NETWORK CABLING SOLUTIONS

CATALOG

CONNECTING THE WORLD TO A HIGHER STANDARD

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Siemon Innovation

Inspired by our past, focused on the future

In 1903, Carl Siemon launched The Siemon Company on the strength of his own innovative plastic compounds and soon began pioneering new telecommunication technologies.

Over a century later that spirit of innovation is still at the core of everything we do at Siemon – driving us to develop the most forward-looking, high-quality line of network cabling solutions in the world.

This catalog represents over a century of Siemon expertise, detailing the latest innovations and key products within Siemon's high quality, high performance product portfolio.

New in this edition:

LightHouse™
Advanced Fiber Cabling Solutions

- **LightHouse Advanced Fiber Cabling Solutions - Siemon's most comprehensive fiber solution set to meet nearly any network infrastructure need**
- **Innovative LC BladePatch® with push-pull latch providing the best connector accessibility in high density patching environments**
- **Ultra high density, easily managed, LightStack™ Plug and Play Fiber Solutions**
- **Time Saving MAX TurboTool™ - Multi-pair, single action termination tool for MAX® outlets achieving world-record termination speeds**
- **42U, 45U and 48U versions of the feature-rich VersaPOD®, new V800™ and V600™ Data Center Cabinet Solutions**
- **A complete line of Intelligent Power Distribution Units**
- **EagleEye™ Connect Automated Infrastructure Management (AIM) Software for MapIT® G2**
- **MapIT G2 TERA® Solution**
- **And more...**

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Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.

Category 7/7$_A$/Class F/F$_A$ Products

Exceeding ISO/IEC Category 7/7$_A$/Class F/F$_A$ specifications, Siemon's fully shielded TERA® end-to-end cabling solution is the highest-performing, most secure twisted-pair copper cabling system available. TERA supports performance of 10Gb/s and passes stringent TEMPEST security testing.

Beyond industry best speed and best total cost of ownership, TERA's unique cable-sharing ability in support of lower speed applications results in a more "Green" solution and can also provide up-front savings through the reduction of cable counts. By combining the use of one TERA outlet dedicated for high-speed applications of 1Gb/s to 10Gb/s and another for cable sharing of lower speed voice and video applications, end-users simultaneously benefit from the highest performing and most cost effective copper solution.

The only non-RJ connector approved as a Category 7$_A$/Class F$_A$ interface, TERA fits within a standard RJ45 footprint and is easily connected to RJ45 equipped electronics via hybrid TERA to RJ patch cords.

Section Contents

TERA® Outlet

Chosen as an industry standard interface for Category 7/Class F and Category 7_A/Class F_A, the Siemon TERA outlet still is by far the highest performing twisted-pair copper connector in the world. When installed as part of a TERA solution, each pair delivers 1.2 GHz of bandwidth — exceeding Category 7_A/Class F_A specifications. This extra bandwidth supports demanding applications like 10GBASE-T and broadband video.

Bend Relief — Rear boot provides bend relief for cable exiting the plug and outlet

Compact Design — Slim, compact design allows outlets to be side-stacked and inserted from either the front or rear of faceplates and patch panels

Tempest Security Tested — The TERA system is the first and only copper system to pass TEMPEST emissions testing by an independent, NSA certified lab, Dayton T. Brown Inc.

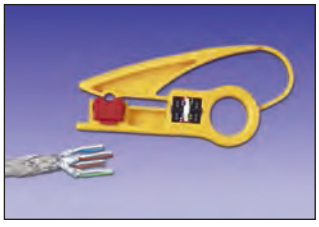
Application Sharing — TERA's ability to support multiple applications over a single 4-pair cable and outlet can save significant material and installation costs

Shielded Termination — Connector automatically assures proper termination of cable shield — no additional processes required for grounding cable

Quadrant Isolation — Shielded quadrant design fully isolates pairs for optimum NEXT performance

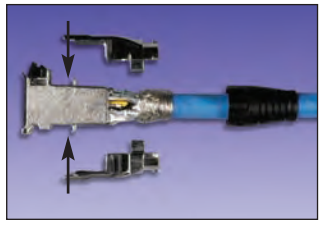
Fully Shielded — Terminates fully shielded (F/FTP and S/FTP) cable - virtually eliminates alien crosstalk

Hinged Door — Outlets include a hinged door to prevent exposure to dust and other contaminates



Easy Installation —
CPT-T tool reduces preparation and termination time.

Mounting Options —
The TERA outlet is compatible with TERA-MAX® patch panels and all MAX series faceplates.



Quick-Ground™ Termination —
No additional steps required for termination. Cable shield is automatically terminated within the outlet without additional steps or tools.

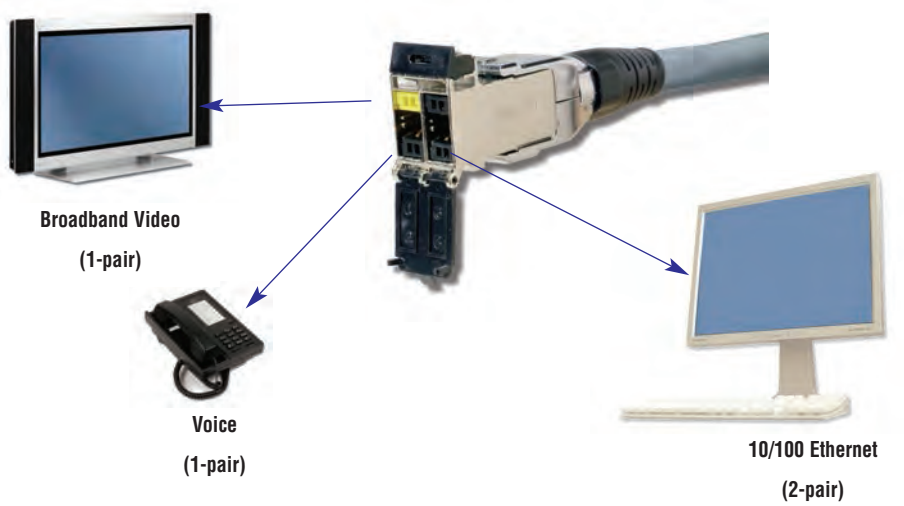
TERA® 4-Pair Outlet

TERA outlets are the industry's highest performing network cabling connectors. Outlets accept 1-, 2- and 4-pair plugs and terminate fully shielded Category 7 and 7_A cables. TERA outlets can be used in both the work area and in the telecommunications room.

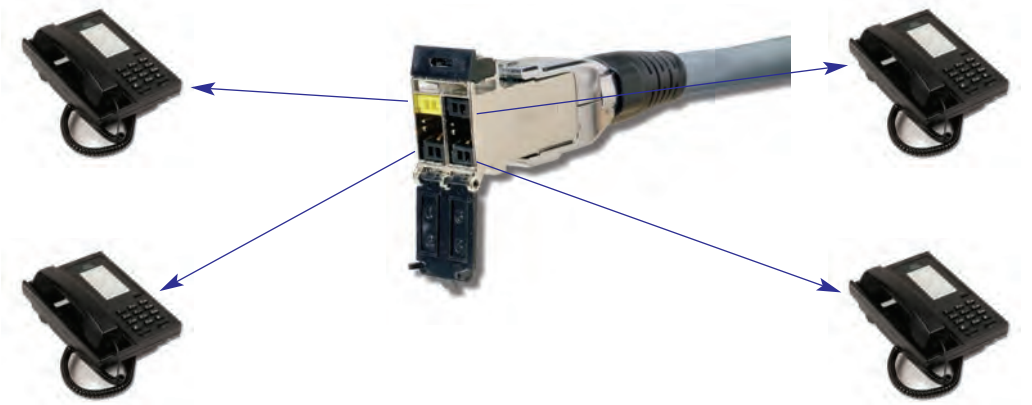
Part #	Description
T7F-01-1	TERA 4-pair outlet with black door, latch and boot. Compatible with 0.64-0.55mm (22-23 AWG) solid S/FTP and F/FTP cable

TERA Cable Sharing

Up to four simultaneous applications can be served from a single 4-pair, S/FTP cable and TERA outlet, saving significant materials, labor, pathway and rack space.



One TERA replaces four 1-pair analog voice outlets — perfect for call centers.



TERA®- MAX® Patch Panels

TERA-MAX 19 inch patch panels provide outstanding performance and reliability in a shielded, high-density modular solution. As outlets are snapped into place, resilient ground tabs assure that each outlet is properly grounded. No secondary outlet grounding operations are required, reducing overall installation time.

Angled TERA-MAX — Allows direct routing of cables to vertical managers, eliminating the need for horizontal cable managers

Standard Fit — Panels can be mounted directly on standard 19 inch relay rack or cabinet

Durable — High strength steel with black or metallic finish

Port Identification — Bold port numbering enables quick identification of outlets

Installation Friendly — Individual modules snap into place, providing integrated grounding without additional steps

Cable Management
Integral rear cable manager facilitates the orderly routing of horizontal cables as well as maintaining proper bend radius for optimum performance.

Slim Design
Use TERA outlets in TERA-MAX patch panel for telecommunications room applications.

Integrated Grounding
Panels feature integrated grounding via resilient ground tabs engaged during module insertion.

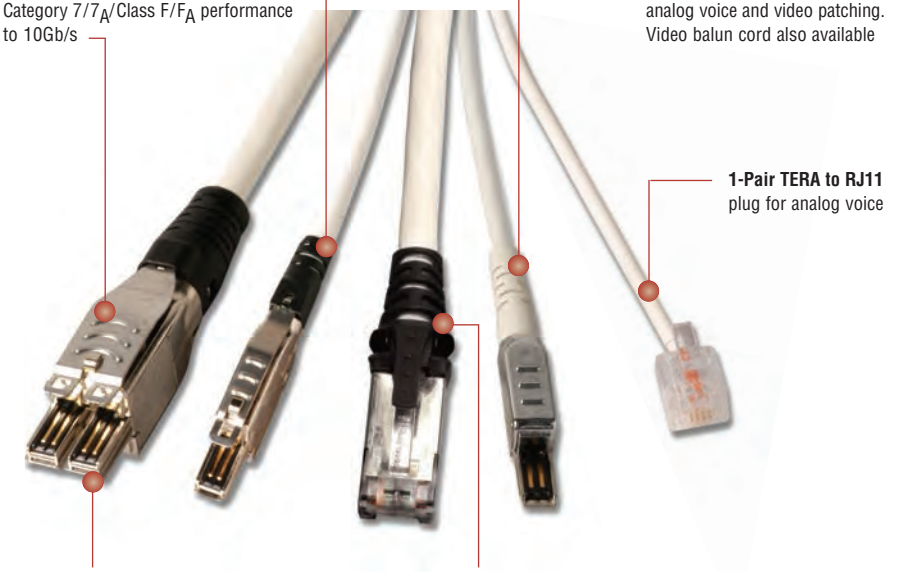
TERA-MAX Patch Panels

Part #	Description
TM-PNLZ-24-01	24-port TERA-MAX panel, black, 1U
TM-PNLZ-24	24-port TERA-MAX panel, metallic, 1U
TM-PNLZA-24-01	24-port Angled TERA-MAX panel, black, 1U
TM-PNLZA-24	24-port Angled TERA-MAX panel, metallic, 1U
PNLA-CVR-01	Angled panel cover, black

Panels include designation labels, cable ties and mounting hardware.
Note: 1U = 44.5mm (1.75 in.)

TERA® - Patch Cords

Part of the TERA cabling solution, TERA-to-TERA patch cords exceed bandwidth of Category 7_A/Class F_A specifications when combined with the TERA outlet. TERA delivers up to 1.2 GHz of bandwidth per pair, providing the extra bandwidth for demanding applications like 10GBASE-T and Broadband Video. Facilitated by 1- and 2-pair patch cords, TERA's extended performance also supports cable sharing — the simultaneous convergence of video, voice and data onto a single 4-pair cable and outlet.



2-Pair TERA to Shielded Category 5e RJ-45 plug for 10/100 Ethernet, VoIP and video over IP

4-Pair TERA to TERA — supports Category 7/7_A/Class F/F_A performance to 10Gb/s

1-Pair TERA to TERA — for analog voice and video patching. Video balun cord also available

1-Pair TERA to RJ11 plug for analog voice

Standard Compliant Interface — Recognized within ISO/IEC 11801 Ed. 2.0

4-Pair TERA to Shielded Category 6_A RJ-45 plug for 1G/10G Ethernet performance

Standard Footprint
ISO recognized interface allows TERA cords and outlets to fit within a standard RJ45 footprint.

Fully Compatible With Active Electronics
TERA to RJ45 patch cords allow the TERA system to be easily connected to RJ45 equipped active electronics.

Cable Sharing
Multiple applications can be run over one 4-pair cable and outlet, saving significant material and pathway space.

TERA Field-Terminated Plug

TERA 4-pair plugs can be used to terminate horizontal cable into exact lengths for consolidation point applications. Plugs terminate fully shielded Category 7 and 7_A solid cable.

Part #	Description
T7P4-B(XX)-1	4-pair TERA plug with colored boot. Compatible with 0.64 – 0.55mm (22 – 23 AWG) solid S/FTP and F/FTP cable
T7P4-B(XX)-2	4-pair TERA plug with black boot. Compatible with 0.48mm (26 AWG) stranded S/FTP and F/FTP cable

Use (XX) to specify boot color: 01 = black, 02 = white, 03 = red, 05 = yellow, 06 = blue, 07 = green

TERA® Patch Cords

TERA Category 7_A Patch Cords

Category 7_A compatible, TERA to TERA, LS0H cable assembly, ivory jacket, colored boot.

T(X)-(XX)M-B(XX)L

Plug Type
1 = 1-Pair
4 = 4-Pair

Cord Length
01 = 1m (3.28 ft.)
02 = 2m (6.56 ft)
03 = 3m (9.84 ft.)
05 = 5m (16.4 ft.)

Boot Color
01 = Black
02 = White
03 = Red
05 = Yellow
06 = Blue
07 = Green

TERA Category 5e Compatible Patch Cords

TERA to Shielded RJ-45, or TERA to 6 position (Voice) modular plug, LS0H cable assembly, ivory jacket, colored boot.

T(XXX)-(XX)M-B(XX)L

Plug Type
2E2 = 2-Pair, RJ-45, 10/100BASE-T
2UT = 2-Pair, RJ-45, Token Ring
1SU1 = 1-Pair, S/FTP 6-position, Voice

Cord Length
01 = 1m (3.28 ft.)
02 = 2m (6.56 ft)
03 = 3m (9.84 ft.)
05 = 5m (16.4 ft.)

Boot Color
01 = Black
02 = White
03 = Red
05 = Yellow
06 = Blue
07 = Green

TERA Category 6A Patch Cords

Augmented Category 6A, TERA to Shielded RJ-45 modular plug, LS0H cable assembly, ivory jacket, colored boot

T4(X)-S(XX)M-B(XX)L

Plug Type
A = T568B
T = T568A

Cord Length
01 = 1m (3.28 ft.)
02 = 2m (6.56 ft)
03 = 3m (9.84 ft.)
05 = 5m (16.4 ft.)

Boot Color
01 = Black
02 = White
03 = Red
05 = Yellow
06 = Blue
07 = Green

CLIP-(XX) . . . . . Color coding clip, bag of 25

Clip Color

01 = Black	**04** = Gray	**07** = Green
02 = White	**05** = Yellow	**08** = Violet
03 = Red	**06** = Blue	**09** = Orange

TERA Video Balun Cords

TERA CATV baluns provide the optimum solution for the transmission of TV or CATV signals over structured cabling systems that were historically limited to voice and data transmission. These products convert the unbalanced TV signals designed for coaxial cabling (75 Ω impedance) to balanced signals (100 Ω impedance) as required for transmission over twisted pair (balanced) cabling. The TERA CATV adapters are specified and useable to 862 MHz. The 1-pair TERA to PAL and TERA to "F" patch cords utilise an integrated balun. The 1-pair shielded TERA to shielded RJ45 patch cord allows connection to third-party RJ45 baluns.

Part #	Description
T1VC-(XX)M-B01L	1-pair TERA to PAL connector, LS0H cable assembly, gray jacket
T1VF-(XX)M-B01L	1-pair TERA to F connector, LS0H cable assembly, gray jacket
T1S4V-(XX)M-B01L	1-pair shielded TERA to RJ45 patch cord

Use (XX) to specify length: 01 = 1m (3 ft.), 1.5 = 1.5m (4.5 ft.), 02 = 2m (6 ft.), 03 = 3m (9 ft.), 05 = 5m (15 ft.)

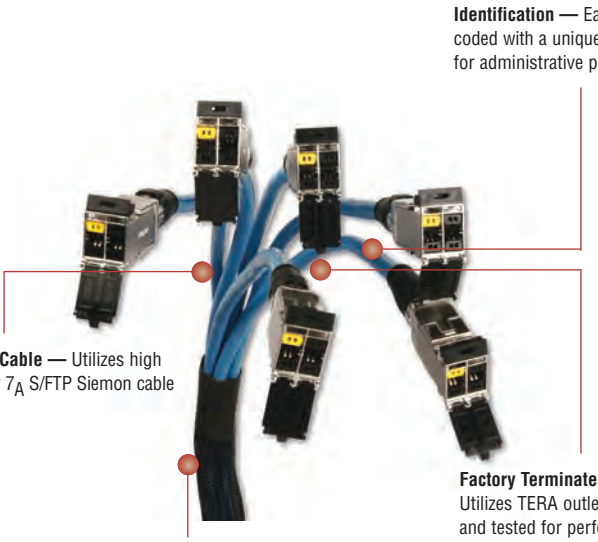
T1VF-(XX)M-B01L

T1S4V-(XX)M-B01L

TERA® - S/FTP Trunking Cable Assemblies

Siemon's TERA copper trunking cable assemblies provide an efficient and cost effective alternative to individual field-terminated components. Combining factory terminated and tested TERA outlets and fully shielded Siemon Category 7_A cable, Siemon TERA trunking cable assemblies offer industry leading performance to 10Gb/s. Standard configurations also help maintain consistent cable layout, facilitate efficient moves, adds and changes and significantly reduce scrap versus typical field installation. Modular design, in conjunction with reduced scrap, makes trunks the most "Green" method for copper cabling installations.

Data Centers
Ideal for data center, raised floor and ladder rack environments enabling up to 75% faster deployment time. Well organized cable bundles improve cable management and air flow.



Identification — Each cable assembly is coded with a unique identification number for administrative purposes

Fully Shielded Cable — Utilizes high quality Category 7_A S/FTP Siemon cable

Factory Terminated and Tested — Utilizes TERA outlets, factory terminated and tested for performance to 10Gb/s

Breakout Kit — Unique breakout kit creates optimal cable orientation and limits cable crossing

Simple, Snap-In Installation
Straight Cut aligns TERA outlets for optimal snap in installation into TERA-MAX® patch panels and allows left, right or center exit.

Protective Packaging
Each assembly is packaged individually to protect factory terminations.

TERA S/FTP Trunking Cable Assemblies

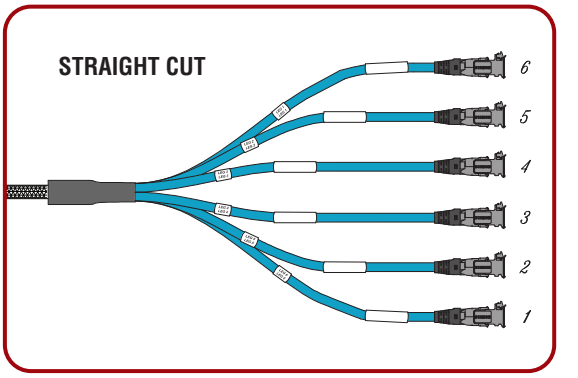
6 Leg Double-Ended Trunking Cable Assemblies

Part #	Description
TJRD6E-F1F1(XXX)F	Riser rated (CMR), blue jacket, 1000MHz
TJPD6E-F1F1(XXX)F	Plenum rated (CMP), blue jacket, 1000MHz

Use (XXX) to specify length: 2.7 - 90m (009 - 295 ft.) in increments of 1 meter (3 feet)

Other lengths and configurations available upon request.

Note: These products are made to order. Call for lead time and part number availability in your region.



TERA® E10 Cable (North America)

COMPLIANCE

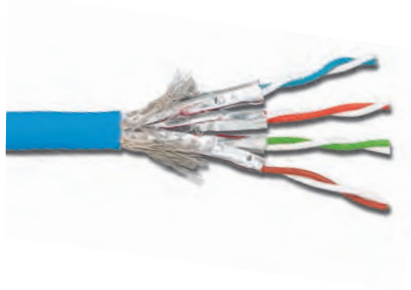
- ISO/IEC 11801: Ed 2.2 (Class F_A)
- IEC 61156-5 Ed 2.1 (Category 7_A)
- IEEE 802.3an
- EN 50288 • EN 55022
- EN 50173 • EN 55024

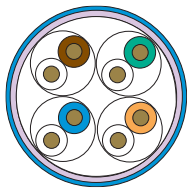
CABLE CONSTRUCTION

- S/FTP
- Nominal Cable O.D: 7.9mm (0.31 in.)
- CMP: 0.64mm (0.025 in.) 22 AWG (solid bare copper)
- CMR: 0.57mm (0.022 in.) 23 AWG (solid bare copper)
- Pairs individually shielded with aluminum-polyester foil
- Overall tinned copper braid

Ordering Information:

Part #	Description
9T7P4-E10-06-R1	Plenum (CMP, CSA FT6), Blue Jacket, 305m (1000 ft.) Reel
9T7R4-E10-06-R1	Riser (CMR, CSA FT4), Blue Jacket, 305m (1000 ft.) Reel





ELECTRICAL SPECIFICATIONS

DC Resistance	<7.32Ω/100m
DC Resistance Unbalance	2%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
NVP	CMR = 79% - CMP = 72%
TCL	40-10 log(*f*) dB
Delay Screw	≤20ns

PHYSICAL PROPERTIES

	CMP	CMR
Pulling Tension (max)	110N (25 lbf)	179N (40 lbf)
Bend Radius (min)	50mm (2.0 in.)	50mm (2.0 in.)
Installation Temperature	0 to 50°C (+32 to 122°F)	-36 to 60°C (-32 to 140°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)	-34 to 75°C (-30 to 167°F)
Operating Temperature	-20 to 75°C (-4 to 167°F)	-34 to 75°C (-30 to 167°F)

TRANSMISSION PERFORMANCE

GUARANTEED WORSE CASE SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PSNEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PSACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1*	2.1	1.7	78.0	104.4	75.0	98.9	75.9	102.6	72.9	97.2	105.3	106.5	75.0	92.2	20.0	28.1	512	443
4	3.7	3.2	78.0	112.5	75.0	105.9	74.3	109.3	71.3	102.7	93.3	113.9	75.0	103.6	23.0	30.9	494	443
10	5.8	4.9	78.0	111.3	75.0	104.8	72.2	106.4	69.2	99.9	85.3	104.6	75.0	97.3	25.0	40.7	487	442
16	7.3	6.2	78.0	104.8	75.0	99.9	70.7	98.5	67.7	93.7	81.2	99.7	75.0	93.8	25.0	41.3	485	440
20	8.2	7.0	78.0	106.4	75.0	100.6	69.8	99.4	66.8	93.6	79.3	94.8	75.0	89.4	25.0	43.5	484	440
31.25	10.3	9.0	78.0	108.1	75.0	101.1	67.7	99.1	64.7	92.1	75.4	94.8	72.4	88.7	23.6	45.3	482	439
62.5	14.6	12.9	78.0	107.2	75.0	101.7	63.4	94.3	60.4	88.8	69.4	93.0	66.4	86.0	21.5	43.7	481	438
100	18.5	16.5	78.0	108.0	75.0	101.0	59.5	91.4	56.5	84.4	65.3	92.8	62.3	83.2	20.1	38.5	480	438
200	26.5	23.9	73.9	107.0	70.9	100.6	47.4	83.0	44.4	76.7	59.3	81.9	56.3	77.7	18.0	33.1	479	437
250	29.7	27.0	72.4	106.3	69.4	100.7	42.7	79.4	39.7	73.7	57.3	76.4	54.3	72.6	17.3	35.1	478	437
300	32.7	29.8	71.2	105.3	68.2	98.5	38.6	75.5	35.6	68.6	55.8	71.3	52.8	67.1	17.3	33.7	478	437
350	35.4	32.4	70.2	106.9	67.2	101.0	34.8	74.5	31.8	68.5	54.4	80.4	51.4	67.2	17.3	35.5	478	437
400	38.0	35.0	69.4	104.7	66.4	98.5	31.4	69.7	28.4	63.6	53.3	72.3	50.3	63.0	17.3	33.7	478	437
550	45.0	41.8	67.3	104.3	64.3	98.0	22.3	62.5	19.3	56.2	50.5	66.3	47.5	57.4	17.3	30.8	478	437
600	47.1	43.8	66.7	106.5	63.7	100.5	19.6	62.7	16.6	56.6	49.7	66.4	46.7	54.0	17.3	28.5	477	437
800	54.9	51.7	64.9	105.8	61.9	98.7	9.9	54.1	6.9	46.9	47.2	58.1	44.2	47.8	16.1	29.7	477	437
900	58.5	55.3	64.1	105.8	61.1	97.7	5.6	50.5	2.6	42.3	46.2	51.2	43.2	45.6	15.5	29.9	477	438
1000	61.9	59.4	63.4	102.3	60.4	93.7	1.5	43.0	-1.5	34.3	45.3	50.4	42.3	44.8	15.1	24.5	477	440

**Values below 4 MHz are for information only.*

All performance based on 100 meters (328 ft.).

TERA® E10 Cable (International)

COMPLIANCE

- ISO/IEC 11801: Ed 2.2 (Class F_A)
- IEC 61156-5 Ed 2.1 (Category 7_A)
- IEEE 802.3an
- EN 50288 • EN55022
- EN 50173 • EN55024
- LSOH: IEC 60332-1, IEC 60754, and IEC 61034

CABLE CONSTRUCTION

- S/FTP
- Nominal jacket OD: 7.7mm
- 0.57mm solid (non-tinned) copper, 23 AWG
- Sequential measurement markings on jacket
- Pairs individually shielded with aluminum-polyester foil
- Overall tinned-copper braid

Ordering Information:

Part #	Description
9T7L4-E10	LS0H (IEC 60332-1), Violet Jacket, 305m

ELECTRICAL SPECIFICATIONS

DC Resistance	<7.32 Ω/100m
DC Resistance Unbalance	≤ 2%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	≤160 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100-250 MHz: 100 ± 22% 250-1000 MHz: 100 ± 25%
NVP	70%
TCL	40-10 x log(f)dB
Delay Skew	25ns/100m

PHYSICAL PROPERTIES

	LSOH
Pulling Tension (max)	110N
Bend Radius (min)	50mm
Installation Temperature	0 to 75°C
Storage Temperature	-20 to 75°C
Operating Temperature	-20 to 75°C

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0*	1.9	1.6	78.0	105.0	75.0	102.0	76.1	103.0	73.1	100.0	77.0	96.0	75.0	94.0	20.0	31.0	536	512
4.0	3.5	3.0	78.0	105.0	75.0	102.0	74.6	102.0	71.6	99.0	77.0	96.0	75.0	94.0	23.0	34.0	518	494
10.0	5.4	4.9	78.0	105.0	75.0	102.0	72.6	100.0	69.6	97.0	74.0	96.0	71.0	94.0	25.0	35.0	511	487
16.0	6.8	6.3	78.0	105.0	75.0	102.0	71.2	99.0	68.2	96.0	70.0	96.0	67.0	94.0	25.0	35.0	509	485
20.0	7.5	7.0	78.0	105.0	75.0	102.0	70.3	98.0	67.4	95.0	68.0	96.0	65.0	94.0	25.0	35.0	508	484
31.25	9.6	8.9	78.0	105.0	75.0	102.0	68.5	96.0	65.5	93.0	64.0	93.0	61.0	91.0	23.6	34.0	506	482
62.5	13.7	12.8	78.0	105.0	75.0	102.0	64.3	92.0	61.3	89.0	58.0	88.0	55.0	86.0	21.5	32.0	505	481
100.0	17.5	16.5	76.0	105.0	73.0	102.0	58.5	89.0	55.5	86.0	54.0	82.0	51.0	80.0	20.1	31.0	504	480
200.0	25.3	23.5	71.0	102.0	68.0	100.0	46.2	79.0	43.2	77.0	48.0	78.0	45.0	75.0	18.0	29.0	503	479
250.0	28.5	28.2	70.0	102.0	67.0	100.0	41.5	74.0	38.5	72.0	46.0	75.0	43.0	70.0	17.3	28.0	502	502
300.0	31.5	28.9	69.0	102.0	66.0	97.0	37.3	73.0	34.3	68.0	44.0	70.0	41.0	68.0	17.3	28.0	502	478
350.0	34.3	31.5	68.0	100.0	65.0	97.0	33.6	69.0	30.6	66.0	43.0	70.0	40.0	63.0	17.3	28.0	502	478
400.0	36.9	33.1	67.0	95.0	64.0	93.0	30.1	62.0	27.1	60.0	42.0	66.0	39.0	59.0	17.3	28.0	502	478
550.0	44.1	40.2	65.0	95.0	62.0	93.0	20.8	55.0	17.8	53.0	39.0	60.0	36.0	56.0	17.3	28.0	502	478
600.0	46.3	41.7	64.0	95.0	61.0	93.0	18.0	53.0	15.0	51.0	38.0	55.0	35.0	53.0	17.3	28.0	502	478
800.0	54.5	47.6	62.0	90.0	59.0	87.0	7.9	42.0	4.9	39.0	36.0	47.0	33.0	44.0	16.1	28.0	501	477
1000.0	62.0	54.5	61.0	85.0	58.0	83.0	-1.0	31.0	-4.0	29.0	34.0	40.0	31.0	38.0	15.5	27.0	501	477
1200.0*		59.8		80.0		77.0		20.0		17.0		35.0		33.0		27.0		477

**Values below 4 MHz are for information only.*

***Values for IEC 61156-5 above 1000 MHz are for information only.*

All performance based on 100 meters

Siemon's Z-MAX® 6A Network Cabling Solutions

The development of the Z-MAX 6A line began with a simple goal — design and build the best RJ-45 based cabling solution — period.

And "best" was not a vague metric. Z-MAX was built to be best across the board:

- **Highest performance margins across all critical transmission parameters**
- **Fastest, easiest and most reliable termination process**
- **Superior transmission consistency**
- **The best customer focused usability, efficiency and ergonomic features**

To meet these goals, we did what we have done for over a century — innovate.

As you explore the Z-MAX line, you'll see Siemon innovation at every turn. From our patent-pending Zero-Cross™ termination to the exclusive PCB-based smart plug technology integrated into every Z-MAX cord to our hybrid flat/angled outlets to the easy-to-use Z-TOOL™, no opportunity to improve this family was overlooked.

Section Contents

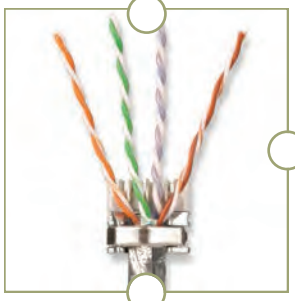
DON'T BLINK

Best-in-class Category 6A performance for UTP and Shielded **in just 45 seconds.**

While average termination time including cable preparation is 45 seconds, some Siemon certified installers have set world rercords for Category 6A Z-MAX terminations at less than 30 seconds.

1 0:20 sec.

Prepare cable and place into Z-MAX's patent-pending Zero-Cross™ lacing cap. Close hinged cable retention/grounding clip.



2 0:40 sec.

Lace conductor pairs into color-coded linear lacing channels and trim excess.

3 0:45 sec.

Insert lacing cap into Z-MAX outlet and terminate with the one-step Z-TOOL™.

Complete!

Watch Z-MAX termination video at www.siemon.com/us/zmax

Siemon Innovations that make it possible. . .

Highest-Performing Category 6A Systems

	Z-MAX 6A UTP	Z-MAX 6A F/UTP
IL	3%	3%
NEXT	3.0 dB	3.0 dB
PSNEXT	3.5 dB	3.5 dB
ACR-F	7 dB	7 dB
PSACR-F	10 dB	10 dB
RL	3 dB	3 dB
PSANEXT	1 dB	10 dB
PSAACR-F	1 dB	5 dB
ACR-N	6 dB	6 dB
PSACR-N	6.5 dB	6.5 dB

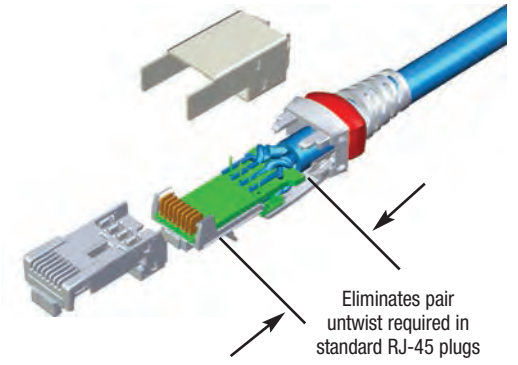
Performance based on use of 24 x 2M cords and 24 port /1U density.

With Z-MAX, Siemon has shattered the RJ-45 barrier. We have achieved best-in-class performance through an innovative "matched" system which combines an optimally tuned plug with a higher performance outlet.

- Best UTP and F/UTP Category 6A margins
- Leading performance on all parameters, not just NEXT
- Exceptional alien crosstalk performance
- ISO channel, link and component compliant
- TIA channel, link and component compliant
- Consistent, superior performance, eliminates marginal testing (*PASS)

Patent-Pending Smart Plug Technology

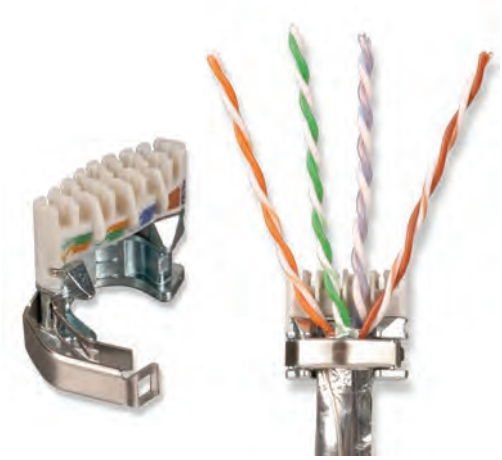
A critical element of Z-MAX systems' exceptional performance is our smart-plug technology. The Z-MAX smart plug contains a tuned printed circuit board (PCB), normally only found in outlets, to achieve high performance tuning. This advancement in miniaturization has packaged the tuning capability and consistency of a PCB in an industry standard RJ-45 footprint, giving the Z-MAX patch cord unsurpassed performance capabilities.



- Patent pending PCB-based plug enables performance levels not possible with traditional cords
- Narrower NEXT range provides capability to tune to higher channel performance levels
- Advanced contact technology and automated assembly results in decreased performance variability compared with crimp-type plugs
- Smart-Plug is fully backwards-compatible and standards compliant
- PCB-based contacts eliminate pair-crossing condition present in traditional cords
- Solderless, press-fit contact technology ensures long-term reliability

Zero-Cross™ Terminations

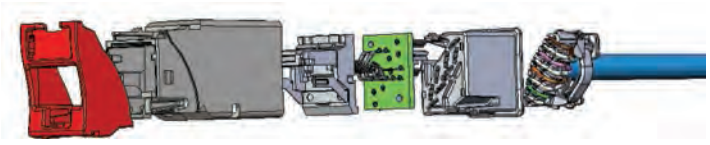
The crossing of cable pairs has long been recognized as a source of variability and performance degradation in connector systems. The linear design of the Z-MAX termination module allows conductors to feed naturally into position without the need for pair crossing.

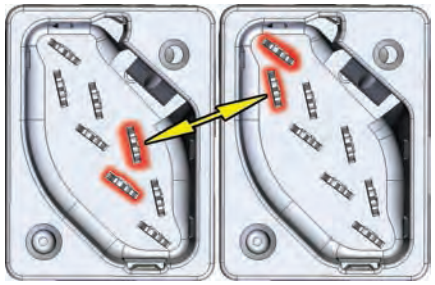


- Linear design dramatically speeds and simplifies cable prep and conductor alignment
- Removes a significant source of crosstalk present in all other RJ-45 outlets
- Maintains and protects cable pair structure for optimized transmission performance consistency
- Intuitive cable lacing significantly minimizes miswires that lead to costly reworks

Diagonal IDC Contact Orientation

Siemon engineers thought "outside of the box" when they developed our diagonally-oriented IDC contact technology. This unique configuration places contacts on a single plane yet varies the alignment of each individual contact within the Z-MAX outlet. This design provides distinct performance benefits compared with traditional rectangular contact layouts.



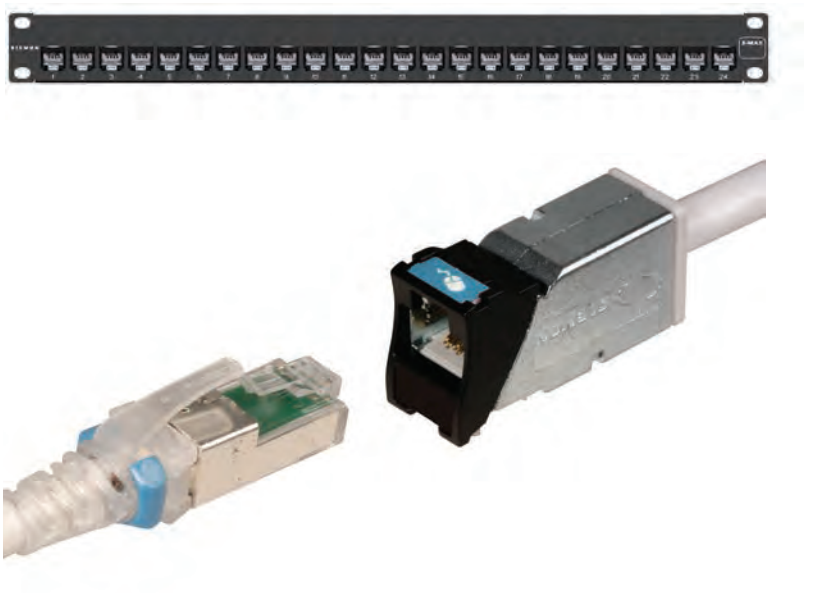


- Maximizes pair-to-pair separation from adjacent outlets to minimize alien crosstalk even in the most dense Category 6A patching environments
- Enhances NEXT performance within outlets
- Limits untwist of pairs at termination to maximize cable performance
- Fully enclosed IDC's eliminates exposure of uninsulated conductors

Z-MAX® 6A Shielded System Features and Benefits

Combining consistent best-in-class performance, unparalleled usability and speed of termination with the security and robust noise immunity of a shielded cabling system, Siemon's Z-MAX 6A shielded end-to-end solution represents the cutting edge of Category 6A cabling. The Z-MAX 6A shielded system provides the highest margins on all ISO and TIA performance requirements for Category 6A/Class E_A, including critical alien crosstalk parameters.

Siemon's Z-MAX 6A shielded channel consists of the shielded Z-MAX 6A outlet, Siemon Category 6A shielded cable and Z-MAX patch panels as well as stranded and solid options.

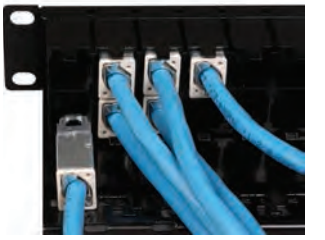


Z-TOOL™ Termination
- Fast
- Simple
- Consistent

PCB-based Smart Plug™
Z-MAX cords feature exclusive PCB-based smart plug specifically tuned to maximize overall system performance

Features and Benefits

- Hybrid work area outlets mount in either flat or angled orientation
- Industry's fastest termination time accelerates project completion
- Guided, tool-based termination process enhances system quality and reliability
- Field-terminated outlets or pre-terminated trunking cables can be quickly snapped into patch panels and released to enable rapid deployment or changes
- High density 48 port, 1U options provide the flexibility to work within strict space limitations saving valuable rack and cabinet space
- Integrated Quick-Ground™ outlet shield and panel connections ensures fast and reliable grounding
- Shielded outlet and modular cord color-coding provides the capability to code and customize your cabling system

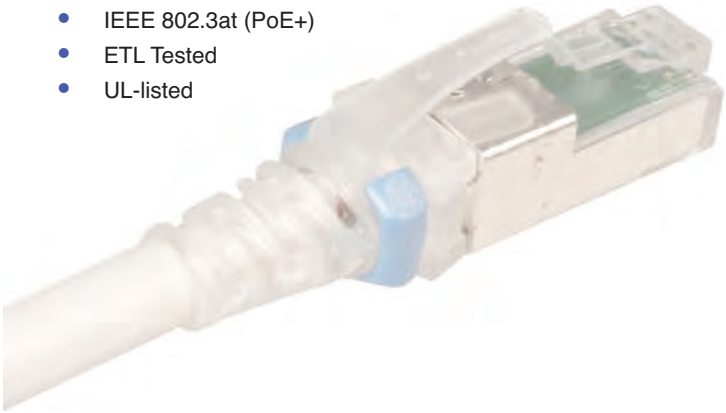


Rapid Deployment
Modular Quick-Snap panel design speeds initial deployment and subsequent MACs

System Performance Overview

Standards Compliance

- ISO/IEC 11801 Class E_A
- ISO/IEC 11801 2nd ed Amendment 1
- ISO/IEC 11801 2nd ed Amendment 2
- IEC 60603-7
- TIA-968-A (formerly FCC Part 68 Subpart F)
- ANSI/TIA-568-C.2
- IEEE 802.3an
- IEEE 802.3af (PoE)
- IEEE 802.3at (PoE+)
- ETL Tested
- UL-listed



Z-MAX 6A Shielded Channel Performance

GUARANTEED 4-CONNECTOR CHANNEL MARGINS TO ISO / IEC 11801 2.1 (1 - 500 MHz)

PARAMETER	VALUE
IL	3%
NEXT	3.0 dB
PSNEXT	3.5 dB
ACR-F	7 dB
PSACR-F	10 dB
RL	3 dB
PSANEXT	10 dB
PSAACR-F	5 dB
ACR-N	6 dB
PSACR-N	6 dB

Performance based on use of 24 x 2M cords and 24 port /1U density.

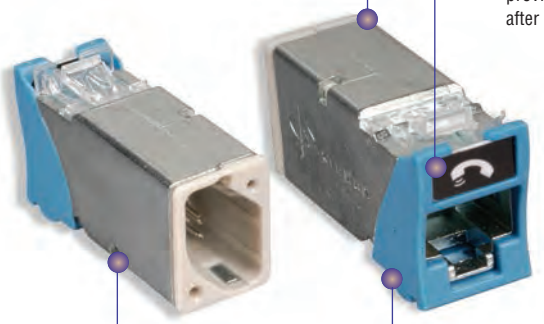
Z-MAX® 6A Shielded Outlets

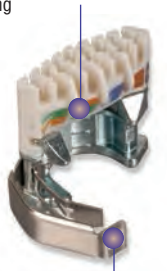
The shielded Z-MAX outlet offers best-in-class performance in every critical specification, exceeding all Category 6A performance requirements, including alien crosstalk. Its innovative features not only speed and simplify termination, but remove installation variability for consistently high and repeatable performance — every termination, every time!

High-Visibility Icon System — Printed icons allow designation for voice / data applications and also provide an additional color coding option

Compact — Slim and side-stackable for high-density applications. Supports "pass-thru" feature to mount from the front or rear of a faceplate

Guided Termination Features — Linear lacing channels guide correct conductor placement while 2-sided color-coding provides wiring verification before and after lacing





Fastest Termination Time — Zero-Cross™ termination module and Z-TOOL™ termination process combine for best-in-class termination time

Robust Hinged Cable Retention — Clip accommodates multiple cable diameters

Color Coding Capability — Bezel allows outlets to be color-coded for customer identification to match faceplates and other mounting accessories

Flexibility and Simplified Ordering

A single hybrid outlet supports both angled and flat mounting orientations.

Enhanced Shielding Effectiveness

High level of shielded effectiveness exceeds ISO 360 degree shielding requirements via die cast housing and hinged cable retention/grounding clip.

100% Jack-to-Jack Plastic Isolation

Plastic bezels prevent contact between metal housings when side stacking to ensure ground quality and ANEXT performance.

Quick-Ground™ Termination

Cable shield is automatically terminated to the outlet without additional steps.

Spring Door Option

Minimizes exposure to dust and other contaminants.

Ordering Information:

Z6A-S(X)(XX)(X). . . . . Shielded Z-MAX 6A outlet, T568A/B

Door Option
(Blank) = No Door
D = Door (Hybrid only)

Mounting Style
(Blank) = Hybrid Flat/Angled
K = Keystone

Bezel Color

01= Black	**06=** Blue
02= White	**07=** Green
03= Red	**09=** Orange
04= Gray	**20=** Ivory
05= Yellow	**80=** Light Ivory

Outlet terminates S/FTP, F/FTP and F/UTP cable constructions with 22 – 26 AWG (0.64 – 0.51mm) solid and 26 AWG (0.48mm) stranded conductors, with up to 0.60mm diameter conductors and up to 1.48mm diameter over insulation.

Add "D" to end of part number for spring door option.

Ⓑ Add "B" to end of part number for bulk project pack of 100 modules (hybrid modules include icons).

Each Z-MAX 6A hybrid outlet includes 1 printed icon set with the following color/print options.

Front

1 - Red Data
1 - Blue Data
1 - Bezel Color-Matching Data
1 - White Blank

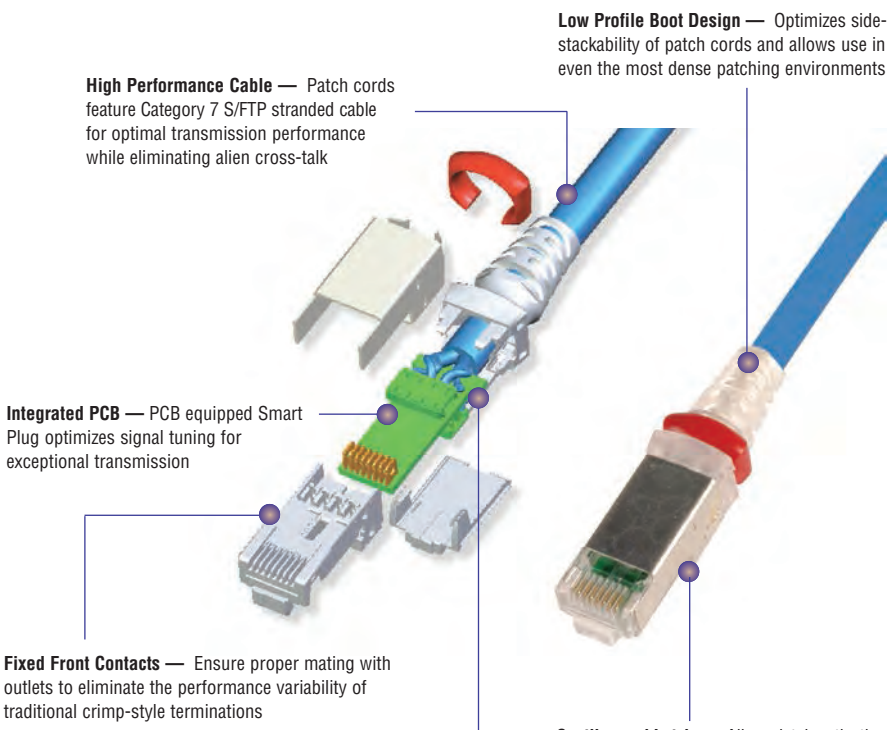
Rear

1 - Red Voice
1 - Blue Voice
1 - Bezel Color-Matching Voice
1 - Bezel Color-Matching Blank

For more Z-MAX icon colors and options see page 8.5.

Z-MAX® 6A Shielded Modular Cords

Combining the unparalleled performance of an exclusive PCB-based plug, noise-resistant shielded construction and a host of innovative user friendly features, the shielded Z-MAX 6A modular cords are the ultimate Category 6A cord. All cords are 100% factory-tested to ensure performance and compliance.



High Performance Cable — Patch cords feature Category 7 S/FTP stranded cable for optimal transmission performance while eliminating alien cross-talk

Low Profile Boot Design — Optimizes side-stackability of patch cords and allows use in even the most dense patching environments

Integrated PCB — PCB equipped Smart Plug optimizes signal tuning for exceptional transmission

Fixed Front Contacts — Ensure proper mating with outlets to eliminate the performance variability of traditional crimp-style terminations

Superior Performance Consistency — Rear contacts maintain cable twist to point of termination and provide robust strain relief. Solderless, press-fit contact technology ensures long-term reliability

Cantilevered Latch — Allows latch activation from further back on the boot for superior accessibility in high density environments

Excellent Bend Relief
Boot ensures proper bend relief, critical for Category 6A performance.

Colored Clips
Removable clips allow field color coding even when cords are connected.

Solid Cord Option
Solid F/UTP assemblies are available for consolidation point and equipment cord applications.

Ordering Information:

ZM6A-S(XX)-(XX) . . . . . Z-MAX 6A shielded (S/FTP), double-ended, stranded modular cord, clear boot, T568A/B, dual-listed CM/LS0H

Length
03 = 0.9m (3 ft.)
05 = 1.5m (5 ft.)
07 = 2.1m (7 ft.)
10 = 3.1m (10 ft.)
15 = 4.6m (15 ft.)
20 = 6.1m (20 ft.)

Jacket Color
01 = Black **04** = Gray **07** = Green
02 = White **05** = Yellow **08** = Violet
03 = Red **06** = Blue **09** = Orange

ZC6A-S(XX)(X)-(X)(X). . . . . Z-MAX 6A shielded (F/UTP) solid modular cord, blue jacket, clear boot

Length
10 = 3.1m (10 ft.)
20 = 6.1m (20 ft.)
30 = 9.1m (30 ft.)
40 = 12.2m (40 ft.)
50 = 15.2m (50 ft.)
60 = 18.3m (60 ft.)

Wiring
A = T568B
T = T568A

Jacket
R = CMR
P = CMP

Plugs
(Blank) = Single-ended
D = Double-ended (T568A/B)

Ⓑ *Add "B" to end of part number for bulk project pack of 100 cords.*

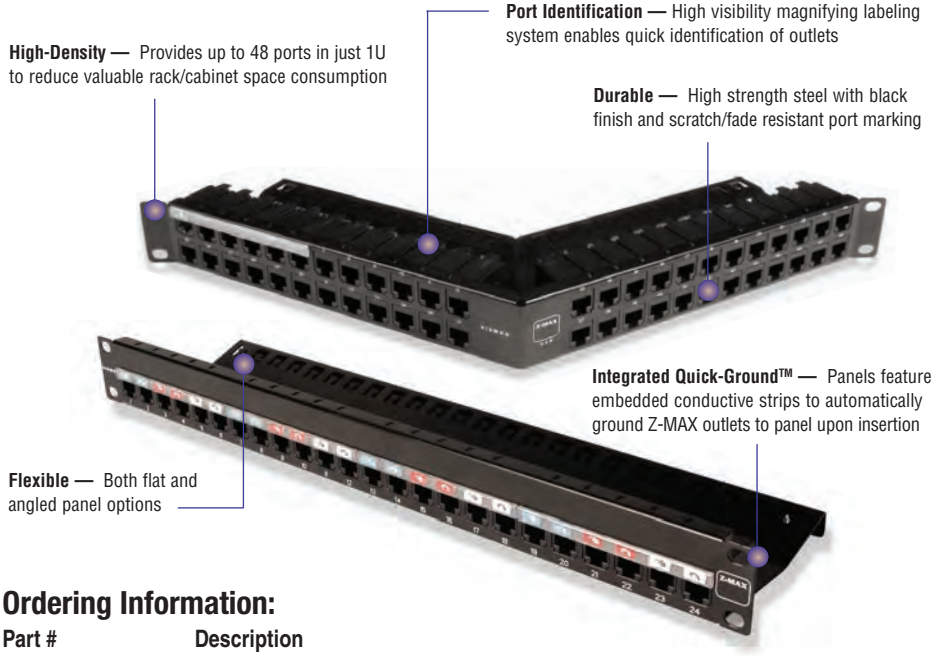
CLIP-(XX) . . . . . Color coding clip, bag of 25

Clip Color
01 = Black **04** = Gray **07** = Green
02 = White **05** = Yellow **08** = Violet
03 = Red **06** = Blue **09** = Orange

Z-MAX® 6A Shielded Patch Panels

Z-MAX patch panels provide outstanding performance and aesthetics in a shielded, high-density modular solution. The Z-MAX panels provide rapid and reliable installation by accelerating outlet mounting, grounding, and cable tie-down operations.

In addition to traditional 24 port / 1U flat and angled versions, the Z-MAX shielded panels are also available in 48 port / 1U configurations to permit high density installations.



Installation Friendly
Quick-Snap feature allows Z-MAX panel outlets to be quickly inserted and removed.

Trunking Applications
Ideal for Trunking applications combine Z-MAX trunk assemblies (with panel outlets) and empty Z-MAX panels for rapid data center deployment.

Kits
Panels available as complete kits including patch panel, Z-MAX panel outlets and all necessary accessories. Empty panels are also available for use with Z-MAX trunk assemblies.

Ordering Information:

Part #	Description
Fixed Wire Manager:	
Z6AS-PNL(X)-24K	Z-MAX 24-Port, category 6A shielded patch panel kit, 1 RMS, black, with outlets
Z6AS-PNL(X)-U48K	Z-MAX 48-Port, category 6A shielded patch panel kit, 1 RMS, black, with outlets
ZS-PNL(X)-24E	Z-MAX 24-Port shielded patch panel, 1RMS, black, empty
ZS-PNL(X)-U48E	Z-MAX 48-Port shielded patch panel, 1RMS, black, empty

Use (X) to specify mounting style: (Blank) = Flat, A = Angled

Removable Wire Manager:

Z6AS-P(X)-24	Z-MAX 24-Port, category 6A Shielded patch panel with removable wire manager kit, 1 RMS, black, with outlets
Z6AS-P(X)-48.	Z-MAX 48-Port, category 6A shielded patch panel with removable wire manager kit, 1 RMS, black, with outlets
ZS-P(X)-24	Z-MAX 24-Port shielded patch panel with removable wire manager, 1RMS, black, empty
ZS-P(X)-48	Z-MAX 48-Port shielded patch panel with removable wire manager, 1RMS, black, empty

Use (X) to specify mounting style: (F) = Flat, A = Angled

Panels include Z-TOOL, label / icon holders, designation labels, cable ties, grounding lugs, and mounting hardware.*

*Note: 1U = 44.5mm (1.75 in.) * included in kit only*

Panel Accessories:

Note: Z-MAX shielded patch panels designed for use with Z-MAX shielded panel outlets only

Part #	Description
Z-PNL-PL24	Patch panel label sheet, numbered 1 to 24, bag of 100
Z-PNL-PL48	Patch panel label sheet, numbered 25 to 48, bag of 100
Z-PNL-PS	Patch panel label holder, bag of 25
Z6A-SP	Z-MAX 6A shielded panel outlet
PNLA-CVR-01	Angled panel cover, black
Z-BL-01	Z-MAX panel blank, bag of 10, black

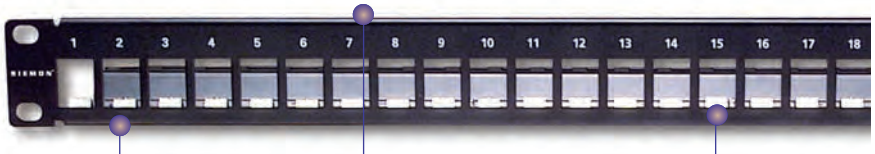
PNLA-CVR-01

Z-BL-01

TERA-MAX® Patch Panels

TERA-MAX patch panels provide outstanding performance and reliability in a shielded, high-density modular solution. As outlets are snapped into place, resilient ground tabs assure that each outlet is properly grounded for maximum protection from outside interference. No secondary outlet grounding operations are required, reducing overall installation time.

Angled TERA-MAX — Allows direct routing of cables to vertical managers, eliminating the need for horizontal cable managers



High Density — 24 ports in 1U

Port Identification — Bold port numbering enables quick identification of outlets

Durable — High strength steel with black or metallic finish

Integrated Grounding

Panels feature integrated grounding via resilient Quick-Ground™ tabs automatically engaged during Z-MAX® outlet insertion.

Single Outlet Solution

Hybrid (flat/angled) shielded Z-MAX outlets used in the work area are required for use in TERA-MAX panels creating a common outlet solution for all locations.

Future Flexibility

TERA-MAX panels also accept TERA® outlets to support potential future infrastructure upgrades.

Ordering Information:

Part #	Description
TM-PNLZ-24-01	24-port TERA-MAX panel, black, 1U
TM-PNLZ-24	24-port TERA-MAX panel, metallic, 1U
TM-PNLZA-24-01	24-port Angled TERA-MAX panel, black, 1U
TM-PNLZA-24	24-port Angled TERA-MAX panel, metallic, 1U
PNLA-CVR-01	Angled panel cover, black

Panels include designation labels, cable ties, grounding lug and mounting hardware.

Note: TERA-MAX panels are designed for use with hybrid (flat/angled) shielded Z-MAX outlets. Also compatible with TERA outlets

Z-MAX® 6A Shielded Trunking Cable Assemblies

Featuring factory terminated and tested shielded Z-MAX outlets and Siemon Category 6A shielded cable, Z-MAX 6A shielded copper trunking cable assemblies were designed with data center applications in mind, providing high-performance Category 6A performance in a quickly implemented, efficient and cost effective alternative to individual field-terminated components.

Data Centers
Ideal for data centers, raised floor and ladder rack environments enabling up to 75% faster deployment time.

Simple Installation
Pre-terminated Z-MAX panel outlets utilize a Quick-Snap feature for easy installation and removal from Z-MAX panels.

Protective Packaging
Each assembly is packaged individually to protect factory terminations.

Category 6A F/UTP Cable — Utilizes high quality Siemon Category 6A F/UTP cable

Identification — Each cable assembly is coded with a unique identification number for administrative purposes

Quick-Ground™ — Shielded Z-MAX 6A outlets are automatically grounded upon insertion into Z-MAX panels

Proper Orientation — Each leg is labeled for proper outlet orientation

Breakout Kit — Unique breakout kit creates optimal cable orientation and limits cable crossing

Factory Terminated and Tested — Utilizes shielded Z-MAX outlets, factory terminated and tested for high performance

Ordering Information:

TE(X)D6E-(XXXX)(XXX)F . . . . . 6 Leg Solid Cable Double-Ended Trunking Cable Assembly

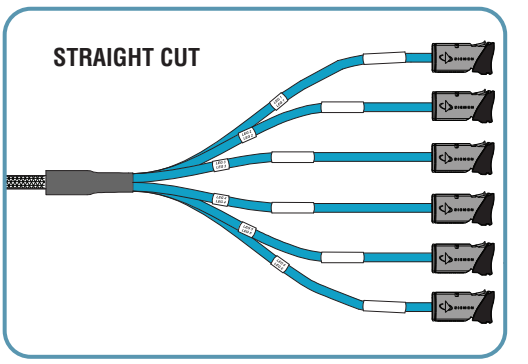
Cable Jacket
R = Riser rated (CMR), blue jacket
P = Plenum rated (CMP), blue jacket

Length
009-295= Indicate length in feet (increments of 3 feet)

Connector Types
P7P7 = Z-MAX panel outlets for use with Z-MAX panels
H1H1 = Z-MAX hybrid (flat/angled) outlets for use with TERA-MAX panels
P7J7 = Z-MAX panel outlets to Z-MAX plugs
H1J7 = Z-MAX hybrid flat/angled outlets to Z-MAX plugs

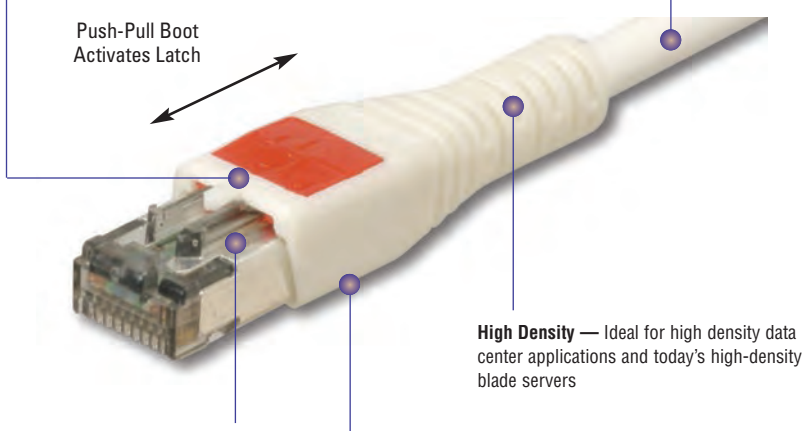
Standard wiring is T568B. Other lengths and configurations available upon request. Keystone versions also available.

Note: These products are made to order. Call for lead time and part number availability in your region.



Category 6A Shielded BladePatch® Modular Cords

Category 6A shielded BladePatch patch cord offers a unique Category 6A solution for high-density patching environments. It features an innovative push-pull boot design to control the latch, enabling easy access and removal of the cord in tight-fitting areas. The BladePatch cord is ideal for patching blade servers, patch panels, or any equipment with high density RJ-45 outlets.



Snagless — Push-pull latch design eliminates external thumb latch used in standard modular plug designs which can snag and break

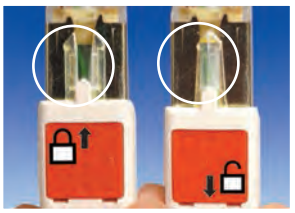
High Performance — Cords feature Category 7 S/FTP stranded cable for optimal transmission performance while eliminating alien crosstalk

High Density — Ideal for high density data center applications and today's high-density blade servers

Easy Access and Removal — RJ-45 patch cord with patent-pending push-pull latch design enables easy access and removal in high density patching environments

Low Profile Boot Design — Optimizes side-stackability of patch cords and allows use in even the most dense equipment

Universal Compatibility
Fits within any standard RJ-45 outlet.



Revolutionary Latch
Simply push the boot forward to latch into the outlet and pull back to release.

High Density
The push-pull design enables easy access and removal via the push/pull boot in tight-fitting areas.

Ordering Information:

Shielded Category 6A BladePatch LS0H, double-ended, RJ-45 modular patch cord with push-pull latching design, color matching cord/boot, T568A/B.

10GBPS-(XX)M-(XX)L

Cord Length	Cord Color
01 = 1m (3.3 ft.)	**01** = Black
1.5 = 1.5m (4.9 ft.)	**02** = White
02 = 2m (6.6 ft.)	**03** = Red
03 = 3m (9.8 ft.)	**04** = Gray
04 = 4m (13.1 ft.)	**05** = Yellow
05 = 5m (16.4 ft.)	**06** = Blue
	07 = Green

The use of Category 6A shielded BladePatch modular cords will provide Category 6A channel performance if used in a Z-MAX 6A system.

Z-MAX 6A warranty margins do not apply.

Category 6A F/UTP 4-Pair Cable (North America)

CABLE CONSTRUCTION

- F/UTP
- 0.57mm (0.023 in.) (23 AWG) solid bare copper
- 7.1mm (0.28 in.) nom. jacket diameter
- Central isolation member
- Shield is an aluminum foil tape enclosing a 0.51mm (0.20 in.) (24 AWG) tinned copper drain wire

COMPLIANCE

- ISO/IEC 11801
- ANSI/TIA-568-C.2
- UL CMR and CSA FT4
- UL CMP and CSA FT6

Ordering Information:

9A6(X)4-A5-(XX)-R1A . . . . . 305m (1000 ft.) Reel (North America Only)

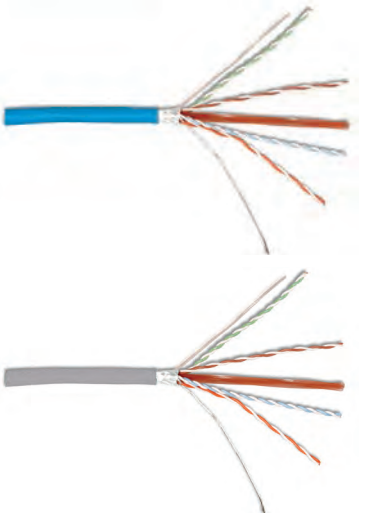
Jacket Color

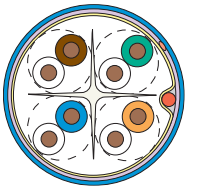
01 = Black **04** = Gray **07** = Green
02 = White **05** = Yellow **08** = Violet
03 = Red **06** = Blue **09** = Orange

Jacket Material

P = Plenum (CMP, CSA FT6)
R = Riser (CMR, CSA FT4)

Lead time and minimum order quantities may vary by cable type. Please contact Customer Service for details.





PHYSICAL PROPERTIES

	CMP	CMR
Pulling Tension (max)	110N (25 lbf)	110N (25 lbf)
Bend Radius (min)	50mm (2.0 in.)	50mm (2.0 in.)
Installation Temperature	0 to 60°C (+32 to 140°F)	0 to 60°C (+32 to 140°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)	-20 to 75°C (-4 to 167°F)
Operating Temperature	-20 to 60°C (-4 to 140°F)	-20 to 60°C (-4 to 140°F)

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0*	2.0	1.8	74.3	86.0	72.3	82.3	72.3	84.2	70.3	80.5	67.8	91.0	64.8	85.0	20.0	33.0	570	545
4.0	3.8	3.4	65.3	77.0	63.3	73.3	61.5	73.6	59.5	69.9	55.8	79.0	52.8	73.0	23.0	35.5	552	527
10.0	6.0	5.4	59.3	71.0	57.3	67.3	53.3	65.6	51.3	61.9	47.8	71.0	44.8	65.0	25.0	38.0	545	520
16.0	7.6	6.9	56.2	68.0	54.2	64.2	46.7	61.1	46.7	57.3	43.7	67.0	40.7	61.0	25.0	35.2	543	518
20.0	8.5	7.7	54.8	67.0	52.8	62.8	46.3	59.3	44.3	55.1	41.8	65.0	38.8	59.0	25.0	35.0	542	517
31.25	10.7	9.9	51.9	64.0	49.9	59.9	41.2	54.1	39.2	50.0	37.9	61.0	34.9	55.0	23.6	33.1	540	515
62.5	15.4	14.3	47.4	59.0	45.4	55.4	32.0	44.7	30.0	41.1	31.9	55.0	28.9	49.0	21.5	32.2	539	514
100.0	19.8	18.1	44.3	56.0	42.3	52.0	24.5	37.9	22.5	33.9	27.8	51.0	24.8	45.0	20.1	31.6	538	513
200.0	29.0	27.3	39.8	52.0	37.8	47.8	10.8	24.7	8.8	20.5	21.8	45.0	18.8	39.0	18.0	29.8	537	512
250.0	32.8	31.1	38.3	50.0	36.3	46.0	5.5	18.9	3.5	14.9	19.8	43.0	16.8	37.0	17.3	28.7	536	511
300.0	36.4	35.0	37.1	49.0	35.1	45.0	0.7	14.0	-1.3	10.0	18.3	38.0	15.3	35.0	16.8	28.0	536	511
400.0	43.0	40.0	35.3	47.0	33.3	43.0	-7.7	7.0	-9.7	3.0	15.8	36.0	12.8	33.0	15.9	27.1	536	511
500.0	48.9	42.0	33.8	47.0	31.8	42.0	-15.1	5.0	-17.1	0.0	13.8	34.0	10.8	32.0	15.2	26.0	536	510
550.0*	51.8	43.0	33.2	46.0	31.2	42.0	-18.6	3.0	-20.6	-1.0	13.0	33.0	10.0	31.0	14.9	26.0	536	510
625.0*	55.8	44.9	32.4	46.0	30.4	41.0	-23.5	1.1	-25.5	-3.9	11.9	33.0	8.9	29.0	14.5	25.0	535	505
750.0*	62.3	49.0	31.2	45.0	29.2	41.0	-31.1	-4.0	-33.1	-8.0	10.3	32.0	7.3	27.0	14.0	25.0	535	504

**Values for frequencies above industry requirements are for information only.*

All performance based on 100 meters (328 ft.).

Category 6A F/UTP 4-Pair Cable (International)

COMPLIANCE

- ISO/IEC 11801 (Class E_A)
- IEC 61156-5
- IEEE 802.3an
- ANSI/TIA-568-C.2 (Category 6A)
- UL CM and IEC 60332-1
- UL CMR and CSA FT4
- LS0H: IEC 60332-1, IEC 60754, IEC 61034

CABLE CONSTRUCTION

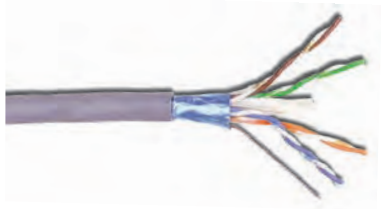
- F/UTP
- Nominal jacket OD: 6.8 mm
- 0.57mm solid (non-tinned) copper
- Central isolation member
- Shield is an aluminum foil tape enclosing a 0.51mm (24 AWG) tinned copper drain wire

Ordering Information:

9A6(X)4-A5 . . . . . 305m Reel

Jacket Material

M = PVC (CM, IEC 60332-1), Gray Jacket
R = Riser (CMR, CSA FT4), Blue Jacket
L = LS0H (IEC 60332-1), Violet Jacket



ELECTRICAL SPECIFICATIONS

DC Resistance	<8.5 Ω/100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100-750 MHz: 100 ± 22%
NVP	67%
TCL	30-10 log(*f*/100) dB
Delay Skey	≤45ns
PoE	Suitable for PoE & PoE +

PHYSICAL PROPERTIES

	LSOH	CM/CMR
Pulling Tension (max)	110N	110N
Bend Radius (min)	50mm	50mm
Installation Temperature	0 to 60°C	0 to 60°C
Storage Temperature	-20 to 75°C	-20 to 75°C
Operating Temperature	-20 to 75°C	-20 to 75°C

TRANSMISSION PERFORMANCE

GUARANTEED WORSE CASE SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0*	2.0	1.8	74.3	86.0	72.3	82.3	72.3	84.2	70.3	80.5	67.8	91.0	64.8	85.0	20.0	33.0	570	545
4.0	3.8	3.4	65.3	77.0	63.3	73.3	61.5	73.6	59.5	69.9	55.8	79.0	52.8	73.0	23.0	35.5	552	527
10.0	6.0	5.4	59.3	71.0	57.3	67.3	53.3	65.6	51.3	61.9	47.8	71.0	44.8	65.0	25.0	38.0	545	520
16.0	7.6	6.9	56.2	68.0	54.2	64.2	46.7	61.1	46.7	57.3	43.7	67.0	40.7	61.0	25.0	35.2	543	518
20.0	8.5	7.7	54.8	67.0	52.8	62.8	46.3	59.3	44.3	55.1	41.8	65.0	38.8	59.0	25.0	35.0	542	517
31.25	10.7	9.9	51.9	64.0	49.9	59.9	41.2	54.1	39.2	50.0	37.9	61.0	34.9	55.0	23.6	33.1	540	515
62.5	15.4	14.3	47.4	59.0	45.4	55.4	32.0	44.7	30.0	41.1	31.9	55.0	28.9	49.0	21.5	32.2	539	514
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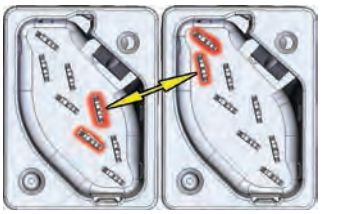
**Values for frequencies above industry requirements are for information only.*

All performance based on 100 metres

Z-MAX® 6A UTP System Features and Benefits

Siemon's Z-MAX 6A UTP solution was developed from the ground up with a single goal: shattering the limitations of Category 6A UTP cabling as we know it today. Combining patented PCB-based Smart Plugs, optimized outlets and high-density patch panels, the Z-MAX 6A UTP system provides outstanding margin on all ISO and TIA performance requirements for Category 6A/Class E_A, including critical alien crosstalk parameters.

And, the innovative Z-TOOL™ termination process eliminates the variability of field terminations, providing faster, more user-friendly and less-error-prone Category 6A UTP installations.



Optimized For Alien Crosstalk Elimination
Diagonal IDC alignment maximizes outlet to outlet pair separation to achieve AXT performance in high-density environments

PCB-Based Smart Plug
Exclusive PCB-based Smart Plug is specifically tuned to maximize overall system performance

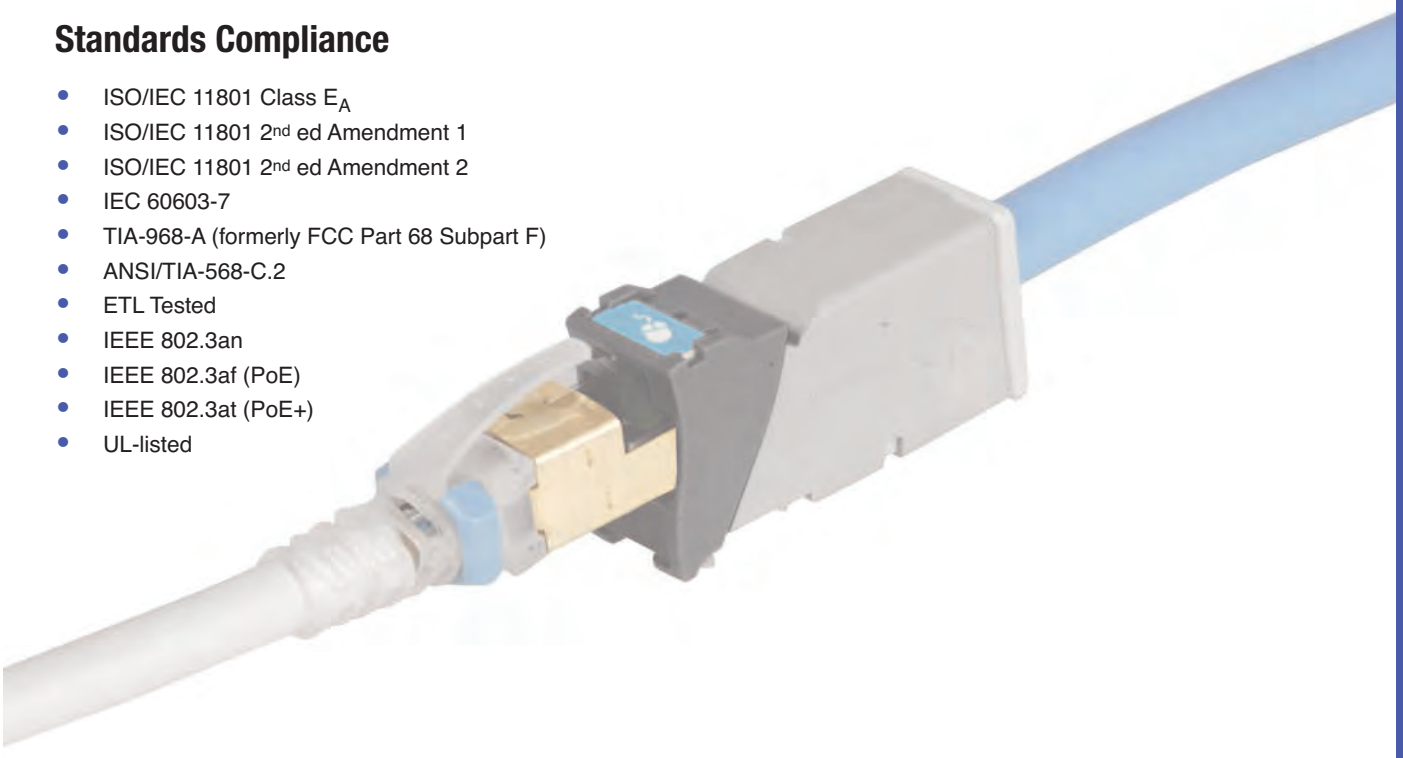
Features and Benefits

- High density 48 port, 1U panels provide the flexibility to maximize rack/cabinet space while maintaining excellent alien crosstalk isolation
- Industry's fastest termination time accelerates project completion
- Guided, tool-based termination process enhances system quality and reliability
- Hybrid work area outlets can be mounted in either flat or angled orientation
- Field-terminated outlets or pre-terminated trunking cables can be quickly snapped into patch panels and released enabling rapid deployment or changes
- Outlet and modular cord color-coding provides the capability to code and customize your cabling system

System Performance Overview

Standards Compliance

- ISO/IEC 11801 Class E_A
- ISO/IEC 11801 2nd ed Amendment 1
- ISO/IEC 11801 2nd ed Amendment 2
- IEC 60603-7
- TIA-968-A (formerly FCC Part 68 Subpart F)
- ANSI/TIA-568-C.2
- ETL Tested
- IEEE 802.3an
- IEEE 802.3af (PoE)
- IEEE 802.3at (PoE+)
- UL-listed



Z-MAX 6A Channel UTP Performance

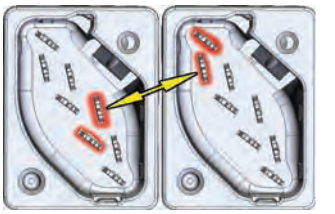
GUARANTEED 4-CONNECTOR CHANNEL MARGINS TO ISO / IEC 11801 2.1 (1 - 500 MHz)

PARAMETER	VALUE
IL	3%
NEXT	3.0 dB
PSNEXT	3.5 dB
ACR-F	7 dB
PSACR-F	10 dB
RL	3 dB
PSANEXT	1 dB
PSAACR-F	1 dB
ACR-N	6 dB
PSACR-N	6.5 dB

Performance is based on the use of 24 x 2M cords and 24 port/1U density.

Z-MAX® 6A UTP Outlets

The Category 6A UTP Z-MAX outlet offers best-in-class performance in every critical specification, exceeding all Category 6A performance requirements, including alien crosstalk. Its innovative features not only accelerate and simplify termination, but remove installation variability for consistently high and repeatable performance — every termination, every time!



Optimized For Alien Crosstalk Isolation

Diagonal IDC alignment maximizes outlet to outlet pair separation to achieve AXT performance in high-density environments.

Compact — Slim and side-stackable for high-density applications. Supports "pass-thru" feature to mount from the front or rear of a faceplate

Guided Termination Features — Lacing channels guide correct conductor placement while 2-sided color-coding provides wiring verification before and after lacing

Enclosed IDC Terminations — IDC terminations are fully enclosed in the outlet housing for robust protection

High-Visibility Icon System — Printed icons allow designation for voice / data applications and also provide an additional color coding option

Robust Hinged Cable Retention — Hinged clip accommodates multiple cable diameters

Fastest Termination Time — Zero-Cross™ termination module and 2-step Z-TOOL™ termination process combine for best-in-class termination time

Flexibility and Simplified Ordering

A single hybrid outlet supports both angled and flat mounting orientations.

Spring Door Option

Minimizes exposure to dust and other contaminants.

Ordering Information:

Z6A-(X)(XX)(X) . . . . . .UTP Z-MAX 6A outlet, T568A/B

Mounting Style
(Blank) = Hybrid Flat/Angled
K = Keystone

Bezel Color
01 = Black
02 = White
03 = Red
04 = Gray
05 = Yellow
06 = Blue
07 = Green
09 = Orange
20 = Ivory
80 = Light Ivory

Door Option
(Blank) = No Door
D = Door (Hybrid only)

Outlet terminates UTP cable constructions with 23 – 26 AWG (0.64 – 0.51mm) solid and 26 AWG (0.48mm) stranded conductors, with up to 0.60mm diameter conductors and up to 1.48mm diameter over insulation.

Ⓑ *Add "B" to end of part number for bulk project pack of 100 modules (hybrid modules include Icons).*

Z-MAX 6A UTP outlets utilize 10G MAX faceplates and cannot be side-stacked in standard MAX faceplates.

Each Z-MAX 6A UTP hybrid flat/angled outlet includes 1 printed icon set with the following color/print options.

Front

1 - Red Data
1 - Blue Data
1 - Bezel Color-Matching Data
1 - White Blank

Rear

1 - Red Voice
1 - Blue Voice
1 - Bezel Color-Matching Voice
1 - Bezel Color-Matching Blank

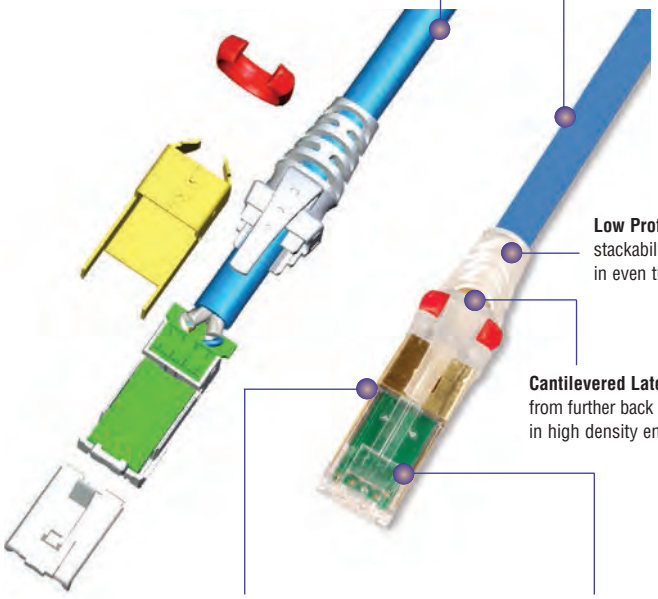
For more Z-MAX icon colors and options see page 8.5.

Z-MAX® 6A UTP Modular Cords

Combining the unparalleled performance of an exclusive PCB-based smart plug, alien crosstalk resistant construction and a host of innovative end-user features, Z-MAX 6A UTP modular cord sets the bar for Category 6A UTP patching.

High Performance Cable — Z-MAX 6A UTP cords feature dual jacket construction for excellent alien crosstalk performance

Solid Cord Option — Solid UTP cords are available for consolidation point and equipment cord applications



Low Profile Boot Design — Optimizes side-stackability of modular cords and allows use in even the most dense equipment

Cantilevered Latch Guard — Allows latch activation from further back on the boot for superior accessibility in high density environments

Superior Performance Consistency — Precision PCB-based conductor terminations eliminate the performance variability of traditional crimp-style terminations. Rear contacts maintain cable twist to point of termination and provide robust strain relief

Integrated PCB — PCB equipped Smart Plugs optimize signal tuning for exceptional transmission. Solderless, press-fit contact design ensues long-term reliability

Colored Clips

Removable clips allow field color coding even when cords are connected.

100% Factory-Tested

Cords are 100% transmission tested to ensure compliance with applicable standards requirements..

Solid Cord Option

Solid F/UTP assemblies are available for consolidation point and equipment cord applications.

Ordering Information:

ZM6A-(XX)-(XX) . . . . . Z-MAX 6A UTP, double-ended, stranded modular cord, clear boot, T568A/B, CMG

Length
- **03** = 0.9m (3 ft.)
- **05** = 1.5m (5 ft.)
- **07** = 2.1m (7 ft.)
- **10** = 3.1m (10 ft.)
- **15** = 4.6m (15 ft.)
- **20** = 6.1m (20 ft.)

Jacket Color
- **01** = Black
- **02** = White
- **03** = Red
- **04** = Gray
- **05** = Yellow
- **06** = Blue
- **07** = Green
- **09** = Orange

Ⓑ *Add "B" to end of part number for bulk project pack of 100 cords.*

ZC6A-(XX)(X)-(X)(X) . . . . . Z-MAX 6A UTP, solid modular cord, blue jacket, clear boot

Length
- **10** = 3.1m (10 ft.)
- **20** = 6.1m (20 ft.)
- **30** = 9.1m (30 ft.)
- **40** = 12.2m (40 ft.)
- **50** = 15.2m (50 ft.)
- **60** = 18.3m (60 ft.)

Wiring
- **A** = T568B
- **T** = T568A

Jacket
- **R** = CMR
- **P** = CMP

Plugs
- **(Blank)** = Single-ended
- **D** = Double-ended (T568A/B)

CLIP-(XX) . . . . . Color coding clip, bag of 25

Clip Color
- **01** = Black
- **02** = White
- **03** = Red
- **04** = Gray
- **05** = Yellow
- **06** = Blue
- **07** = Green
- **08** = Violet
- **09** = Orange

Z-MAX® 6A UTP Patch Panels

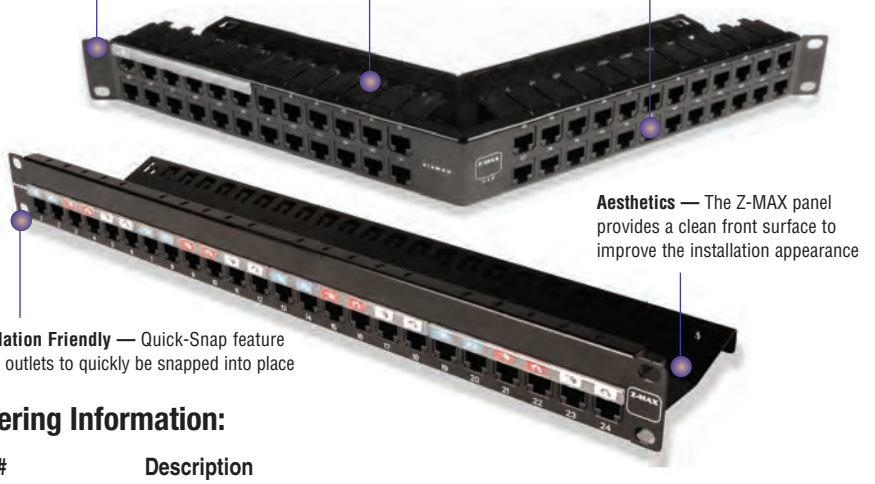
Z-MAX patch panels provide outstanding 10 Gb/s performance and aesthetics in a high-density, modular UTP solution. The Z-MAX UTP panels provide rapid and reliable installation by accelerating module mounting, and cable tie-down operations.

In addition to traditional 24 port / 1U flat and angled versions, the Z-MAX UTP panels are also available in 48 port / 1U configurations to permit high density installations.

High-Density — Provides 48 ports in just 1U while still meeting strict Category 6A Alien Crosstalk parameter

Port Identification — High visibility magnifying labeling system enables quick identification of outlets

Durable — High strength steel with black finish and scratch/fade resistant port marking



Aesthetics — The Z-MAX panel provides a clean front surface to improve the installation appearance

Installation Friendly — Quick-Snap feature allows outlets to quickly be snapped into place

Kits
Panels available as complete kits including patch panel, Z-MAX panel outlets and all necessary accessories. Empty panels are also available for use with Z-MAX trunk assemblies.

Ideal for Trunking Applications
Combine Z-MAX trunk assemblies (with preterminated panel outlets) and empty Z-MAX panels for rapid data center deployment.

Integrated Cable Management
Ensures proper cable management practices for all installations, critical to Category 6A performance.

Ordering Information:

Part #	Description
Fixed Wire Manager	
Z6A-PNL(X)-24K	Z-MAX 24-Port, category 6A UTP patch panel, kit, 1 RMS, black, with outlets
Z6A-PNL(X)-U48K	Z-MAX 48-Port, category 6A UTP patch panel kit, 1 RMS, black, with outlets
Z-PNL(X)-24E	Z-MAX 24-Port UTP patch panel, 1RMS, black, empty
Z-PNL(X)-U48E	Z-MAX 48-Port UTP patch panel, 1RMS, black, empty

Use (X) to specify mounting style: (Blank) = Flat, A = Angled

Removable Wire Manager	
Z6A-P(X)-24	Z-MAX 24-Port, category 6A UTP patch panel with removable wire manager kit, 1 RMS, black with outlets
Z6A-P(X)-48	Z-MAX 48-Port, CAT 6A UTP Patch Panel with removable wire manager kit, 1 RMS, black with outlets
Z-P(X)-24	Z-MAX 24-Port, UTP patch panel with removable wire manager, 1RMS, black, empty
Z-P(X)-48	Z-MAX 48-Port, UTP patch panel with removable wire manager, 1RMS, black, empty

Use (X) to specify mounting style: (F) = Flat, A = Angled

Panels include Z-TOOL, label / icon holders, designation labels, cable ties, grounding lugs, and mounting hardware.*
Note: 1U = 44.5mm (1.75 in.) included in kit only*

Note: Z-MAX UTP patch panels are designed for use with Z-MAX UTP panel outlets only

Panel Accessories:

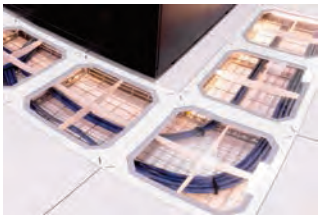
Part #	Description
Z-PNL-PL24	Patch panel label sheet, numbered 1 to 24, bag of 100
Z-PNL-PL48	Patch panel label sheet, numbered 25 to 48, bag of 100
Z-PNL-PS	Patch panel label holder, bag of 25
Z6A-P	Z-MAX 6A UTP panel outlet
PNLA-CVR-01	Angled panel cover, black
Z-BL-01	Z-MAX panel blank, bag of 10, black

PNLA-CVR-01

Z-BL-01

Z-MAX® 6A UTP Trunking Cable Assemblies

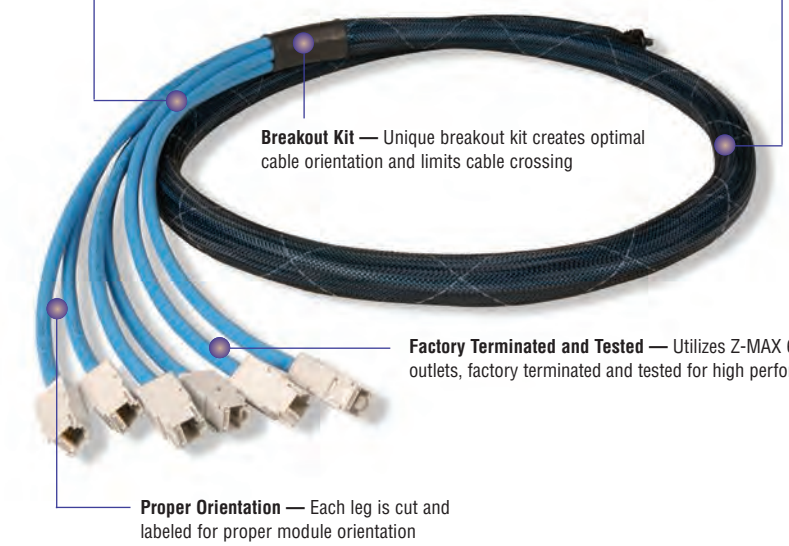
Siemon's Z-MAX 6A UTP trunking cable assemblies provide an easily installed and cost effective alternative to individual field-terminated channels. Combining factory terminated and tested Z-MAX outlets with Siemon's Category 6A UTP cable in a high-performance modular cable assembly, Z-MAX 6A UTP trunking cable assemblies are designed to simplify the installation of Category 6A systems in data centers and other high-density high-performance environments.



Data Centers
Ideal for Data Centers, raised floor and ladder rack environments enabling up to 75% faster deployment time.

Simple Installation
Pre-terminated Z-MAX panel outlets utilize a Quick-Snap feature for easy installation and removal from Z-MAX panels.

Protective Packaging
Each assembly is packaged individually to protect factory terminations.



Ordering Information:

TD(X)D6E-(XXXX)(XXX)F . . . . . 6 Leg Solid Cable Double-Ended Trunking Cable Assembly

Cable Jacket

R = Riser rated (CMR, CSA FT6), blue jacket

P = Plenum rated (CMP, CSA FT4), blue jacket

Connector Types

P0P0 = Z-MAX panel outlets for use with Z-MAX panels

H1H1 = Z-MAX hybrid flat/angled outlet

P0J0 = Z-MAX panel outlets to Z-MAX plugs

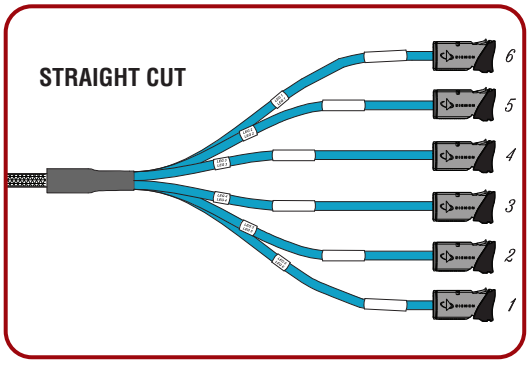
H1J0 = Z-MAX hybrid flat/angled outlet to Z-MAX plugs

Length

009-295 = Indicate length in feet (increments of 3 feet)

Standard wiring is T568B. Other lengths and configurations available upon request. Keystone versions also available.

Note: These products are made to order. Call for lead time and part number availability in your region.



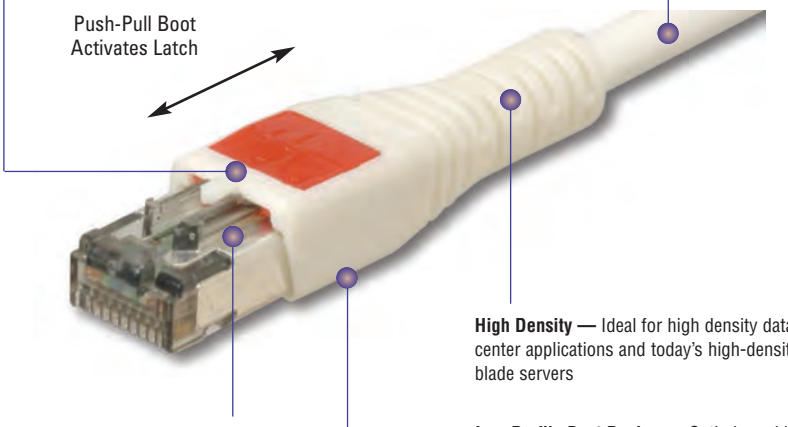
Category 6A UTP BladePatch® Modular Cords

Siemon's Category 6A UTP BladePatch patch cord offers a unique Category 6A solution for high-density patching environments. It features an innovative push-pull boot design to control the latch, enabling easy access and removal of the cord in tight-fitting areas.

The BladePatch cord is ideal for patching blade servers, patch panels, or any equipment with high density RJ-45 outlets.

Snagless — Push-pull latch design eliminates external thumb latch used in standard modular plug designs which can snag and break

High Performance — Cords feature Category 7 S/FTP stranded cable for optimal transmission performance while eliminating alien crosstalk

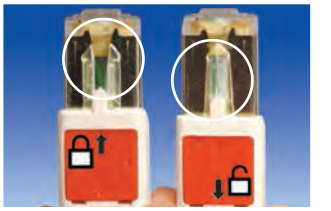


High Density — Ideal for high density data center applications and today's high-density blade servers

Easy Access and Removal — RJ-45 patch cord with patent-pending push-pull latch design enables easy access and removal in high density patching environments

Low Profile Boot Design — Optimizes side-stackability of patch cords and allows use in even the most dense equipment

Universal Compatibility
Fits within any standard RJ-45 outlet.



Revolutionary Latch
Simply push the boot forward to latch into the outlet and pull back to release.

High Density
The push-pull design enables easy access and removal via the boot in tight-fitting areas.

Ordering Information:

Category 6A BladePatch double ended, 4-pair UTP stranded modular cord with push-pull latching design, color matching cord/boot, T568A/B, CMG

BP6A-(XX)(XX)

Cord Length:	Cord Color		
03 = 0.9m (3 ft.)	**01** = Black	**04** = Gray	**07** = Green
05 = 1.5m (5 ft.)	**02** = White	**05** = Yellow	**08** = Violet
07 = 2.1m (7 ft.)	**03** = Red	**06** = Blue	**09** = Orange
10 = 3.1m (10 ft.)			
15 = 4.6m (15 ft.)			
20 = 6.1m (20 ft.)			

The use of Category 6A UTP BladePatch modular cords will provide Category 6A channel performance if used in a Z-MAX 6A system.

Z-MAX 6A warranty margins do not apply.

Category 6A UTP Cable (North America)

CABLE CONSTRUCTION

- UTP
- CMP Nominal Cable O.D: 7.9mm (0.31 in.)
- CMR Nominal Cable O.D: 8.3mm (0.326 in.)
- 0.58mm (0.022 in.) (23 AWG) solid bare copper
- Round jacket with Internal Longitudinal Striations (ILS)

COMPLIANCE

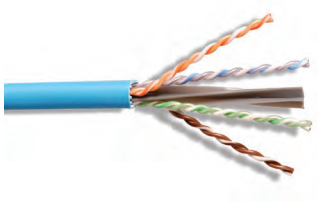
- ISO/IEC 11801
- ANSI/TIA-568-C.2
- UL CMR and CSA FT4
- UL CMP and CSA FT6

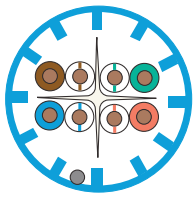
Ordering Information:

9C6(X)4-A5-(XX)-AR1A. . . . . 305m (1000 ft.) Reel

Jacket Material
P = Plenum (CMP, CSA FT6)
R = Riser (CMR, CSA FT4)

Jacket Color
01 = Black **04** = Gray **07** = Green
02 = White **05** = Yellow **08** = Violet
03 = Red **06** = Blue **09** = Orange





PHYSICAL PROPERTIES

	CMP	CMR
Pulling Tension (max)	110N (25 lbf)	110N (25 lbf)
Bend Radius (min)	34mm (1.3 in.)	34mm (1.3 in.)
Installation Temperature	0 to 50°C (+32 to 122°F)	0 to 50°C (+32 to 122°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)	-20 to 75°C (-4 to 167°F)
Operating Temperature	-20 to 60°C (-4 to 140°F)	-20 to 60°C (-4 to 140°F)

TRANSMISSION PERFORMANCE

☐ GUARANTEED WORSE CASE

Frequency (MHz)	Insertion Loss (dB)	NEXT (dB)	PS NEXT (dB)	ACR (dB)	PSACR (dB)	ACR-F (dB)	PS ACR-F (dB)	Return Loss (dB)	Propagation Delay (ns)
1.0	2.1	74.3	72.3	72.2	70.2	67.8	64.8	20.0	570
4.0	3.8	65.3	63.3	61.5	59.5	55.7	52.7	23.0	552
10.0	5.9	59.3	57.3	53.4	51.4	47.8	44.8	25.0	545
16.0	7.5	56.2	54.2	48.8	46.8	43.7	40.7	25.0	543
20.0	8.4	54.8	52.8	46.4	44.4	41.7	38.7	25.0	542
31.25	10.5	51.9	49.9	41.4	39.4	37.9	34.9	23.6	540
62.5	15.0	47.4	45.4	32.4	30.4	31.8	28.8	21.5	539
100.0	19.1	44.3	42.3	25.2	23.2	27.8	24.8	20.1	538
200.0	27.6	39.8	37.8	12.2	10.2	21.7	18.7	18.0	537
250.0	31.1	38.3	36.3	7.3	5.3	19.8	16.8	17.3	536
300.0	34.3	37.1	35.1	2.9	0.9	18.2	15.2	16.8	536
350.0	37.2	36.1	34.1	-1.1	-3.1	16.9	13.9	16.3	535
400.0	40.1	35.3	33.3	-4.8	-6.8	15.7	12.7	15.9	535
500.0*	45.3	33.8	31.8	-11.4	-13.4	13.8	10.8	15.2	536
625.0*	51.2	32.4	30.4	-18.8	-20.8	11.8	8.8	14.5	535
750.0*	56.7	31.2	29.2	-25.5	-27.5	10.3	7.3	14.0	535

**Performance for frequencies beyond TIA requirements are for information only.*

All performance based on 100 meters (328 ft.).

Category 6A UTP Cable (International)

COMPLIANCE

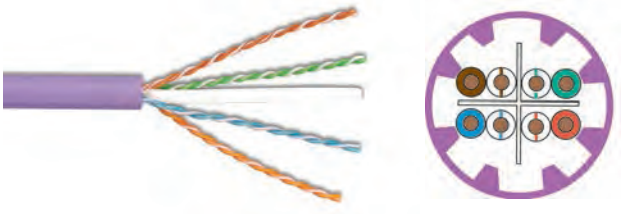
- ISO/IEC 11801 Ed. 2.2 (Class E_A)
- ISO/IEC 61156-5
- IEEE 802.3an
- TIA-568-C.2 (Category 6A)
- LSOH: ISO/IEC 60332, IEC 60754, IEC 61034

CABLE CONSTRUCTION

- UTP
- Nominal jacket OD: 8.5mm
- 0.58mm solid (non-tinned) copper
- Center Isolation Member

Ordering Information:

Part #	Description
9C6L4-A5	LSOH (IEC 60332-1), violet jacket, 305m Reel



ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38 Ω/100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1 - 250 MHz: 100 ± 15% 100 - 750 MHz: 100 ± 22%
NVP	67%
LCL	30-10 log (*f*/100)dB
PSANEXT	62.5-15log(*f*/100)dB
PSAACR-F	38.2-20log(*f*/100)dB
Delay Skew	≤ 45ns

PHYSICAL PROPERTIES

	LSOH
Pulling Tension (max)	110N
Bend Radius (min)	45.7mm
Installation Temperature	0 to 60°C
Storage Temperature	-20 to 75°C
Operating Temperature	-20 to 60°C

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0	2.1	1.8	75.3	96.0	72.3	92.0	73.2	94.2	70.2	90.2	68.0	92.0	65.0	85.0	20.0	29.0	570	540
4.0	3.8	3.5	66.3	89.0	63.3	83.0	62.5	85.7	59.5	79.7	56.0	80.0	53.0	73.0	23.0	32.0	552	522
10.0	5.9	5.5	60.3	83.0	57.3	77.0	54.4	77.8	51.4	71.8	48.0	72.0	45.0	65.0	25.0	36.0	545	515
16.0	7.5	6.7	57.2	80.0	54.2	74.0	49.8	73.3	46.8	67.3	43.9	68.0	40.9	61.0	25.0	36.0	543	513
20.0	8.4	7.5	55.8	79.0	52.8	73.0	47.4	71.5	44.4	65.5	42.0	68.0	39.0	59.0	25.0	36.0	542	512
31.25	10.5	9.4	52.9	76.0	49.9	70.0	42.4	66.6	39.4	60.6	38.1	62.0	35.1	55.0	23.6	34.0	540	510
62.5	15.0	13.7	48.4	71.0	45.4	65.0	33.4	57.3	30.4	51.3	32.1	56.0	29.1	49.0	21.5	34.0	539	509
100.0	19.1	17.8	45.3	68.0	42.3	62.0	26.2	50.2	23.2	44.2	28.0	52.0	25.0	45.0	20.1	33.0	538	507
200.0	27.6	25.8	40.8	64.0	37.8	58.0	13.2	38.2	10.2	32.2	22.0	46.0	19.0	39.0	18.0	31.0	537	506
250.0	31.1	29.2	39.3	62.0	36.3	56.0	8.3	32.8	5.3	26.8	20.0	44.0	17.0	37.0	17.3	31.0	536	506
300.0	34.3	31.5	38.1	61.0	35.1	55.0	3.9	29.5	0.9	23.5	18.5	42.0	15.5	35.0	17.3	29.0	536	505
400.0	37.2	33.8	37.1	60.0	34.1	54.0	-0.1	26.2	-3.1	20.2	17.1	41.0	14.1	34.0	17.3	28.0	535	505
500.0	40.1	37.9	36.38	59.0	33.3	53.0	-3.8	21.1	-6.8	15.1	16.0	40.0	13.0	33.0	17.3	27.0	535	505
550.0*	45.3	42.1	34.8	57.0	31.8	51.0	-10.4	14.9	-13.4	8.9	14.0	39.0	11.0	32.0	-	26.0	535	505
625.0*	-	44.9	-	53.0	-	50.0	-	8.1	-	5.1	-	36.0	-	29.0	-	25.0	-	505
750.0*	-	49.0	-	51.0	-	49.0	-	2.0	-	0.0	-	35.0	-	27.0	-	25.0	-	504

**Values for frequencies above industry requirements are for information only.*

All performance based on 100 metres

Category 6 UTP

Siemon offers multiple systems levels of system performance based on our high-performance Category 6 connectivity.

- **Paired with Siemon Premium 6™ UTP cable, our connectivity provides a warranted, end-to-end Premium 6 UTP cabling solution. Premium 6 exhibits exceptional margin on all parameters beyond category 6 — exceeding connecting hardware and channel performance specifications set forth for category 6/class E by the TIA and ISO/IEC**
- **With the use of Siemon's Z-MAX® 6 UTP outlets, Siemon's Z-MAX Premium 6 System provides margins beyond those of Premium 6, offering industry leading category 6 system performance**
- **Utilized with Siemon System 6™ UTP cable, Siemon category 6 connectivity offers excellent performance/price value in an end-to-end system that meets or exceed all category 6 parameters**
- **When deployed with Solution 6™ UTP cable, Siemon category 6 connectivity delivers a very cost-effective, standards-compliant system designed for installations where the additional performance headroom of Premium 6 and System 6 is not required**

Section Contents

Category 6 UTP

S210® Connection System

Z-MAX® 6 UTP Outlets

The Category 6 UTP Z-MAX outlet offers best-in-class performance exceeding all Category 6 performance requirements. Its innovative features not only accelerate and simplify termination, but remove installation variability for consistently high and repeatable performance - every termination, every time! This consistency eliminates troubleshooting time due to marginal passes during field testing.

Compact — Slim and side-stackable for high-density applications. Supports "pass-thru" feature to mount from the front or rear of a faceplate

Enclosed IDC Terminations — IDC terminations are fully enclosed in the outlet housing for robust protection

High-Visibility Icon System — Printed icons allow designation for voice / data applications and also provide an additional color coding option

Guided Termination Features — Lacing channels guide correct conductor placement while 2-sided color-coding provides wiring verification before and after lacing

Robust Hinged Cable Retention — Hinged clip accommodates multiple cable diameters

Fastest Termination Time — Zero-Cross™ termination module and 2-step Z-TOOL™ termination process combine for best-in-class termination time

Flexibility and Simplified Ordering
A single hybrid outlet supports both angled and flat mounting orientations.

Spring Door Option
Minimises exposure to dust and other contaminants.

Ordering Information:

Z6-(X)(XX)(X) . . . . . .UTP Z-MAX 6 outlet, T568A/B

Door Option
(Blank) = No Door
D = Door (Hybrid only)

Mounting Style
(Blank) = Hybrid Flat/Angled
K = Keystone

Bezel Colour
01 = Black
02 = White
03 = Red
04 = Gray
05 = Yellow
06 = Blue
07 = Green
09 = Orange
20 = Ivory
80 = Light Ivory

Hybrid

Door Option

Keystone

Outlet terminates UTP cable constructions with 23 – 26 AWG (0.64 – 0.51mm) solid and 26 AWG (0.48mm) stranded conductors, with up to 0.60mm diameter conductors and up to 1.48mm diameter over insulation.

Add "D" to end of part number for spring door option. (Hybrid only)

Add "B" to end of part number for bulk project pack of 100 modules (hybrid modules include icons).

Note: Z-MAX outlets utilise the Z-TOOL termination tool. Included with each standard pack of Z-MAX outlets.

Note: Keystone version is designed for integration with various international mounting products and is not compatible with MAX® mounting hardware.

Each Z-MAX 6 UTP hybrid flat/angled outlet includes 1 printed icon set with the following colour/print options.
Additional color options available.

Front **Rear**

1 - Red Data
1 - Blue Data
1 - Bezel Color-Matching Data
1 - White Blank

1 - Red Voice
1 - Blue Voice
1 - Bezel Color–Matching Voice
1 - Bezel Color–Matching Blank

For more Z-MAX icon colors and options see page 8.5.

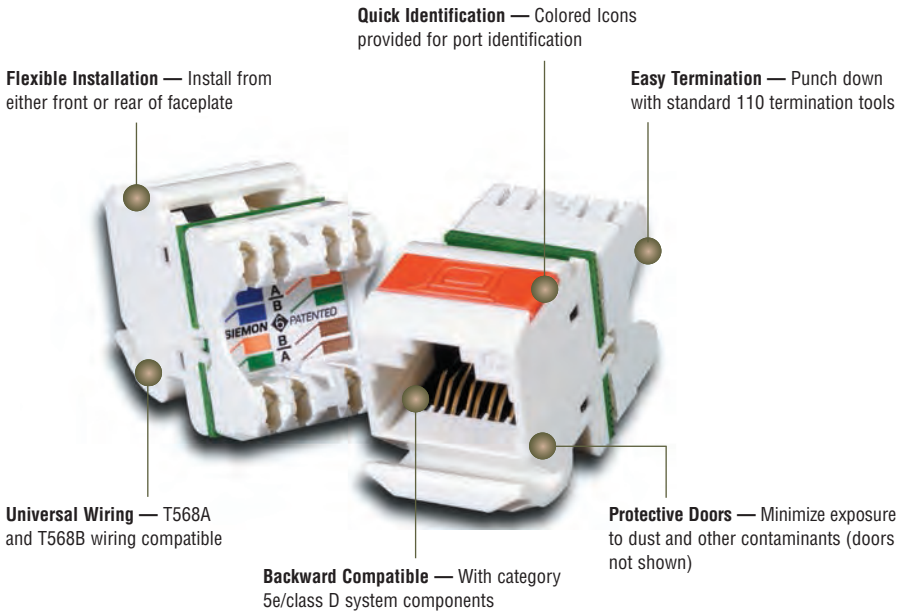
MAX® 6 UTP Outlets

Part of Siemon's category 6 UTP end-to-end Cabling Solution, the MAX 6 outlet exceeds category 6 connecting hardware performance specifications.

It's compact design is ideal for high density applications. Up to six outlets can be utilized in a single gang faceplate and twelve outlets in a double gang faceplate. Also, the angled MAX outlet provides a gravity feed, low-profile design for the work area — greatly improving cable management in installations where front or rear clearance is at a minimum.

Quick Installation
Pyramid wire entry system on S310 blocks separates paired conductors when lacing cables to simplify and reduce installation time.

Termination
Siemon's Palm Guard with MAX insert (p/n: PG-MX6) assists in securing outlet during termination.



MAX 6 UTP Modules

MX6-(XX) . . . . . .

Category 6 Angled MAX outlet, T568A/B, rear strain relief cap and protective color-matching rubber door*

MX6-F(XX) . . . . . .

Category 6 Flat MAX outlet, T568A/B, rear strain relief cap

MX6-K(XX) . . . . . .

Category 6 Keystone MAX outlet, T568A/B, rear strain relief cap

Use (XX) to specify color: 01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue,07 = green, 09 = orange, 20 = ivory, 25 = bright white, 80 = light ivory

Angled outlets include one color-matching, one red, and one blue icon.
**Door color is clear for red, yellow, blue and orange angled outlets.*

Flat outlets include one color-matching, one red, and one blue icon.

Ⓑ *Add "B" to end of part number for bulk project pack of 100 outlets (angled and flat outlets include icons).*

Add "VP" to end of part number for value pack option. Value pack is a kit of 250 jacks, doors, terms caps and color match icons. (Available in flat/ angled only. Door only included with angled version.)

Note: Keystone version is designed for integration with various international mounting products and is not compatible with MAX mounting hardware.

CT® 6 UTP Couplers

Angled CT 6 Couplers

Siemon's patented gravity-feed jack controls the bend radius of the mated modular cords to ensure the integrity of the transmission channel, while physically protecting the connection from incidental contact at the work area. The angled shroud creates a slim profile, perfect for installations in shallow raceways and modular furniture.

CT-C6-C6-(XX) . . . . . .
Angled, double coupler,
T568A/B

CT-C6-(XX) . . . . . .
Angled, single coupler,
T568A/B

Technical Tip!
Angled couplers are recommended for work area applications.

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory, 82 = alpine white
Add "-D" for spring door option.
Ⓑ *Add "B" to end of part number for bulk project pack of 100 couplers.*
(Bulk option includes couplers, icons, and termination caps. Cable ties are available separately
Couplers include one color-matching icon (clear for black) and one termination cap per port, plus one red and one blue icon.

Flat CT 6 Couplers

Flat CT 6 couplers are designed for use in flush mount applications and are also recommended for use with CT patch panels.

CT-F-C6-C6-(XX) . . . . . .
Flat, double coupler,
T568A/B

CT-F-C6-(XX). . . . . .
Flat, single coupler,
T568A/B

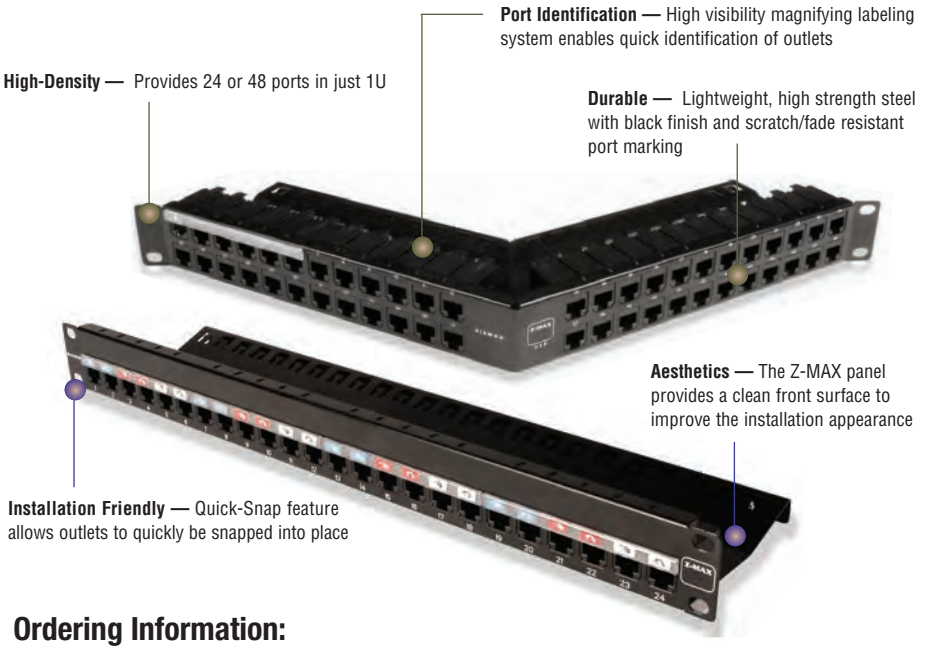
Technical Tip!
Flat couplers are recommended for patch panel applications.

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory,
Ⓑ *Add "B" to end of part number for bulk project pack of 100 couplers.*
(Bulk option includes couplers, icons, and termination caps. Cable ties are available separately.)
Couplers include one color-matching icon (clear for black) and one termination cap per port, plus one red and one blue icon.

Z-MAX® 6 UTP Patch Panels

Z-MAX patch panels provide outstanding performance and aesthetics in a high-density, modular UTP solution. The Z-MAX UTP panels provide rapid and reliable installation by accelerating outlet mounting, and cable tie-down operations.

In addition to traditional 24-port / 1U flat and angled versions, the Z-MAX UTP panels are also available in 48-port / 1U configurations for ultra high density installations.



Kits
Panels available as complete kits including patch panel, Z-MAX panel outlets, Z-TOOL and all necessary accessories. Empty panels are also available for use with Z-MAX trunk assemblies

Ideal for Trunking Applications
Combine Z-MAX trunk assemblies (with panel outlets) and empty Z-MAX panels for rapid data center deployment

Integrated Cable Management
Ensures proper cable management practices for all installations

Ordering Information:

Part #	Description
Fixed Wire Manager	
Z6-PNL(X)-24K	Z-MAX 24-Port, category 6 UTP patch panel, 1 RMS, black with outlets
Z6-PNL(X)-U48K	Z-MAX 48-Port, category 6 UTP patch panel, 1 RMS, Black, with outlets
Z-PNL(X)-24E	Z-MAX 24-Port UTP patch panel, 1RMS, black, empty
Z-PNL(X)-U48E	Z-MAX 48-Port UTP patch panel, 1RMS, black, empty
Use (X) to specify mounting style: (Blank) = Flat, A = Angled	
Removable Wire Manager‥	
Z6-P(X)-24	Z-MAX 24-Port, category 6 UTP Patch panel with removable wire manager kit, 1 RMS, Black, with outlets
Z6-P(X)-48	Z-MAX 48-Port, category 6 UTP patch panel with removable wire manager kit, 1 RMS, black, with outlets
Z-P(X)-24	Z-MAX 24-Port UTP patch panel with removable wire manager, 1RMS, black, empty
Z-P(X)-48	Z-MAX 48-Port UTP patch panel with removable wire manager, 1RMS, black, empty
Use (X) to specify mounting style: (F) = Flat, A = Angled	

Panels include Z-TOOL, label / icon holders, designation labels, cable ties, and mounting hardware. Note: 1U = 44.5mm (1.75 in.)* included in kit only*

Panel Accessories:

Part #	Description
Z-PNL-PL24	Patch panel label sheet, numbered 1 to 24, bag of 100
Z-PNL-PL48	Patch panel label sheet, numbered 25 to 48, bag of 100
Z-PNL-PS	Patch panel label holder, (6 port ea.) bag of 25
Z6-P	Z-MAX 6 UTP panel outlet
Z-BL-01	Z-MAX panel blank, bag of 10, black

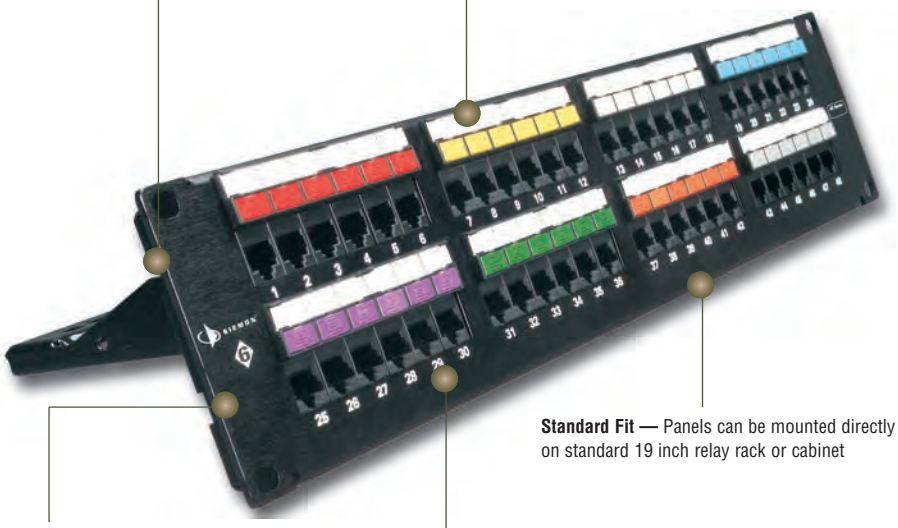
Note: Z-MAX UTP patch panels are designed for use with Z-MAX UTP panel outlets only

Z-BL-01

SIEMON

HD® 6 UTP Patch Panels

Siemon's HD 6 patch panel was the industry's first patch panel to exceed category 6 connecting hardware specifications for all pair combinations up to 250 MHz. Get superior performance and user-friendly termination, labeling, and cable management features with Siemon's popular category 6 patch panel.



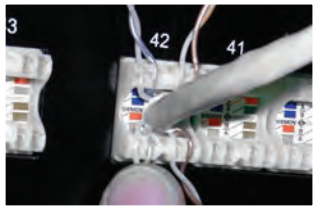
Universal Wiring — HD 6 patch panels feature universal wiring for both T568A/B compatible with standard 110 style single position punch tool.

Installer Friendly — Icon label holders and designation labels included

Standard Fit — Panels can be mounted directly on standard 19 inch relay rack or cabinet

Aesthetics — Front surface is uninterrupted by screw heads for a clean appearance

Port Identification — Bold port numbering enables quick identification of outlets



Pyramid™ Wire Entry System
Pyramid wire entry system on S310 blocks separates paired conductors when lacing cables to reduce installation time.

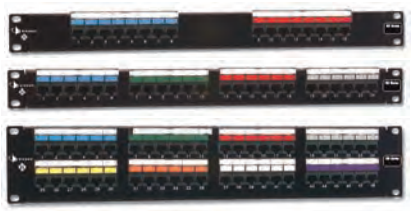
Circuit Protection
Rear metal enclosure protects printed circuitry.

Cable Management
Includes built-in cable manager to properly guide cables to point of termination.

Ordering Information:

HD® 6 Flat Patch Panels

Part #	Description
HD6-16	16-port category 6 UTP HD patch panel, 1U
HD6-24	24-port category 6 UTP HD patch panel, 1U
HD6-48	48-port category 6 UTP HD patch panel, 2U
HD6-96	96-port category 6 UTP HD patch panel, 4U



Panels include rear cable manager(s), icon/label holders, designation labels, cable ties, and mounting hardware.

(B) Add "B" for bulk project pack of 5 panels (rear cable managers (p/n: HD-RWM] not included but can be ordered separately).

Note: 1U = 44.5mm (1.75 in.)

S310 termination blocks are not compatible with S110® multi-pair termination tools.

HD® 6 Angled Patch Panels

Part #	Description
HD6-24A	24-port angled panel, T568A/B wiring, 1 RMS
HD6-48A	48-port angled panel, T568A/B wiring, 2 RMS
PNLA-CVR-01	Angled panel cover, black

Angled panels include one rear cable manager, designation labels, cable ties, and mounting hardware

(B) Add "B" for bulk project pack of 5 panels (rear cable managers not included but can be ordered separately).

Note: 1 RMS = 44.5mm (1.75 in.)

12-Port HD® 6 Mounted on S89D Bracket

The HD6-89 offers an economical solution for small applications and is ideal for retrofitting S66™ punch down blocks to a high performance modular design.

Part #	Description
HD6-89D-12	12-port HD 6 panel, T568A/B, mounted on S89D bracket
	height: 254.0mm (10.0 in), *width: 85.9mm (3.38 in),* *depth: 60.2mm (2.37 in)*

HD Panel Accessories

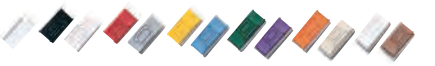
Part #	Description
HD-RWM	Rear cable management bracket for HD patch panels (not compatible with HD5-S-24)
HD5-ICON6-LBL	10 sheets of labels for HD5-ICON6 for laser printing (48 labels per sheet)*
HD5-LBL-480	Adhesive strips for sequentially numbering panel ports 1 through 480 for 24-, 48-, or 96-port panels
HD5-LBL6-2	White removable designation strips in a package of eight for 24-, 48-, or 96-port panels
HD5-ICON6	Adhesive-backed strips in a package of 8 for color-coding and port designation for 24-, 48-, or 96-port panels (icons not included)
CT-ICON-(XX)	25 colored icon tabs (phone on one side, computer on reverse)

HD-RWM

HD5-LBL-480

HD5-LBL6-2

HD5-ICON6



CT-ICON

Use (XX) to specify color: 00 = clear (TAB-XX only), 01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green, 08 = violet, 09 = orange, 20 = ivory, 25 = bright white, 60 = brown, 80 = light ivory

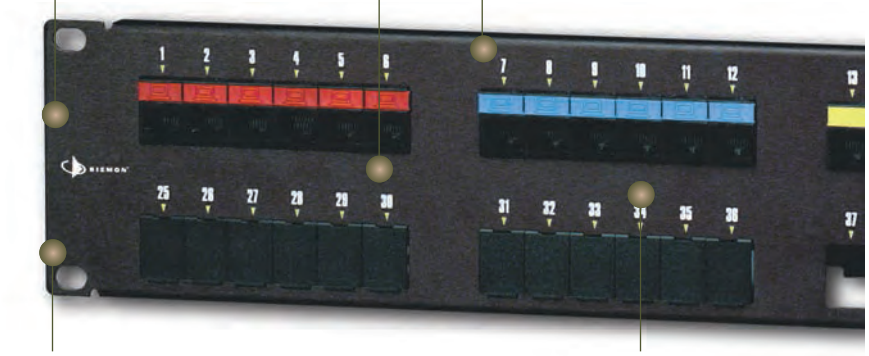
Ⓑ *Add "B" for bulk pack of 100 icons.*

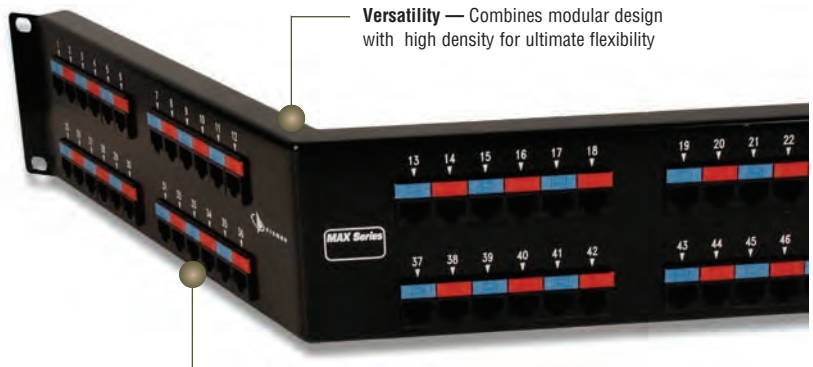
*Visit our web site or contact our Technical Support Department for labeling software.

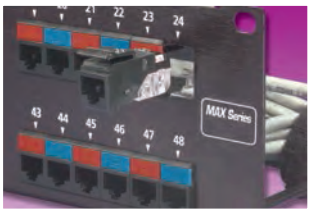
MAX® Patch Panels

MAX patch panels provide a flexible, high density termination solution for the telecommunications room. Using the full line of Z-MAX® or MAX modules (available separately), the panel can be configured for a variety of multimedia applications. Blank modules can be used to reserve ports for future capacity.

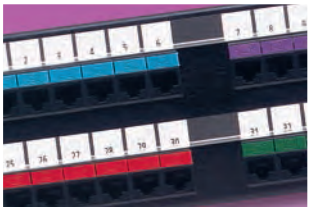
Siemon's MAX series angled patch panels route cables directly into the vertical cable managers eliminating the need for horizontal cable management between panels.







Installation Friendly
Individual modules snap into place from front or rear of panel for added installation flexibility.



Designation labels
Removable designation labels can be laser printed and enable proper circuit identification for each port.

Cable Management
Rear Cable management bar included for routing horizontal cables to terminations.

Eliminates Horizontal Cable Managers
Angled panels route patch cords directly into vertical cable managers saving valuable rack space.

MAX® Patch Panels

Part #	Description
MX-PNL-16	16-port MAX patch panel, 1U

Part #	Description
MX-PNL-24	24-port MAX patch panel, 1U

Part #	Description
MX-PNL-48	48-port MAX patch panel, 2U

Part #	Description
MX-PNL-72	72-port MAX patch panel, 2U

Panels include rear cable manager, designation labels, cable ties, and mounting hardware.
MAX Panels are not compatible with shielded MAX or shielded Z-MAX modules. Use the TERA·MAX or Z-MAX shielded panel.
Note: 1U= 44.5mm (1.75 in.)

Angled MAX Patch Panels

Siemon's MAX series angled patch panels route cables directly into the vertical cable managers, eliminating the need for horizontal cable management between panels.

Part #	Description
MX-PNLA-24	24-port angled MAX patch panel, 1U

Part #	Description
MX-PNLA-48	48-port angled MAX patch panel, 2U

Angled MAX panels are not compatible with shielded Z-MAX or shielded MAX modules. Use the TERA-MAX or Z-MAX shielded panel.
Angled MAX panels are not recommended for use with RS3 rack series. RS series racks with VPC vertical patching channels are recommended.
Panels include mounting hardware. Rear cable manager not included.
Note: 1U = 44.5mm (1.75 in.)

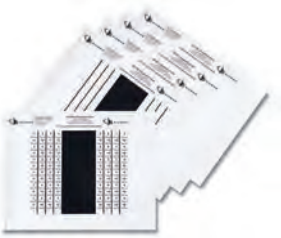
12-Port MAX Panel Mounted on S89D Bracket

The MAX S89D offers an economical solution for smaller applications while allowing for a range of different media using the full line of MAX modules.

Part #	Description
MX-89D-12	12-port MAX panel mounted on an 89D bracket *height: 254.0mm (10.0 in.),* *width: 85.9mm (3.38 in.),* *depth: 47.8mm (1.88 in.)*

MAX Panel Accessories

MX-PNL-LBL4*. . . . . .
10 sheets of laser printable labels for 16-port MAX panels



MX-PNL-LBL6*. . . . . .
10 sheets of laser printable labels for 24- and 48-port MAX panels

*Visit our web site or contact our Technical Support Department for labeling software.

CT® Patch Panels

Oversized CT Panels

Oversized CT panels are available for applications that require additional labeling space. They provide the same flexibility as our standard CT panels and feature a write-on designation surface above each coupler opening that may also be used as a space for adhering your own label. Siemon offers adhesive-backed label holders with replaceable write-on labels that mount above the entire row of CT couplers.

Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-24-ID	24-port panel	3	12

Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-48-ID	48-port panel	4	24

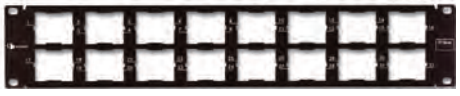
**Number of ports when configured with two-port CT couplers.*
Note: 1 RMS = 44.5mm (1.75 in.)

CT Patch Panels

Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-16	16-port panel	1	8

Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-24	24-port panel	2	12

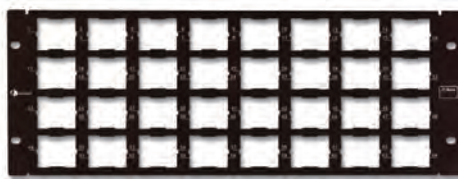
Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-32	32-port panel	2	16



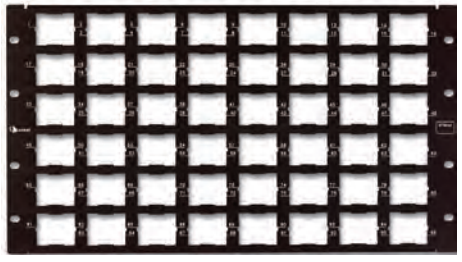
Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-48	48-port panel	3	24

**Number of ports when configured with two-port CT couplers.*
Note: 1 RMS = 44.5mm (1.75 in.)

Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-64	64-port panel	4	32



Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-96	96-port panel	6	48



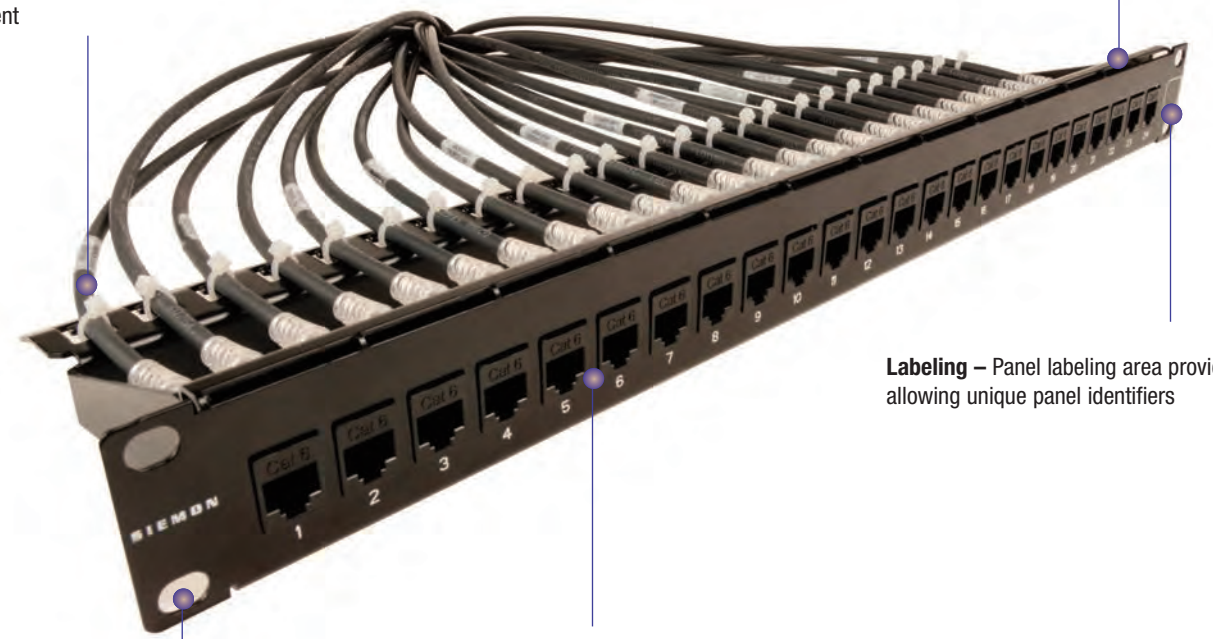
Technical Tip!
Flat couplers are recommended for patch panel applications.

MAX® In-Line Coupler Panel

Siemon's In-Line Coupler Panel is a 1U patch panel that allows users the ability to patch on the front and rear of the patch panel with standard RJ45 patch cables. When used with Siemon factory tested solid double ended IC and stranded MC cords, active equipment ports can be very quickly duplicated at the patch panel. The compact 1U design features a removable rear cable management bar and is available with Category 5e or 6 UTP couplers.

Management – RJ45 connections at the front and rear of the panel enables faster installation and deployment

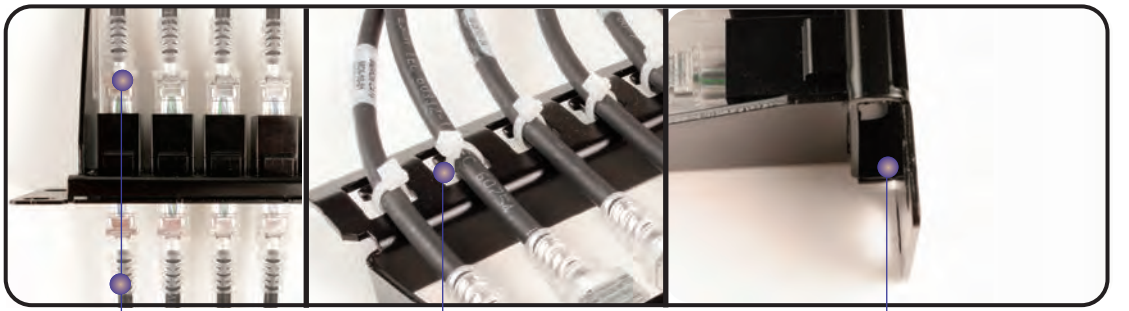
Strength – Lightweight high strength steel with black finish



Labeling – Panel labeling area provided allowing unique panel identifiers

Preassembly – Panel pre-assembled with 24 category 5e or 6 UTP couplers

Mounting – Panels can be mounted directly on standard 19 inch rack or cabinet. CEA 310-E compliant



In-Line Couplers - Allow you to plug a RJ45 plug into both sides of a coupler

Cable Management – Integrated cable manager provides ability to secure cables at the rear of the panel for proper strain relief

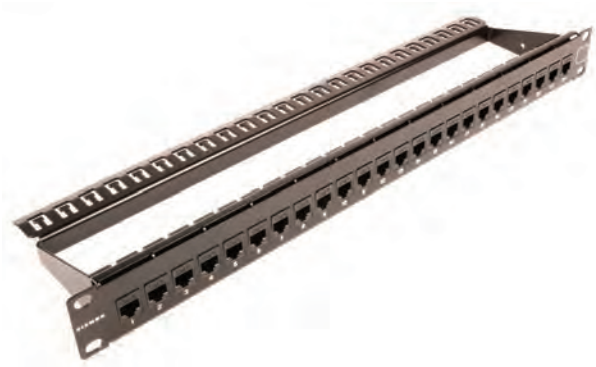
Latches – Individual coupler latches are recessed within the panel, creating a clean front surface

PRODUCT INFORMATION

	Mechanical Properties
Dimensions	109.2mm x 482.6mm x 44.2mm (4.30 in. x 19.00 in. x 1.74 in.)
Mounting	CEA-310-E 19-inch (482.6mm) rack
Material	Panel: 16 AWG CRS. Wire Manager: 14 AWG CRS.
Operating Temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Relative Humidity	Up to 95%, non-condensing
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Insertion cycles	750 Mating cycles
Application requirements	Maximum one In-Line coupler per channel
Color	Black

ORDERING INFORMATION

MX-K-C5-IL-24 .....In-Line Coupler Panel, Cat 5e UTP, 1U, Black
MX-K-C6-IL-24 .....In-Line Coupler Panel, Cat 6 UTP, 1U, Black

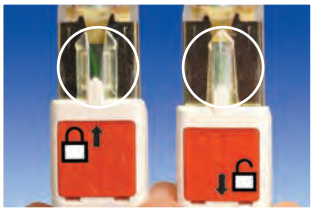


Panels include tie-wraps, wire manager and mounting screws. Also offered in Category 5e UTP.

BladePatch® 6 UTP Modular Cords

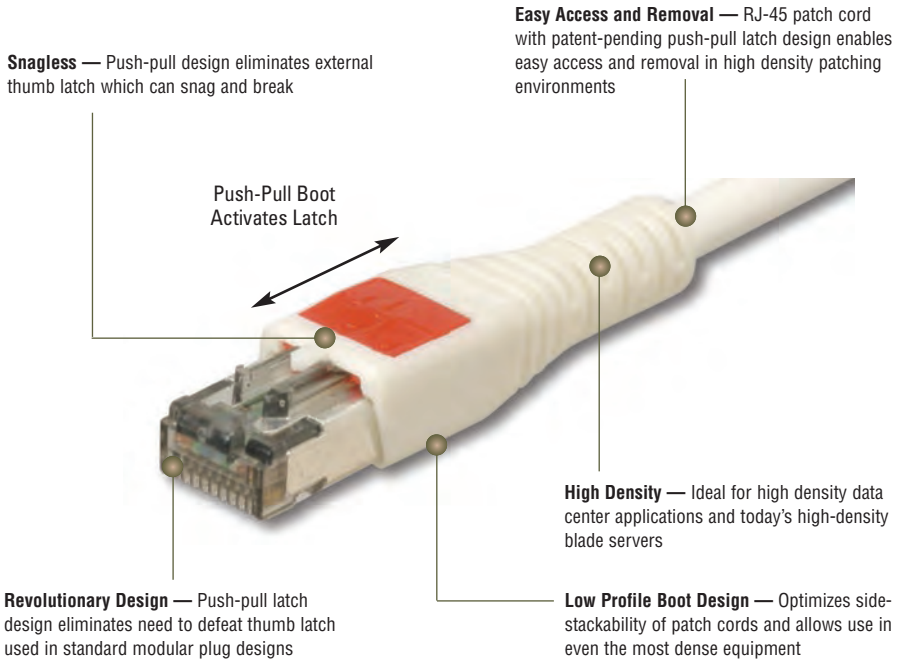
Siemon's BladePatch 6 offers a unique category 6 solution for high-density patching environments. It features an innovative push-pull boot design to control the latch, enabling easy access and removal of the cord in tight-fitting areas. The BladePatch cord is ideal for patching blade servers, patch panels, or any equipment with high density RJ-45 outlets.

Universal Compatibility
Fits within any standard RJ-45 opening.



Revolutionary Latch
Simply push the boot forward to latch into the outlet and pull back to release.

High Density
The push-pull design enables easy access and removal via the boot in tight-fitting areas.



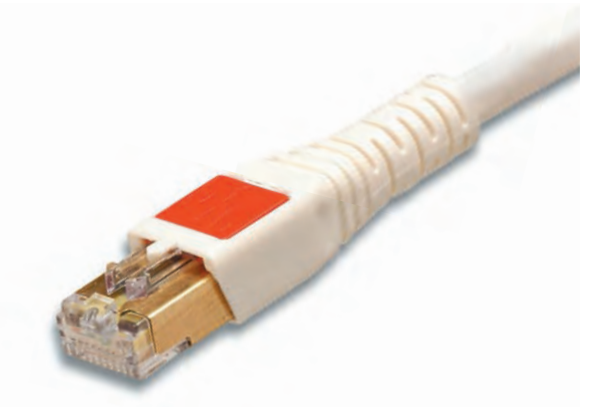
BladePatch 6 UTP

Category 6 UTP BladePatch, double-ended, RJ-45 modular patch cord with push-pull latching design, color matching cord/boot, T568A/B.

BP6-(XX)-(XX)

Cord Length:	Cord Color:
03 = 0.9m (3 ft.)	**01** = Black
05 = 1.5m (5 ft.)	**02** = White
07 = 2.1m (7 ft.)	**03** = Red
10 = 3.1m (10 ft.)	**04** = Gray
15 = 4.6m (15 ft.)	**05** = Yellow
20 = 6.1m (20 ft.)	**06** = Blue
	07 = Green
	08 = Violet
	09 = Orange

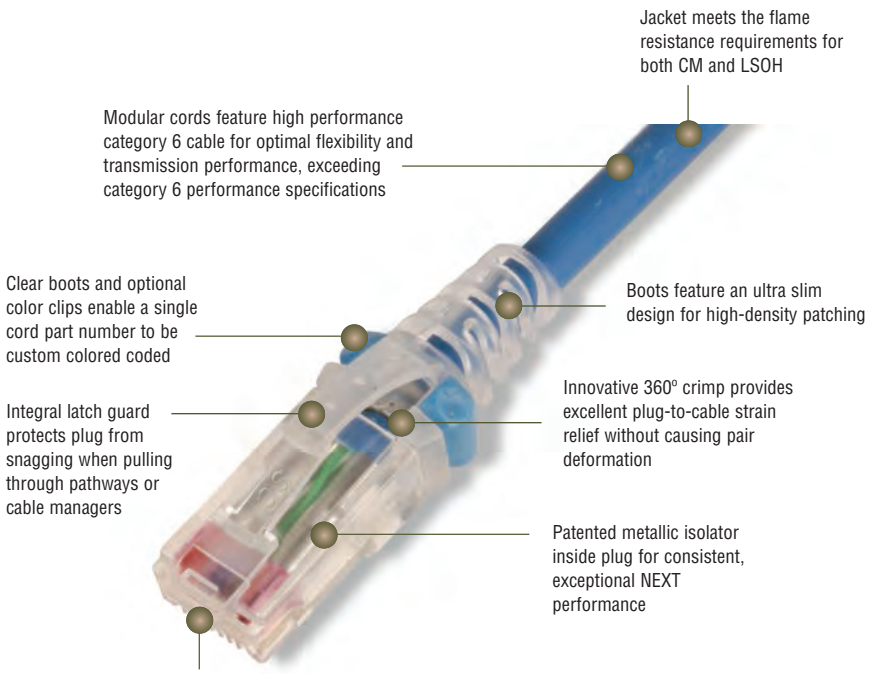
Ⓑ *Add "B" for bulk pack of 100 modular cords.*



MC® 6 UTP Modular Cords

Siemon's category 6 series of modular cords are key components to ensure optimum channel performance of our category 6 UTP systems. A variety of product enhancements contribute to the cord's superior performance — including 250 MHz rated stranded cordage, a patented crosspair isolator and an innovative 360° crimp, which provides excellent plug-to-cable strain relief without causing pair deformation. The cable used to manufacture the category 6 patch cords exceeds the specifications set forth by both ANSI/TIA-568-C.2 and ISO/IEC 11801:2002.

Excellent Bend Relief
Boot and integrated strain relief ensures proper bend relief, critical for category 6 performance



Color Coding
Optional colored clips enable field color coding and can easily be snapped into place without having to disconnect cords

STANDARDS COMPLIANCE
- ANSI/TIA-568-C.2
- ISO/IEC 11801
- IEEE 802.3af (PoE)
- IEEE 802.3at (PoE+)
- IEC 60603-7
- cUL US Listed
- IEC 60332-1, 60754, 61054, 61034
- TIA-968-A (formerly FCC Part 68 Subpart F)

MC 6 UTP Modular Cords

Category 6 MC, double-ended, 4-pair UTP stranded modular patch cord, T568A/B, clear boot.

MC6-(XX)-(XX)

Cord Length:
- **03** = 0.9m (3 ft.)
- **05** = 1.5m (5 ft.)
- **07** = 2.1m (7 ft.)
- **10** = 3.1m (10 ft.)
- **15** = 4.6m (15 ft.)
- **20** = 6.1m (20 ft.)

Cord Color:

01 = Black	**04** = Gray	**07** = Green
02 = White	**05** = Yellow	**08** = Violet
03 = Red	**06** = Blue	**09** = Orange

Ⓑ *Add "B" for bulk pack of 100 modular cords.*

CLIP-(XX) . . . . . Color coding clip, bag of 25

Clip Color

01 = Black	**04** = Gray	**07** = Green
02 = White	**05** = Yellow	**08** = Violet
03 = Red	**06** = Blue	**09** = Orange

IC® 6 Solid Single-Ended Cords

Siemon's category 6 IC solid single-ended modular cords are designed for use in category 6 applications requiring a consolidation point (CP) or cross-connect (as an equipment cord). The cords are 100% factory transmission tested to 250 MHz and feature the same plug construction used in Siemon's stranded category 6 modular cords. These cords are available in CMP and CMR versions and are single-ended for direct termination.

Premium 6 IC Modular Cords

Part #	Description
IC6E-8A-(XX)-B(XX)R	Premium 6 IC, single-ended, non-plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568B, CMR
IC6E-8T-(XX)-B(XX)R	Premium 6 IC, single-ended, non-plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568A, CMR
IC6E-8A-(XX)-B(XX)P	Premium 6 IC, single-ended, plenum, 4-pair UTP solid modular cord, blue jacket with colored boot T568B, CMP
IC6E-8T-(XX)-B(XX)P	Premium 6 IC, single-ended, plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568A, CMP

System 6 IC Modular Cords

Part #	Description
IC6-8A-(XX)-B(XX)R	System 6 IC, single-ended, non-plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568B, CMR
IC6-8T-(XX)-B(XX)R	System 6 IC, single-ended, non-plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568A, CMR
IC6-8A-(XX)-B(XX)P	System 6 IC, single-ended, plenum, 4-pair UTP solid modular cord, blue jacket with colored boot T568B, CMP
IC6-8T-(XX)-B(XX)P	System 6 IC, single-ended, plenum, 4-pair UTP solid modular cord, blue jacket with colored boot, T568A, CMP

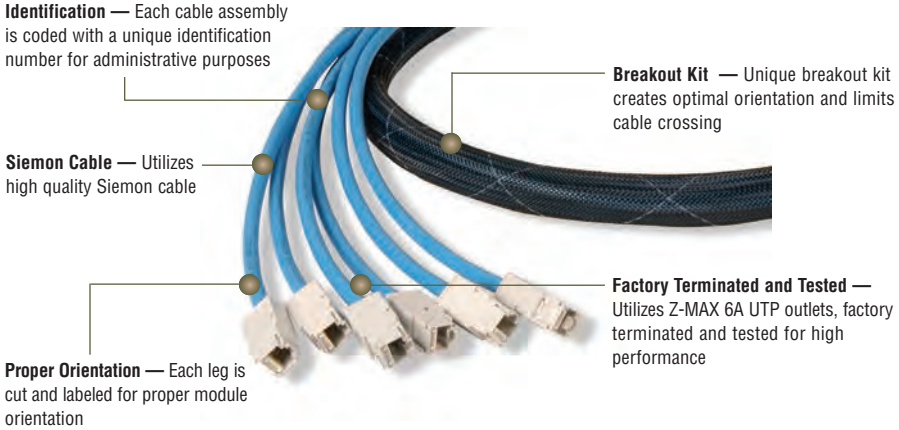
Use 1st (XX) to specify cord length: 10 = 3.1m (10 ft.), 20 = 6.1m (20 ft.), 30 = 9.1m (30 ft.), 40 = 12.2m (40 ft.), 50 = 15.2m (50 ft.), 60 = 18.3m (60 ft.)

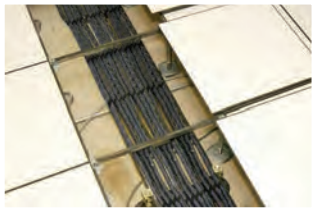
Use 2nd (XX) to specify color of boot: 01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green

Add "D" to denote double-ended.

Category 6 UTP Trunking Cable Assemblies

Siemon's category 6 UTP copper trunking cable assemblies provide an efficient and cost effective alternative to individual field-terminated components. Combining factory terminated and tested UTP Z-MAX® or MAX® modules with Siemon Premium™ or System 6™ cable, Siemon copper trunking cable assemblies were designed with data center applications in mind. In addition to providing simple and aesthetically pleasing cable management, standard configurations also help maintain consistent cable layout and facilitate efficient moves, adds and changes. the modular design and reduced scrap of trunk assemblies make them the most "Green" method for category 6 cabling.





Data Centers
Ideal for data centers, raised floor and ladder rack environments enabling up to 75% faster deployment time. Well organized cable bundles improve cable management and air flow.

Straight Cut
Typical installation utilizing Straight Cut ensures each cable is terminated at the proper length and allows left, right or center exit.

Protective Packaging
Each assembly is packaged individually to protect factory terminations.

MAX Premium 6 Double-Ended Trunking Cable Assemblies

Part #	Description
TPRD6E-A1A1(XXX)F	6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMR
TPPD6E-A1A1(XXX)F	6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMP

MAX System 6 Double-Ended Trunking Cable Assemblies

Part #	Description
TCRD6E-A1A1(XXX)F	6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMR
TCPD6E-A1A1(XXX)F	6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMP

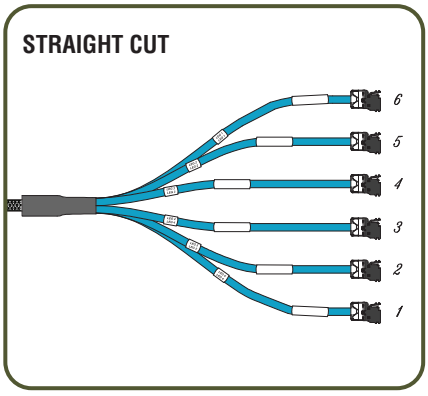
Z-MAX Premium 6 Double-Ended Trunking Cable Assemblies w/Panel Outlets

Part #	Description
TPRD6E-P0P0(XXX)F	6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMR
TPPD6E-P0P0(XXX)F	6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMP

Z-MAX System 6 Double-Ended Trunking Cable Assemblies w/Panel Outlets

Part #	Description
TCRD6E-P0P0(XXX)F	6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMR
TCPD6E-P0P0(XXX)F	6 Leg Solid Cable Trunking Cable Assembly, blue jacket, CMP

Use (XXX) to specify length: 009-295 ft. in increments of 3 feet
Standard wiring is T568B. Other lengths and configurations available upon request.



Premium 6™ UTP Cable (North America)

COMPLIANCE

- ISO/IEC 11801:2002 (Category 6)
- TIA-568-C.2 (Category 6)
- IEC 61156-5:2002 (Category 6)
- UL CMP and CSA FT6
- UL CMR and CSA FT4

CABLE CONSTRUCTION

- UTP
- 0.57mm (0.023 in.) (23 AWG) solid bare copper
- 6 mm (0.24 in.) max jacket diameter
- Central isolation member

Part #	Description
9C6P4-E4-(XX)-RBA	Plenum (CMP, CSA FT6) 305m (1000 ft.) Reel-in-Box
9C6R4-E4-(XX)-RBA	Riser (CMR. CSA FT4) 305m (1000 ft.) Reel-in-Box

Use (XX) to specify jacket color:
02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green

ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38Ω/100m
DC Resistance Unbalance	3%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100-250 MHz: 100 ± 20%
NVP	CMP-70% CMR-68%
TCL	30-10 log(*f*/100) dB
Delay Screw	≤25ns

PHYSICAL PROPERTIES

	CMP	CMR
Pulling Tension (max)	110N (25 lbf)	110N (25 lbf)
Bend Radius (min)	35.6mm (1.4 in.)	35.6mm (1.4 in.)
Installation Temperature	0 to 60°C (+32 to 140°F)	0 to 60°C (+32 to 140°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)	-20 to 75°C (-4 to 167°F)
Operating Temperature	-20 to 60°C (-4 to 140°F)	-20 to 60°C (-4 to 140°F)

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0	2.0	1.8	81.3	96.0	79.3	92.2	79.3	94.2	77.3	90.2	74.8	84.8	71.8	79.8	20.0	29.0	570	540
4.0	3.7	3.3	72.3	89.0	70.3	83.0	68.5	85.7	66.5	79.7	62.7	72.8	59.7	67.8	23.0	32.0	552	522
10.0	5.9	5.2	66.3	83.0	64.3	77.0	60.4	77.8	58.4	71.8	54.8	64.8	51.8	59.8	25.0	36.0	545	515
16.0	7.4	6.7	63.2	80.0	61.2	74.0	55.8	73.3	53.8	67.3	50.7	60.7	47.7	55.7	25.0	36.0	543	513
20.0	8.3	7.5	61.8	79.0	59.8	73.0	53.5	71.5	51.5	65.5	48.7	58.8	45.7	53.8	25.0	36.0	542	512
31.25	10.34	9.4	58.9	76.0	56.9	70.0	48.5	66.6	46.5	60.6	44.9	54.9	41.9	49.9	23.6	34.0	540	510
62.5	14.9	13.7	54.4	71.0	52.4	65.0	39.5	57.3	37.5	51.3	38.8	48.9	35.8	43.9	21.5	34.0	539	509
100.0	19.0	17.8	51.3	68.0	49.3	62.0	32.3	50.2	30.3	44.2	34.8	44.8	31.8	39.8	20.1	33.0	538	507
160.0	24.4	22.7	48.2	65.0	46.2	59.0	23.9	42.3	21.9	36.3	30.7	40.7	27.7	35.7	18.7	32.0	537	506
200.0	27.5	25.8	46.8	64.0	44.8	58.0	19.3	38.2	17.3	32.2	28.7	38.8	25.7	33.8	18.0	31.0	537	506
250.0	31.0	29.2	45.3	62.0	43.3	56.0	14.4	32.8	12.4	26.8	26.8	37.0	23.8	31.8	17.3	31.0	536	506
300.0*	34.2	31.5	44.1	61.0	42.1	55.0	10.0	29.5	8.0	23.5	25.2	36.0	22.2	30.0	16.8	29.0	536	505
400.0*	40.0	37.9	42.3	59.0	40.3	53.0	2.3	21.1	0.3	15.1	22.7	32.0	19.7	27.0	15.9	27.0	536	505
500.0*	45.3	39.9	40.8	48.0	38.8	52.0	-1.2	15.4	-6.4	11.9	20.8	31.0	17.8	26.0	15.2	26.0	536	505
550.0*	47.7	42.1	40.2	47.0	38.2	51.0	-7.5	14.9	-9.5	8.9	19.9	30.0	16.9	26.0	14.9	25.0	536	505

**Values for frequencies above industry requirements are for information only.*

All performance based on 100 meters (328 ft.).

System 6™ UTP Cable (North America)

COMPLIANCE

- ISO/IEC 11801:2002 (Category 6)
- TIA-568-C.2 (Category 6)
- IEC 61156-5:2002 (Category 6)
- UL CMP and CSA FT6
- UL CMR and CSA FT4

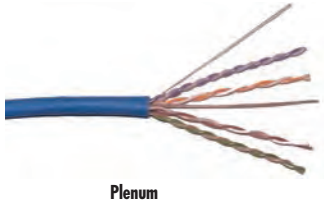
CABLE CONSTRUCTION

- UTP
- 0.54 mm (0.021 in.) (23 AWG) solid bare copper
- 5.3 mm (0.208 in.) Nom. jacket diameter - plenum
- 6.0 mm (0.236 in.) Nom. jacket diameter - riser
- Central isolation member

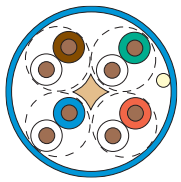
Part #	Description
9C6P4-E3-(XX)-RXA	Plenum (CMP, CSA FT6) 305m (1000 ft.) Reelex
9C6R4-E3-(XX)-RXA	Riser (CMR. CSA FT4) 305m (1000 ft.) Reelex

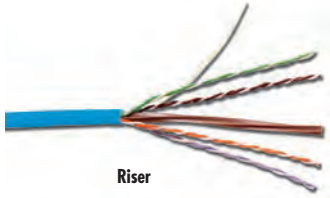
Use (XX) to specify jacket color:

02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green

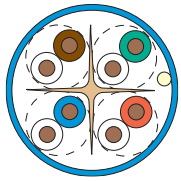


Plenum





Riser



ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38Ω/100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100-550 MHz: 100 ± 22%
NVP	CMP-70% CMR-68%
TCL	30-10 log(*f*/100) dB
Delay Screw	≤35ns

PHYSICAL PROPERTIES

	CMP	CMR
Pulling Tension (max)	110N (25 lbf)	110N (25 lbf)
Bend Radius (min)	25mm (1 in.)	25mm (1 in.)
Installation Temperature	0 to 60°C (+32 to 140°F)	-36 to 60°C (-32 to 140°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)	-34 to 75°C (-30 to 167°F)
Operating Temperature	-20 to 60°C (-4 to 140°F)	-34 to 60°C (-30 to 140°F)

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE SIEMON TYPICAL

Frequency µ(MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PS ACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0	2.0	1.8	77.3	87.3	75.3	82.3	75.3	85.5	73.3	80.5	70.8	84.8	68.8	79.8	20.0	29.0	550	545
4.0	3.8	3.5	68.3	78.3	66.3	73.3	64.5	74.8	62.5	69.8	58.8	72.8	56.8	67.8	23.6	32.0	532	527
10.0	5.9	5.6	62.3	72.3	60.3	67.3	56.4	66.7	54.4	61.7	50.8	64.8	48.8	59.8	26.0	38.0	525	520
16.0	7.5	7.1	59.2	69.2	57.2	64.2	51.8	62.1	49.8	57.1	46.7	60.7	44.7	55.7	26.0	34.0	523	518
20.0	8.4	7.9	57.8	67.8	55.8	62.8	49.4	59.9	47.4	54.9	44.8	58.8	42.8	53.8	26.0	34.0	522	517
31.25	10.6	10.0	54.9	64.9	52.9	59.9	44.3	54.9	42.3	49.9	40.9	54.9	38.9	49.9	23.6	32.0	520	515
62.5	15.2	14.4	50.4	60.4	48.4	55.4	35.1	46.0	33.1	41.0	34.9	48.9	32.9	43.9	21.5	32.0	519	514
100.0	19.6	18.6	47.3	57.3	45.3	52.3	27.7	38.7	25.7	33.7	30.8	44.8	28.8	39.8	20.1	32.0	518	513
160.0	25.4	24.1	44.2	54.2	42.2	49.2	18.9	30.1	16.9	25.1	26.7	40.7	24.7	35.7	18.7	31.0	517	512
200.0	28.7	26.8	42.8	52.8	40.8	47.8	14.1	26.0	12.1	21.0	24.8	38.8	22.8	33.8	18.0	29.0	517	512
250.0	32.6	30.5	41.3	51.3	39.3	46.3	8.8	20.8	6.8	15.8	22.8	37.0	20.8	31.8	17.3	29.0	516	511
300.0*	36.1	33.7	40.1	50.0	38.1	45.0	4.0	16.3	2.0	11.3	21.3	36.0	19.3	30.0	16.8	27.0	516	511
400.0*	42.6	40.3	38.3	48.0	36.3	43.0	-4.3	7.7	-6.3	2.7	18.8	32.0	16.8	27.0	15.9	26.0	516	511
500.0*	48.5	39.9	36.8	48.0	34.8	42.0	-11.7	8.1	-13.7	2.1	16.8	31.0	14.8	26.0	15.2	25.0	516	511
550.0*	51.3	39.7	39.7	46.0	34.2	42.0	-15.1	6.3	-17.1	2.3	16.0	30.0	14.0	26.0	14.9	24.0	516	510

**Values for frequencies above industry requirements are for information only.*

All performance based on 100 meters (328 ft.).

System 6™ UTP Cable (International)

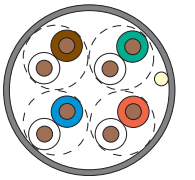
COMPLIANCE

- ISO/IEC 11801 Ed. 2.2 (Class E)
- IEC 61156-5:2002 (Category 6)
- IEEE 802.3
- TIA-568-C.2 (Category 6)
- UL CMR and CSA FT4
- UL CMX
- UL CM
- LSOH: IEC 60332-1, IEC 60754,and IEC 61034

CABLE CONSTRUCTION

- UTP
- Nominal jacket OD: 6.35mm
- 0.57mm solid (non-tinned) copper
- Central isolation member
- Reverse sequential numbering

Part #	Description
9C6R4-E3	PVC (CMR. CSA FT4) 305m Reel-in-Box
9C6M4-E3	CM, 305m Reel-in-Box
9C6L4-E3	LSOH (IEC 60332-1), 305m Reel-in-Box
9C6H4-E3	LSOH (IEC 60332-3C), 305m Reel-in-Box



ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38Ω/100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100-550 MHz: 100 ± 22%
NVP	68%
TCL	30-10 log(*f*/100) dB
Delay Skew	≤35ns

PHYSICAL PROPERTIES

	LSOH	CM/CMR
Pulling Tension (max)	110N	110N
Bend Radius (min)	25mm	25mm
Installation Temperature	0 to 60°C	0 to 60°C
Storage Temperature	-20 to 75°C	-20 to 75°C
Operating Temperature	-20 to 60°C	-20 to 60°C

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE SIEMON TYPICAL

Frequency µ(MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PS ACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0	2.0	1.8	77.3	87.3	75.3	82.3	75.3	85.5	73.3	80.5	70.8	84.8	68.8	79.8	20.0	29.0	550	545
4.0	3.8	3.5	68.3	78.3	66.3	73.3	64.5	74.8	62.5	69.8	58.8	72.8	56.8	67.8	23.6	32.0	532	527
10.0	5.9	5.6	62.3	72.3	60.3	67.3	56.4	66.7	54.4	61.7	50.8	64.8	48.8	59.8	26.0	38.0	525	520
16.0	7.5	7.1	59.2	69.2	57.2	64.2	51.8	62.1	49.8	57.1	46.7	60.7	44.7	55.7	26.0	34.0	523	518
20.0	8.4	7.9	57.8	67.8	55.8	62.8	49.4	59.9	47.4	54.9	44.8	58.8	42.8	53.8	26.0	34.0	522	517
31.25	10.6	10.0	54.9	64.9	52.9	59.9	44.3	54.9	42.3	49.9	40.9	54.9	38.9	49.9	23.6	32.0	520	515
62.5	15.2	14.4	50.4	60.4	48.4	55.4	35.1	46.0	33.1	41.0	34.9	48.9	32.9	43.9	21.5	32.0	519	514
100.0	19.6	18.6	47.3	57.3	45.3	52.3	27.7	38.7	25.7	33.7	30.8	44.8	28.8	39.8	20.1	32.0	518	513
160.0	25.4	24.1	44.2	54.2	42.2	49.2	18.9	30.1	16.9	25.1	26.7	40.7	24.7	35.7	18.7	31.0	517	512
200.0	28.7	26.8	42.8	52.8	40.8	47.8	14.1	26.0	12.1	21.0	24.8	38.8	22.8	33.8	18.0	29.0	517	512
250.0	32.6	30.5	41.3	51.3	39.3	46.3	8.8	20.8	6.8	15.8	22.8	37.0	20.8	31.8	17.3	29.0	516	511
300.0*	36.1	33.7	40.1	50.0	38.1	45.0	4.0	16.3	2.0	11.3	21.3	36.0	19.3	30.0	16.8	27.0	516	511
400.0*	42.6	40.3	38.3	48.0	36.3	43.0	-4.3	7.7	-6.3	2.7	18.8	32.0	16.8	27.0	15.9	26.0	516	511
500.0*	48.5	39.9	36.8	48.0	34.8	42.0	-11.7	8.1	-13.7	2.1	16.8	31.0	14.8	26.0	15.2	25.0	516	511
550.0*	51.3	39.7	39.7	46.0	34.2	42.0	-15.1	6.3	-17.1	2.3	16.0	30.0	14.0	26.0	14.9	24.0	516	510

**Values for frequencies above industry requirements are for information only.*

All performance based on 100 metres.

Solution 6™ UTP Cable (North America)

COMPLIANCE

- ISO/IEC 11801:2002 (Category 6)
- TIA/EIA-568-C.2
- UL CMP and CSA FT6
- RoHS Compliant

CABLE CONSTRUCTION

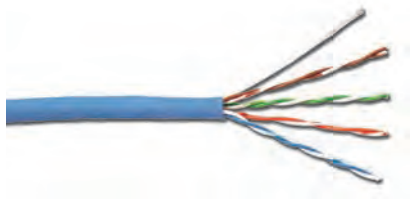
- UTP
- 0.57mm (0.023 in.) (23 AWG) solid bare copper
- 5 mm (0.192 in.) max jacket diameter

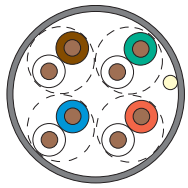
Part # **Description**

9C6P4-E2-(XX)-RXA .....Plenum (CMP, CSA FT6) 305m (1000 ft.) Reelex

Use (XX) to specify jacket color:

01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green, 08 = violet, 09 = orange





ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38Ω/100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100-520 MHz: 100 ± 22%
NVP	CMP-70%
LCL	30-10 log(*f*/100) dB
Delay Screw	≤45ns

PHYSICAL PROPERTIES

	CMP
Pulling Tension (max)	110N (25 lbf)
Bend Radius (min)	25mm (1 in.)
Installation Temperature	0 to 60°C (+32 to 140°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)
Operating Temperature	-20 to 60°C (-4 to 140°F)

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE SIEMON TYPICAL

Frequency (MHz)	**Insertion Loss (dB)**		**NEXT (dB)**		**PS NEXT (dB)**		**ACR-N (dB)**		**PS ACR -N (dB)**		**ACR-F (dB)**		**PS ACR-F (dB)**		**Return Loss (dB)**		**Propagation Delay (ns)**	
1.0	2.0	1.8	74.3	98.8	72.3	96.3	72.3	97.1	70.3	94.6	67.8	88.8	64.8	86.2	20.0	27.1	570	493
4.0	3.8	3.5	65.3	85.4	63.3	83.6	61.3	81.8	59.5	80.1	55.8	77.4	52.8	75.3	23.0	35.2	552	491
10.0	6.0	5.6	59.3	75.6	57.3	74.3	53.3	70.0	51.3	68.7	47.8	71.0	44.8	67.8	25.0	34.2	545	487
16.0	7.6	7.1	56.2	74.9	54.2	73.8	48.7	67.8	46.7	66.6	43.7	66.6	40.7	64.3	25.0	34.1	543	485
20.0	8.5	8.0	54.8	71.4	52.8	69.3	46.3	63.4	44.3	61.3	41.8	65.4	38.8	62.2	25.0	37.6	542	485
31.25	10.7	10.0	51.9	70.8	49.9	68.6	41.2	60.8	39.2	58.6	37.9	62.7	34.9	58.7	23.6	35.0	540	484
62.5	15.4	14.4	47.4	62.7	45.4	62.3	32.0	48.3	30.0	47.9	31.9	55.4	28.9	52.5	21.5	27.6	539	482
100.0	19.8	18.5	44.3	58.7	42.3	58.4	24.5	40.2	22.5	39.8	27.8	50.6	24.8	47.9	20.1	27.4	538	482
160.0	25.6	24.0	41.2	62.1	39.2	59.2	15.6	38.1	13.6	35.2	23.7	46.7	20.7	43.5	18.7	25.7	537	481
200.0	29.0	27.0	39.8	54.6	37.8	54.2	10.8	27.6	8.8	27.2	21.8	44.4	18.8	41.4	18.0	22.2	537	481
250.0	32.8	30.5	38.3	53.0	36.3	52.1	5.5	22.5	3.5	21.6	19.8	41.7	16.8	39.7	17.3	25.3	536	481
300.0*	-	33.8	-	53.5	-	52.3	-	19.7	-	18.5	-	39.9	-	37.5	-	20.1	-	481
400.0*	-	39.9	-	49.9	-	49.0	-	10.1	-	9.2	-	34.1	-	33.0	-	18.2	-	481
500.0*	-	45.2	-	55.3	-	52.7	-	10.0	-	7.4	-	34.4	-	31.2	-	17.7	-	480
550.0*	-	48.2	-	46.2	-	44.5	-	-2.0	-	-3.8	-	33.1	-	30.2	-	19.6	-	480

**Values for frequencies above industry requirements are for information only.*

All performance based on 100 meters (328 ft.).

Solution 6™ UTP Cable (International)

COMPLIANCE

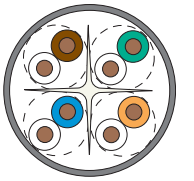
- ISO/IEC 11801 Ed. 2.2 (Class E)
- IEC 61156-5:2002 (Category 6)
- IEEE 802.3
- TIA-568-C.2 (Category 6)
- PVC: UL CM, IEC 60332-1
- LSOH: IEC 60332-1, IEC 60754, and IEC 61034

CABLE CONSTRUCTION

- UTP
- Nominal jacket OD: 5.6mm
- 0.52mm solid (non-tinned) copper, 24 AWG
- Central isolation member
- Reverse sequential numbering

Part #	Description
9C6M4-E2	CM, Gray Jacket, 305m Reel-in-Box
9C6L4-E2	LSOH, Violet Jacket, 305m Reel-in-Box

Other cable lengths also available: Add "-5CR" for 500m Reel, "-1KR" for 1000m Reel



ELECTRICAL SPECIFICATIONS

DC Resistance	≤9.50Ω/100m
DC Resistance Unbalance	≤2.5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 200-250 MHz: 100 ± 22%
NVP	65%
TCL	30-10 log(*f*/100) dB
Delay Skew	45ns

PHYSICAL PROPERTIES

	CM & LSOH
Pulling Tension (max)	80N
Bend Radius (min)	25mm
Installation Temperature	5 to 60°C
Storage Temperature	0 to 60°C
Operating Temperature	-10 to 60°C

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE SIEMON TYPICAL

Frequency µ(MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PS ACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0	2.1	1.7	75.3	102.5	72.3	95.4	73.2	100.8	70.2	93.7	68.0	99.6	65.0	92.4	20.0	27.8	570	508
4.0	3.8	3.6	66.3	93.5	63.3	87.6	62.4	89.9	59.4	84.0	56.0	86.9	53.0	79.0	23.0	29.5	552	504
10.0	6.0	5.8	60.3	90.1	57.3	81.2	54.3	84.3	51.3	75.4	48.0	78.3	45.0	70.5	25.0	33.4	545	499
16.0	7.6	7.4	57.2	83.4	54.2	77.1	49.6	76.0	46.6	69.7	43.9	74.6	40.9	67.7	25.0	33.8	543	498
20.0	8.5	8.3	55.8	81.0	52.8	75.5	47.3	72.7	44.3	67.2	42.0	70.3	39.0	63.7	25.0	34.5	542	497
31.25	10.7	10.5	52.9	82.1	49.9	74.1	42.1	71.6	39.1	63.7	38.1	65.1	35.1	59.4	23.6	33.1	540	497
62.5	15.5	14.9	48.4	72.3	45.4	65.4	32.9	57.5	29.9	50.6	32.1	57.5	29.1	52.0	21.5	32.6	539	496
100.0	19.9	19.1	45.3	70.5	42.3	64.6	25.4	51`.3	22.4	45.5	28.0	58.8	25.0	51.6	20.1	34.6	538	495
160.0	25.7	24.4	42.2	67.9	39.2	61.0	16.5	43.5	13.5	36.5	23.9	51.4	20.9	42.9	18.7	33.5	537	495
200.0	29.1	27.3	40.8	67.9	37.8	61.7	11.6	40.6	8.6	34.4	22.0	50.8	19.0	43.8	18.0	32.9	537	494
250.0	33.0	31.8	39.3	66.6	36.3	59.0	6.3	34.7	3.3	27.2	20.0	47.6	17.0	40.1	17.3	32.5	536	494

All performance based on 100 metres..

S210® Connecting Block System

The Siemon S210 connection system provides superior Category 6 connecting block performance. The S210 block is the ideal for Voice over IP (VoIP) applications. It can be used to support existing cross-connects for standard phone systems today and enables upgrades to a Category 6 rated solution for a seamless network transition.

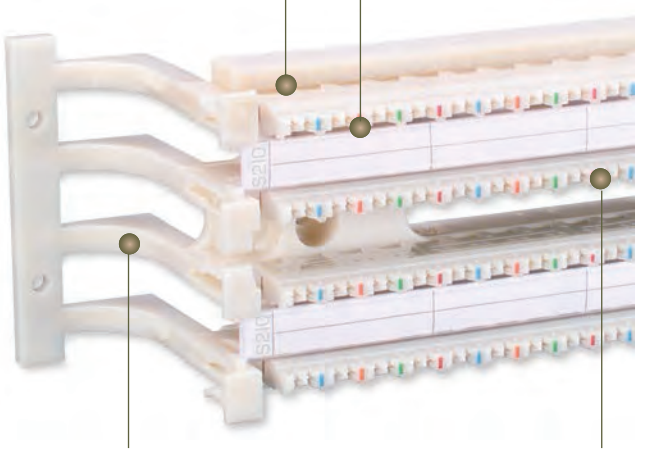
S210® Connection System

S210® Connection System

The Siemon S210 offers the best connecting block performance in the telecommunications industry. Its NEXT performance is so exceptional that it is essentially transparent when used as a consolidation point in a category 6 channel.

Colored Labels — Designation strip with interchangeable colored labels can be mounted between each row of connecting blocks

Easy Termination — Utilizes same termination practices as existing S110 product and is compatible with all single-position S110 termination tools as well as Siemon's S210 multi-pair termination tool

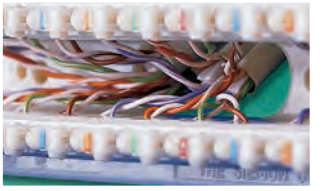


Stand-off Legs — Patented stand-off legs may be detached from the block before, during, or after installation on 64-pair version

Compatibility — Utilizes same wiring base footprint as standard S110® products to be fully compatible with existing S110 mounting and cable management solutions

Internal Crosstalk Barriers
Provide superior NEXT performance (13 dB NEXT margin over category 6 specifications) via 360° pair isolation.

Pyramid™ Wire Entry System
Separates paired conductors when lacing cables to simplify and reduce installation time.



Patented Cable Access Openings
Allow cables to be routed through the rear of the block directly to the point of termination.

S210 Field Termination Kits

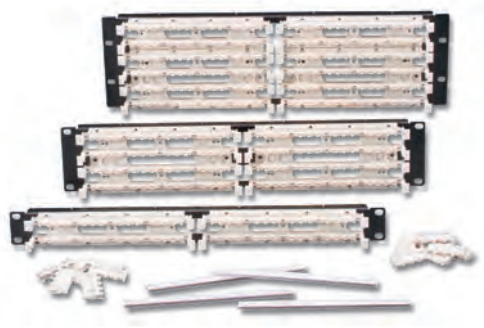
Complete S210 installation kits include S210 wiring blocks with detachable legs*, S210 connecting blocks, and label holders with white designation labels.

Part #	Description
S210AB2-64FT	64-pair, S210 field termination kit height: 91.4mm (3.60 in.), width: 272mm (10.71 in.), depth: 82.8mm (3.26 in.)
S210AB2-128FT	128-pair, S210 field termination kit height: 182.9mm (7.20 in.), width: 272mm (10.71 in.), depth: 82.8mm (3.26 in.)
S210AB2-192FT	192-pair, S210 field termination kit height: 275mm (10.81 in.), width: 272mm (10.71 in.), depth: 82.8mm (3.26 in.)

**Legs detachable on 64-pair version only.*

S210® Field Terminated 19 Inch Panels

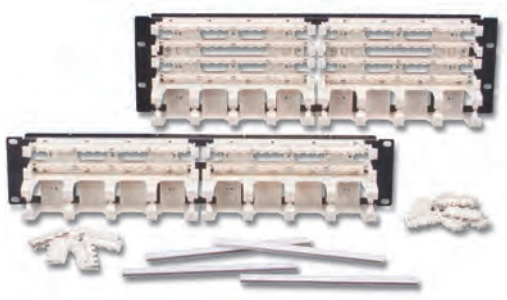
S210 panels allow wiring blocks to be mounted directly to a 19 inch rack or cabinet. Each panel includes the appropriate quantity of S210 connecting blocks, mounting hardware and label holders with white designation labels. Patented openings between rows allow horizontal cables to be routed from behind the panel and enter the block from the rear, helping to maintain cable jacket and twist up to the point of termination.



Part #	Description
S210DB2-64RFT	64-pair, 19 inch S210 field termination kit, 1U
S210DB2-128RFT	128-pair, 19 inch S210 field termination kit, 2U
S210DB2-192RFT	192-pair, 19 inch S210 field termination kit, 3U

Note: 1U = 44.5mm (1.75 in.)

S210 Field Terminated 19 Inch Panels with Cable Managers



Part #	Description
S210DB2-64RWM	64-pair, 19 inch S210 field termination kit, 2U with cable managers and covers
S210DB2-128RWM	128-pair, 19 inch S210 field termination kit, 3U with cable managers and covers

Note: 1U = 44.5mm (1.75 in.)

Each kit includes adequate connecting blocks to fully populate panel.

Vertically Mounted S210 Field Termination Kits

These 32-pair or 48-pair S210 blocks can be mounted on the same S89B or S89D brackets that hold our S66™ blocks. The high density 48-pair kit provides category 6 performance in the same footprint as a standard M1-50 66 block. Field-termination kits include the S210 connecting blocks, designation labels and label holders.

Part #	Description
S210DB1-48FT-89	48-pair S210 field termination kit on an 89-type retainer*
S210DB1-32FT-89	32-pair S210 field termination kit on an 89-type retainer*

**S89 Brackets are not included and must be ordered separately.*

S210DB1-48FT-89

S210DB1-32FT-89

S210® Tower Field Termination Kits

Part #	Description
S210MB2-192FT	192-pair, S210 Tower field termination kit height: 406mm (16 in.), width: 216mm (8.50 in.), depth: 152mm (6 in.)
S210MB2-256FT	256-pair, S210 Tower field termination kit height: 541mm (21.31 in.), width: 216mm (8.50 in.), depth: 152mm (6 in.)
S210MB2-320FT	320-pair, S210 Tower field termination kit height: 676mm (26.62 in.), width: 216mm (8.50 in.), depth: 152mm (6 in.)

Each kit includes adequate connecting blocks to fully populate tower.

Large-Scale Vertical Cable Managers

The S188 large scale vertical cable manager for the S110®/S210 Towers accommodates our quarter-turn RS-CH cable managers. With the RS-CH managers installed, additional vertical channels can be integrated into the main channel to segregate patch cables and cross-connect wire.

Part #	Description
S188-300	Large-scale vertical cable manager for use with 192-pair S210 Tower height: 406mm (16 in.), width: 216mm (8.50 in.), depth: 152mm (6 in.)
S188-400	Large-scale vertical cable manager for use with 256-pair S210 Tower height: 541mm (21.31 in.), width: 216mm (8.50 in.), depth: 152mm (6 in.)
S188-500	Large-scale vertical cable manager for use with 320-pair S210 Tower height: 676mm (26.62 in.), width: 216mm (8.50 in.), depth: 152mm (6 in.)

Small-Scale Vertical Cable Managers

Part #	Description
S110M-WM-300	Small-scale vertical cable manager, for use with 192-pair S210 Tower height: 406mm (16 in.), width: 76.2mm (3.0 in.), depth: 152mm (6 in.)
S110M-WM-400	Small-scale vertical cable manager, for use with 256-pair S210 Tower height: 541mm (21.31 in.), width: 76.2mm (3.0 in.), depth: 152mm (6 in.)
S110M-WM-500	Small-scale vertical cable manager, for use with 320-pair S210 Tower height: 676mm (26.62 in.), width: 76.2mm (3.0 in.), depth: 152mm (6 in.)

S210 Tower Optional Accessories

Part #	Description
S188-WD	Metal duct for additional horizontal cable management at base of S210 Tower height: 114.3mm (4.50 in.), width: 215.9mm (8.50 in.), depth: 203.2mm (8 in.)
S188-GND	Ground kit consists of one, 3-position grounding busbar height: 9.0mm (0.35 in.), width: 50.8mm (2.0 in.), depth: 12.3mm (0.49 in.)

S188-WD

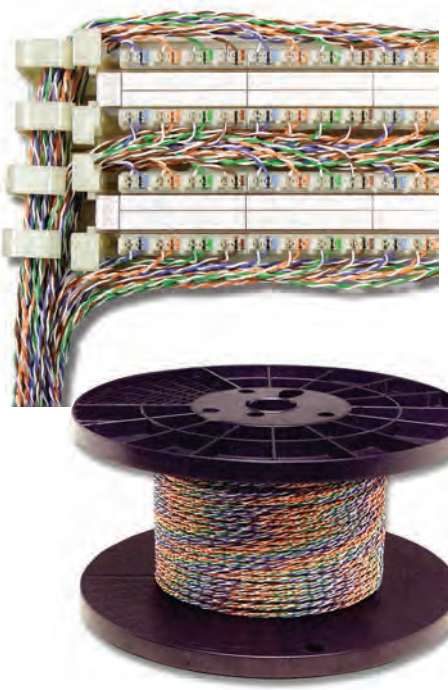
S188-GND

S210® Connecting Block

Siemon S210 blocks terminate 22 – 26 AWG (0.64mm – 0.40mm) solid or 7-strand wires. They also incorporate markings to designate tip and ring conductors, color-coded pairs on each block and Siemon's patent-pending Pyramid™ wire entry system to expedite lacing of pairs.

Part #	Description
S210C-4	4-pair, S210 connecting block

System 6™ Cross-Connect Wire



Siemon's System 6 cross-connect is ideal for cross-connect applications up to 5 meters (15 ft.). It can be used for System 6 installations using S210 wiring blocks.

Part #	Description
CJ6-W4-1000	Category 6, 4-pair, 24 AWG (0.05mm), solid cross-connect wire, pair colors blue/orange/green/brown, 305mm (1000 ft.) spool

COMPLIANCE

- ISO/IEC 11801:2002 2nd Edition (category 6)
- TIA-568-C.2 (Category 6)
- IEC 61156-5:2002 (Category 6)

CABLE CONSTRUCTION

- 0.5mm (0.02 in.) 24 AWG bare copper conductors
- 1.02mm (0.04 in.) insulation diameter nominal

S110®/S210 Covers

The Siemon Company S110/S210 covers are available in 50- and 100-pair sizes (32- and 64-pair for S210). The cover easily snaps on and off wiring blocks and S110/S210 cable managers, and enhances the appearance of the S110/S210 installation. Removable icon tabs provide color-coding on the front for compliance with the ANSI/TIA/EIA-606-A administration standard.

Part #	Description
S110-CVR-50-(XX)	50-pair S110 cover/32-pair S210 cover
S110-CVR-100-(XX)	100-pair S110 cover/64-pair S210 cover

Use (XX) to specify color: 00 = clear, 01 = black, 20 = ivory

Clear covers protect connections yet allow full viewing of circuits and individual station ID's.

Wall Mount S110®/S210® Cable Managers

The Siemon S110/S210 cable managers are the foundation of a series of cable management products that are designed to support S110 or S210 cross-connects and patch panel applications. They can be ordered individually for field assembly in wall-mount applications. The cable managers are manufactured with high-strength, flame-retardant thermoplastic, and have been designed for easy cable insertion or withdrawal. The 2 RMS cable manager provides additional capacity for high-density patching applications. Siemon S110/S210 covers can be snapped on to provide color-coding and keep cables hidden.

Cable Managers Without Legs

S110B1RMS . . . . . .
1 RMS white cable manager without legs

S110B2RMS . . . . . .
2 RMS white cable manager without legs

S110B1RMS-01. . . . . .
1 RMS black cable manager without legs

S110B2RMS-01. . . . . .
2 RMS black cable manager without legs

Cable Managers With Legs

S110A1RMS . . . . . .
1 RMS white cable manager with legs

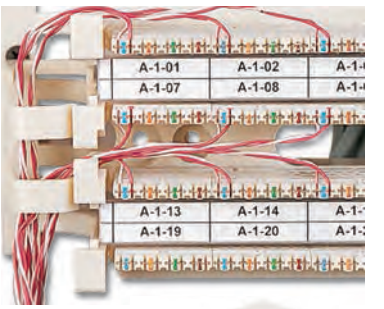
S110A2RMS . . . . . .
2 RMS white cable manager with legs

S110A1RMS-01. . . . . .
1 RMS black cable manager with legs

S110A2RMS-01. . . . . .
2 RMS black cable manager with legs

Note: 1 RMS = 44.5mm (1.75 in.)

S100A2 Wire Manager

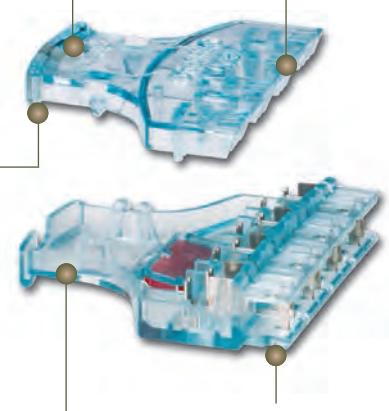


The S100A2 wire manager snaps onto the legs of the S110 or S210 blocks/legs to provide a channel for routing cross-connect wire or patch cords. One S100A2 is designed to be used with each 100-/64-pair leg (2 for 200-/128-pair, 3 for 300-/192-pair) to allow space to access the wires. The S100A2 can also be mounted side-by-side. The outside edges are flared and tapered for smoother wire entry and exit and preventing damage to the conductor insulation.

Part #	Description
S100A2	Snap-on S110/S210 wire manager, white
S100A2-01.	Snap-on S110/S210 wire manager, black

S210® Patch Plugs

The S210 patch plug utilizes internal pair isolation, pair-to-pair compensation and layered contacts to improve cross-talk performance so that the mated plug and connecting block far exceed category 6 connecting hardware transmission requirements. The clear housing keeps the conductor colors/positions visible to aid matching termination positions on the other end.



Proper Orientation — Directional arrow provided to assist in proper insertion orientation

Tapered Lacing — Enable easy lacing of pairs for quick field termination

Ergonomic Handle — Aids insertion and removal of patch plug

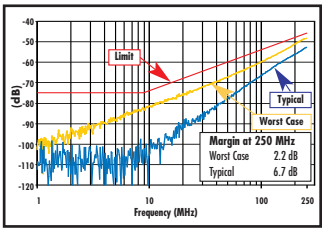
Clear Housing — Durable, flame-retardant, clear thermoplastic housing keeps conductors visible during and after termination

Polarization — Each plug housing includes polarization features to ensure proper orientation of the plug when connecting to the S210 block

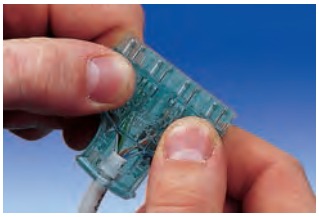
Technical Tip!
S210 to MC® 6 cable assemblies can be configured in the field. Siemon MC 6 modular cords can be purchased and cut in half. The cut end of the cord can then be field terminated to the S210P patch plug while the factory terminated and tested modular plug end remains undisturbed.

S210 patch plugs can be field-terminated to 23 – 26 AWG (0.40mm – 0.51mm) solid or 7-strand twisted-pair cable.

Field Installable
Terminates 24-26 AWG (0.40mm-0.51mm) solid or 7-strand twisted-pair cable.



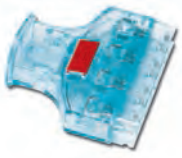
NEXT Performance
The S210 4-pair plug provides unparalleled performance, with 6.7 dB NEXT (typical) and 2.2 dB NEXT (worst case) at 250 MHz.



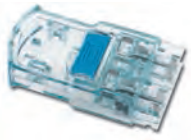
Easy Field Termination
Simply snap the base and cover together to mass terminate all conductors.

S210 Patch Plugs

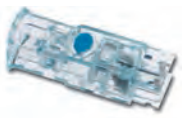
S210P4 . . . . . .
4-pair, field-terminated, S210 patch plug



S210P2 . . . . . .
2-pair, field-terminated, S210 patch plug



S210P1 . . . . . .
1-pair, field-terminated, S210 patch plug



S210 Cable Assemblies

The S210 cable assemblies utilize Siemon's S210P4 patch plugs for easy and reliable connections between S210 termination fields. These assemblies use high performance stranded cable which exceeds category 6 specifications and are 100% factory transmission tested to ensure optimum category 6 channel performance. Colored icons are available for color-coding S210 plugs.

Part #	Description
S210P4-P4-(XX)	4-pair, double-ended, S210 stranded cable assembly, white jacket
S210P2-P2-(XX)	2-pair, double-ended, S210 stranded cable assembly, white jacket
S210P1-P1-(XX)	1-pair, double-ended, S210 stranded cable assembly, white jacket

Use (XX) to specify cord length: 03 = 0.9m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.1m (7 ft.), 10 = 3.1m (10 ft.), 15 = 4.6m (15 ft.), 20 = 6.1m (20 ft.)

Custom lengths available upon request. Contact our Customer Service Department for more information.

S210® to MC® 6 Cable Assemblies

The S210 to modular cable assemblies combine Siemon's high performing plugs for patching network equipment to S210 connecting blocks or providing test access to S210 termination fields. The combination of plugs, high performance cable and 100% factory transmission testing ensures performance is compatible with category 6 channel specifications.

Part #	Description
S210P4A4-(XX)-(XX)	4-pair, S210P4 to MC 6 stranded cable assembly, color matching jacket/boot, T568B, CMG
S210P4T4-(XX)-(XX)	4-pair, S210P4 to MC 6 stranded cable assembly, color matching jacket/boot, T568A, CMG
S210P2E2-(XX)-B(XX)	2-pair, S210P2 to MC 6 stranded cable assembly, white jacket with colored boot, 10/100BASE-T, CMG

Use 1st (XX) to specify cord length:
03 = 0.9m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.1m (7 ft.), 10 = 3.1m (10 ft.), 15 = 4.6m (15 ft.), 20 = 6.1m (20 ft.)
Use 2nd (XX) to specify color:
01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green

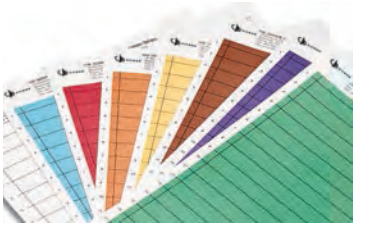
S210 Designation Labels

Siemon S210 wiring blocks allow for designation labels to be mounted between each row of connecting blocks. S210 designation labels feature S210 listings on the side to clearly identify the termination type, 4-pair markings and can also be used for color-coding.

Part #	Description
S110-HLDR	Transparent plastic label holders, bag of 6
S210-LBL-2	4-pair S210 marked white labels, bag of 6

S110®/S210 Designation Label Sheets

Siemon's S110/S210 designation label sheets provide the ability to custom print labels used on S110 or S210 blocks.*The sheets can be used to print 2-, 3-, 4-, or 5-pair labels and eliminate the need to order separate sheets for different configurations. There are 20 labels per side and both sides are marked so they can be reversed and re-printed in case of an error.



Part #	Description
S110-SHT-(X)	S110/S210 Designation label sheets, package of 6

Use (X) to specify color: 2 = white, 3 = red, 4 = gray, 5 = yellow, 6 = blue, 7 = green, 8 = violet, 9 = orange, 60 = brown
*Visit our web site or contact our Technical Support Department for labeling software.

Category 5e Shielded

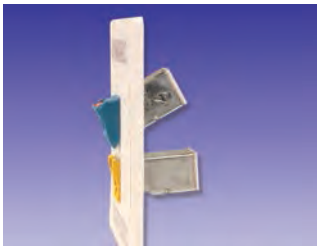
In addition to the excellent EMI resistance and signal security provided by its shielded construction, Siemon's end-to-end category 5e shielded system is guaranteed to deliver transmission performance margins in excess industry standards for category 5e. And thanks to the ultra-fast terminating Z-MAX® category 5e shielded outlets and Quick-Ground™ patch panels, deploying a high-performance, noise-resistant shielded system is every bit as fast and easy as UTP.

Section Contents

Z-MAX® 5e Shielded Outlets

Combining exceptional category 5e performance with best-in-class termination time, the Z-MAX 5e shielded outlet is a vital part of an end-to-end Z-MAX 5e shielded cabling system. The Z-MAX module exceeds all applicable industry standards, including ANSI/TIA-568-C.2 and Amendments 1 and 2 of ISO/IEC 11801 2nd ed.

User Friendly
The ergonomic and easy-to-use Z-TOOL ensures a fast, low force termination.

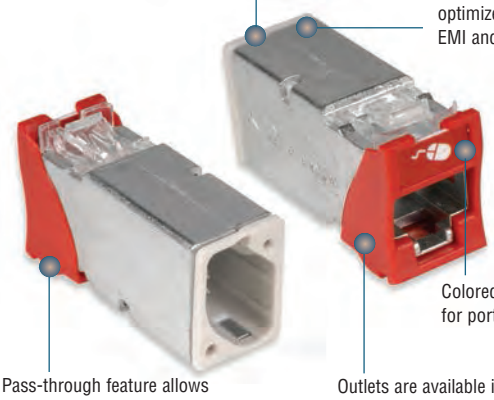


Flexibility and Simplified Ordering
Hybrid design allows the same outlet to be mounted in flat or angled orientations.

Terminates in as little as 45 seconds using the Z-TOOL™

Robust die cast housing optimizes shielding from EMI and alien crosstalk

Zero-cross termination module accelerates lacing and eliminates pair crossing



Colored icons provided for port identification

Pass-through feature allows mounting from front or rear of faceplate. Also compatible with optional outlet door.

Outlets are available in a wide range of colors and mount in MAX faceplates and accessories.

Rapid shield connection and cable jacket strain relief via integrated hinged metal clip

STANDARDS COMPLIANCE

- ANSI/TIA-568-C.2
- ISO/IEC 11801 2nd ed Amendment 1
- ISO/IEC 11801 2nd ed Amendment 2
- IEEE 802.3an
- IEEE 802.3af (PoE)
- IEEE 802.3at (PoE+)
- IEC 60603-7
- TIA-968-A (formerly FCC Part 68 Subpart F)

Ordering Information:

Z5-S(X)(XX)(X) . . . . . Shielded Z-MAX Category 5e outlet, T568A/B

Door Option
(Blank) = No Door
D = Spring Door (Hybrid only)

Mounting Style
(Blank) = Hybrid Flat/Angled
K = Keystone

Bezel Colour

01= Black	**06=** Blue
02= White	**07=** Green
03= Red	**09=** Orange
04= Grey	**20=** Ivory
05= Yellow	**80=** Light Ivory

Hybrid **Keystone** **Door**

Outlet terminates S/FTP, F/FTP and F/UTP cable constructions with 22 – 26 AWG (0.64 – 0.51mm) solid and 26 AWG (0.48mm) stranded conductors, with up to 0.60mm diameter conductors and up to 1.48mm diameter over insulation.

Add "B" to end of part number for bulk project pack of 100 modules. (hybrid modules include icons.).

Front **Rear**

1 - Red Data	1 - Red Voice
1 - Blue Data	1 - Blue Voice
1 - Bezel Color-Matching Data	1 - Bezel Color-Matching Voice
1 - White Blank	1 - Bezel Color-Matching Blank

For more Z-MAX icon colors and options see page 8.5.

Z-MAX® 5e Shielded Patch Panels

Z-MAX 5e shielded patch panels provide unprecedented performance and reliability in a high-density modular solution. These complete patch panel kits combine 19 inch shielded patch panels with Z-MAX 5e shielded panel outlets to offer the industry's highest performing Category 5e patching solution.

These panels also accelerate installation through quick-snap module insertion and automatic grounding of modules via an embedded grounding conductor. The panel allows one- or two-hole ground lug connections to rack on cabinet grounding system. This complete shielded solution provides maximum protection from outside interference and superior 5e performance.

Ordering Information:

Part #	Description
Fixed Wire Manager	
Z5S-PNL(X)-24K	24 Port, Z-MAX 5e shielded patch panel kit,1U, black
Z5S-PNL(X)-U48K	48 Port, Z-MAX 5e shielded patch panel kit, 1U, black
ZS-PNL(X)-24E	24 Port, Z-MAX shielded patch panel empty, 1U, black
ZS-PNL(X)-U48E	48 Port, Z-MAX shielded patch panel empty, 1U, black

Use (X) to specify mounting style: (Blank) = Flat, A = Angled

Removable Wire Manager	
Z5S-P(X)-24	Z-MAX 24-Port, category 5e shielded patch panel with removable wire manager kit, 1 RMS, black, with outlets
Z5S-P(X)-48	Z-MAX 48-Port, category 5e shielded patch panel with removable wire manager kit, 1 RMS, black, with outlets
ZS-P(X)-24	Z-MAX 24-Port shielded patch panel with removable wire manager, 1 RMS, black, empty
ZS-P(X)-48	Z-MAX 48-Port shielded patch panel with removable wire manager, 1 RMS, black, empty

Use (X) to specify mounting style: (F) = Flat, A = Angled

Panels include Z-TOOL, label / icon holders, designation labels, cable ties, grounding lugs, and mounting hardware. Note: 1U = 44.5mm (1.75 in.)*
** included in kit only*

Panel Accessories:

Part #	Description
Z-PNL-PL24	Patch panel label sheet, numbered 1 to 24, bag of 100
Z-PNL-PL48	Patch panel label sheet, numbered 25 to 48, bag of 100
Z-PNL-P	Patch panel label holder (6-port each), bag of 25
Z5-SP	Z-MAX 5e shielded panel outlet
Z-BL-01	Z-MAX panel blank, bag of 10, black

Note: Z-MAX shielded patch panels designed for use with Z-MAX shielded panel outlets only

Z-BL-01

TERA®-MAX® Patch Panels

Part #	Description
TM-PNLZ-24-01	24-port TERA-MAX panel, black, 1U
TM-PNLZ-24	24-port TERA-MAX panel, metallic, 1U
TM-PNLZA-24-01	24-port Angled TERA-MAX panel, black, 1U
TM-PNLZA-24	24-port Angled TERA-MAX panel, metallic, 1U

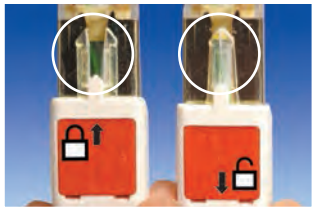
Note: TERA-MAX panels are designed for use with hybrid (flat/angled) shielded Z-MAX outlets. Also compatible with TERA outlets

Panels include designation labels, cable ties, grounding lug and mounting hardware.
Note: 1U = 44.5mm (1.75 in.)

BladePatch® 5e Shielded Modular Cords

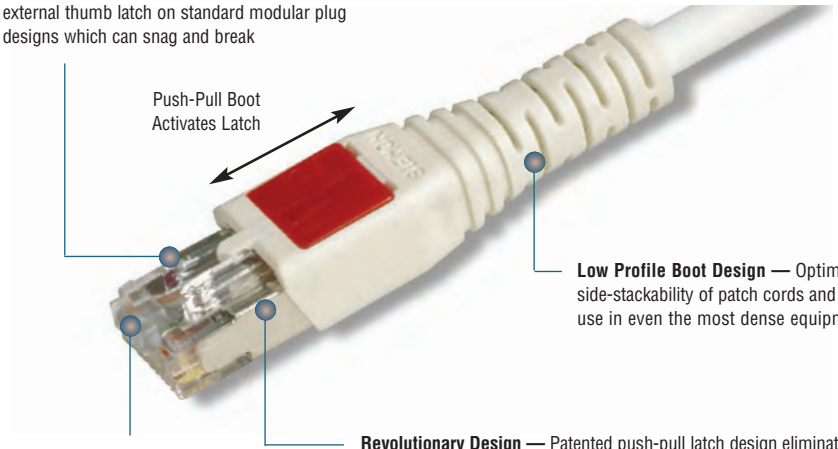
Siemon's category 5e BladePatch patch cords offer a unique solution for high-density patching environments. They feature an innovative push-pull boot design to control the latch, enabling easy access and removal of the cord in tight-fitting areas. The BladePatch cords are ideal for patching blade servers, patch panels, or any equipment with high density RJ-45 outlets.

Universal Compatibility
Fits within any standard RJ-45 outlet.



Revolutionary Latch
Simply push the boot forward to latch into the outlet and pull back to release.

High Density
The push-pull design enables easy access and removal via the boot in tight-fitting areas.



Snagless — Push-pull latch design eliminates external thumb latch on standard modular plug designs which can snag and break

Low Profile Boot Design — Optimizes side-stackability of patch cords and allows use in even the most dense equipment

Universal Wiring — Compatible with T568A/B wiring schemes

Revolutionary Design — Patented push-pull latch design eliminates need to defeat thumb latch used in standard modular plug designs. Enables easy access and removal in high density patching environments

Ordering Information:

Category 5e shielded BladePatch, double-ended modular patch cord with push-pull latching design, color matching cord/boot, T568A/B, LSOH

BP5S-(XX)M-(XX)

Cord Length:

03 = 0.9m (3 ft.)
05 = 1.5m (5 ft.)
07 = 2.1m (7 ft.)
10 = 3.1m (10 ft.)
15 = 4.6m (15 ft.)
20 = 6.1m (20 ft.)

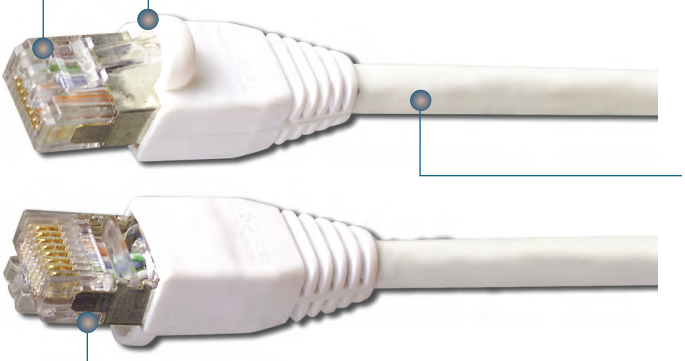
Cord Color:

01 = Black
02 = White
03 = Red
04 = Gray
05 = Yellow
06 = Blue
07 = Green
08 = Violet
07 = Orange

Ⓑ *Add "B" for bulk project pack of 100 modular cords.*

MC® 5e Shielded Modular Cords

Siemon's shielded MC 5e modular cords are manufactured using stranded shielded cable that meets all category 5e specifications. Modular plugs have an overall shield and meet TIA-968-A and IEC 60603-7 specifications. T568A/B wired assemblies include colored strain-relief boots and are available in a wide range of lengths.



Universal Wiring — Compatible with T568A/B wiring schemes

Latch Guard — Boots feature a latch guard to protect plug from snagging when pulling through pathways or cable managers

Color Options — Variety of color options available for circuit identification

Superior Quality — Quality plug components ensure long-term resistance to corrosion from humidity, extreme temperatures, and airborne contaminants

Factory-Tested

Cords are factory terminated and transmission tested to ensure compliance with applicable standards requirements.

Compliance

- Plug geometry meets IEC 60603-7 and TIA-968-A specifications for modular plugs
- Exceeds ISO/IEC 11801:2002 requirements for transfer impedance, coupling attenuation and shield effectiveness
- Stranded Cable: IEC 61156-6:2002 Compliant
- LSOH Cordage: IEC 60332-1, IEC 60754, and IEC 61034 compliant

Excellent Bend Relief

Boot ensures proper bend relief.

Ordering Information:

Category 5e shielded MC, double-ended 4-pair stranded modular cord, color matching jacket/boot, T568A/B, LSOH

MC5S-(XX)M-(XX)L

Cord Length:

01 = 1m (3.3 ft.)	
1.5 = 1.5m (4.9 ft.)	
02 = 2m (6.6ft.)	
03 = 3m (9.8 ft.)	
04 = 4m (13.1 ft.)	
05 = 5m (16.4 ft.)	

Cord Color:

01 = Black	**04** = Gray	**07** = Green
02 = White	**05** = Yellow	**08** = Violet
03 = Red	**06** = Blue	**07** = Orange

Ⓑ *Add "B" to end of part number for bulk project pack of 100 cords.*

Solution 5e™ F/UTP Cable (North America)

COMPLIANCE

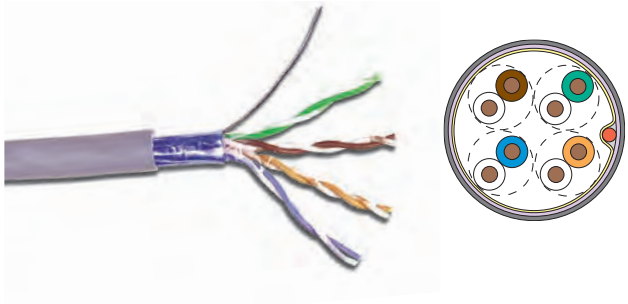
- ISO/IEC 11801:2002 (Category 5e)
- TIA-568-C.2 (Category 5e)
- IEC 61156-5:2002 (Category 5e)
- UL CMR and CSA FT4

CABLE CONSTRUCTION

- F/UTP
- 0.5mm (0.02 in.) (24 AWG) solid bare copper
- 7.4mm (0.29 in.) max jacket diameter
- Shield is an aluminum foil enclosing a 0.5mm (0.02 in.) (24 AWG) tinned copper drain wire

Part #	Description
9A5P4-E1-(XX)-R1A	Plenum (CMP, CSA FT4) 305m (1000 ft.), Reel

Use (XX) to specify jacket color: 01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green, 08 = violet, 09 = orange



ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38Ω/100m
DC resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100 - 160 MHz: 100 ± 20% 160-350 MHz: 100 ± 22%
NVP	CMP - 70% CMR - 68%
TCL	40-10 log(*f*) dB
Delay Screw	≤40ns

PHYSICAL PROPERTIES

	CMR
Pulling Tension (max)	110N (25 lbf)
Bend Radius (min)	25mm (1.0 in.)
Installation Temperature	0 to 60°C (+32 to 140°F)
Storage Temperature	-20 to 60°C (-4 to 140°F)
Operating Temperature	-20 to 60°C (-4 to 140°F)

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0	2.1	2.1	65.3	68.3	62.3	66.3	63.2	66.2	60.2	64.2	63.8	67.8	60.8	65.8	20.0	20.0	570	550
4.0	4.1	4.1	59.3	56.3	53.3	57.3	52.2	55.2	49.2	53.2	51.8	55.7	48.8	53.7	23.0	23.3	552	532
10.0	6.5	6.5	53.3	50.3	47.3	51.3	43.8	46.9	40.8	44.9	43.8	47.8	40.8	45.8	25.0	25.5	545	525
16.0	8.3	8.2	50.3	47.2	44.2	48.3	39.0	42.1	36.0	40.1	39.7	43.7	36.7	41.7	25.0	25.5	543	523
20.0	9.3	9.2	48.8	45.8	42.8	46.8	36.5	39.6	33.5	37.6	37.8	41.7	34.8	39.7	25.0	25.5	542	522
31.25	11.7	11.5	45.9	42.9	39.9	43.9	31.1	34.4	28.1	32.4	33.9	37.9	30.9	35.9	23.6	24.4	540	520
62.5	17.0	16.4	41.4	38.4	35.4	39.4	21.4	24.9	18.4	22.9	27.9	31.8	24.9	29.8	21.5	22.7	539	519
100.0	22.0	21.0	38.3	35.3	32.3	36.3	13.3	17.3	10.3	15.3	23.8	44.8	20.8	25.8	20.1	21.5	538	518
160.0*	28.6	26.8	35.3	32.2	29.2	33.3	3.7	8.4	0.7	6.4	19.7	23.7	16.7	21.7	18.7	20.4	537	517
200.0*	32.4	30.2	33.8	30.8	27.8	31.8	-1.6	3.6	-4.6	1.6	17.8	21.7	14.8	19.7	18.0	19.8	536	517
250.0*	36.9	34.0	32.3	29.3	26.3	30.3	-7.5	-1.6	-10.5	-3.6	15.8	19.8	12.8	17.8	17.3	19.2	536	516
300.0*	41.0	37.4	31.2	28.1	25.1	29.2	-12.8	-6.3	-15.8	-8.3	14.3	18.2	11.3	16.2	16.8	18.8	536	516
350.0*	44.9	40.7	30.2	27.1	24.1	28.2	-17.7	-10.5	-20.7	-12.5	12.9	16.9	9.9	14.9	16.3	18.4	536	516

**Values above industry requirements are for information only.*

All performance based on 100 meters (328 ft.).

Premium 5e® F/UTP Cable (International)

COMPLIANCE

- ISO/IEC 11801Ed 2.2 (Class D)
- IEC 61156-5 Ed 2.0 (Category 5e)
- IEEE 802.3
- TIA-568-C.2
- EN 50288
- EN 50173
- UL CM
- UL CMR and CSA FT4
- LSOH: IEC 60332-1, IEC 60754, and IEC 61034

CABLE CONSTRUCTION

- F/UTP
- Nominal jacket OD: 6.1mm
- 0.5mm solid non-tinned copper
- 1.0mm max conductor insulation diameter
- Shield is an aluminium foil tape enclosing a 7 strand 0.6mm tinned copper drain wire
- Reverse sequential numbering

Part #	Description
9A5R4-E2	PVC (CMR), Blue Jacket, 305m Reel-in-Box
9A5M4-E2	PVC (CM, IEC 60332-1), Gray Jacket, 305m Reel-in-Box
9A5L4-E2	LS0H (IEC 60332-1), Violet Jacket, 305m Reel-in-Box

Other cable lengths also available: Add "-5CR" for 500m Reel, "-1KR" for 1000m Reel

ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38Ω/100m
DC resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100 - 250 MHz: 100 ± 22%
NVP	65%
LCL	40-10 log(*f*) dB
Delay Skew	≤40ns

PHYSICAL PROPERTIES

	LSOH	CMR/CM
Pulling Tension (max)	110N	110N
Bend Radius (min)	25mm	25mm
Installation Temperature	0 to 60°C	-36 to 60°C
Storage Temperature	-20 to 75°C	-34 to 75°C
Operating Temperature	-20 to 60°C	-34 to 60°C

TRANSMISSION PERFORMANCE

GUARANTEED WORSE CASE SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0	2.1	1.9	65.3	79.3	62.3	72.3	63.2	77.4	60.2	70.4	63.8	84.8	60.8	78.8	20.0	27.0	570	545
4.0	4.1	3.7	56.3	70.3	53.3	63.3	52.2	66.6	49.2	59.6	51.8	72.8	48.8	66.8	23.0	32.0	552	527
10.0	6.5	5.8	50.3	64.3	47.3	57.3	43.8	58.5	40.8	51.5	43.8	64.8	40.8	58.8	25.0	32.0	545	520
16.0	8.3	7.4	47.2	61.2	44.2	54.2	39.0	53.8	36.0	46.8	39.7	60.7	36.7	54.7	25.0	32.0	543	518
20.0	9.3	8.3	45.8	59.8	42.8	52.8	36.5	51.5	33.5	44.5	37.8	58.8	34.8	52.8	25.0	32.0	542	517
31.25	11.7	10.5	42.9	56.9	39.9	49.9	31.1	46.4	28.1	39.4	33.9	54.9	30.9	48.9	23.6	30.0	540	515
62.5	17.0	15.0	38.4	52.4	35.4	45.4	21.4	37.4	18.4	30.4	27.9	48.9	24.9	42.9	21.5	30.0	539	514
100.0	22.0	19.3	35.3	49.3	32.3	42.3	13.3	30.0	10.3	23.0	23.8	44.8	20.8	38.8	20.1	30.0	538	513
160.0*	28.6	25.1	32.2	46.2	29.2	39.3	3.7	21.1	0.7	14.1	19.7	40.7	16.7	34.7	18.7	28.0	537	512
200.0*	32.4	28.1	30.8	44.8	27.8	37.8	-1.6	16.7	-4.6	9.7	17.8	38.8	14.8	32.8	18.0	27.0	536	512
250.0*	36.9	31.4	29.3	43.3	26.3	36.3	-7.5	11.9	-10.5	4.9	15.8	36.8	12.8	30.8	17.3	26.0	536	511
300.0*	41.0	34.5	28.1	42.1	25.1	35.1	-12.8	7.6	-15.8	0.6	14.3	35.3	11.3	29.3	16.8	25.0	536	511
350.0*	44.9	39.4	27.1	41.1	24.1	34.1	-17.7	1.7	-20.7	-5.3	12.9	33.9	9.9	27.9	16.3	24.0	536	511

**Values above 100 MHz are for information only.*

All performance based on 100 metres

Premium 5e® UTP and Solution 5e™ UTP

Siemon's end-to-end Premium 5e UTP cabling solution is guaranteed to provide transmission performance margins in excess of industry standards for category 5e/class D parameters, and has been independently verified to perform to 160 MHz.

All components are approved for use in a Premium 5e channel unless otherwise indicated. Only Premium 5e components are eligible for use in a Premium 5e channel.

Siemon's Solution 5e UTP solution is designed for 100 MHz category 5e/class D installations in which additional performance margins provided by the Premium 5e solution are not required.

Components specifically designed for use in a Solution 5e channels are indicated by product title. Both Solution 5e and Premium 5e components are eligible for use in a Solution 5e channel.

Section Contents

MAX® 5e UTP Outlets

MAX 5e modules exceed category 5e performance with component and channel performance to 160 MHz. These modules offer all the functional advantages of our MAX 6 outlet in a variety of color options. All outlets utilize our S310 punch-down block — making termination quick and easy.

Quick Installation
Pyramid wire entry system on S310® blocks separates paired conductors when lacing cables to simplify and reduce installation time.

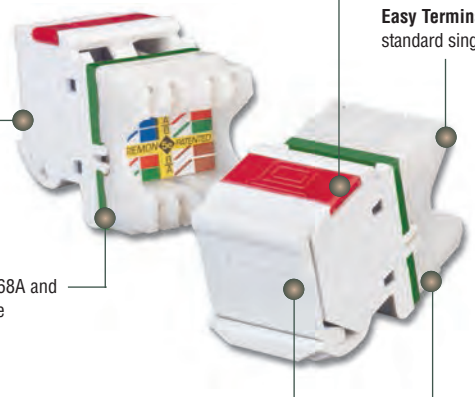
Termination
Siemon's Palm Guard with MAX insert assists in securing outlet during termination.

Superior Performance
Use MC® or BladePatch® 5e modular cords to perfectly match performance of 5e MAX modules.

Easy Installation — Install from either front or rear of faceplate

Quick Identification — Icons provided for port identification

Easy Termination — Punch-down with standard single position 110 termination tools



Universal Wiring — T568A and T568B wiring compatible

Protective Doors — Minimize exposure to dust and other contaminants

Slim Design — Allows jacks to be side-stacked in faceplates to provide maximum density

MX5-(XX) . . . . . .
Angled MAX outlet, T568A/B, rear strain relief cap and protective color-matching rubber door

MX5-F(XX) . . . . . .
Flat MAX outlet, T568A/B, rear strain relief cap

MX5-K(XX). . . . . .
Keystone MAX outlet, T568A/B, rear strain relief cap

Use (XX) to specify color: 01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green, 09 = orange, 20 = ivory, 25 = bright white, 80 = light ivory

Angled modules include one color-matching, one red, and one blue icon.
Door color is clear for red, yellow, blue and orange angled outlets.

Flat modules include one color-matching, one red, and one blue icon.

Ⓑ *Add "B" to end of part number for bulk project pack of 100 outlets (angled and flat outlets include icons).*

Note: Keystone version is designed for integration with various international mounting products and is not compatible with MAX mounting hardware.

CT® 5e UTP Couplers

Angled Couplers

CT-C5-C5-(XX) . . . . . .
Angled, double coupler,
universal T568A/B

CT-C5-(XX) . . . . . .
Angled, single coupler,
universal T568A/B

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory

Add "-D" for spring door option.

Flat Couplers

CT-F-C5-C5-(XX) . . . . . .
Flat, double coupler,
universal T568A/B

CT-F-C5-(XX) . . . . . .
Flat, single coupler,
universal T568A/B

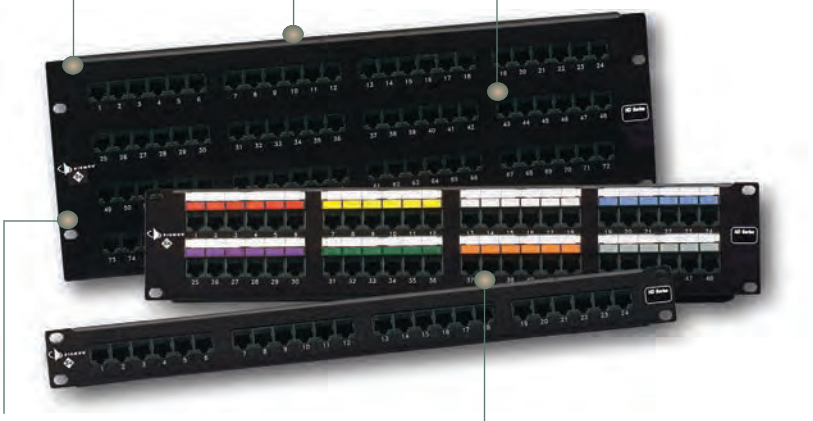
Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory

Technical Tip!
Angled couplers are recommended for work area applications and flat couplers are recommended for patch panel applications.

Ⓑ *Add "B" to end of part number for bulk project pack of 100 couplers.*
(Bulk option includes couplers and icons only — termination caps and cable ties are available separately.)
Couplers include one color-matching icon (clear for black), 2 termination caps, and one cable tie per port, plus one red and one blue icon.

HD® 5e UTP Patch Panels

Siemon's HD 5e series patch panels offer the most robust category 5e patching solution in the industry. HD 5e panels feature universal T568A/B wiring and exceed category 5e requirements with component and channel performance to 160 MHz. Compliant pin technology enables the use of multi-pair S110® punch-down tools to reduce termination time.



Compliant Pin Technology
Allows the use of Siemon's multi-pair impact tool to significantly reduce termination time. S110 termination openings on the rear are compatible with S110 patch plugs.

Rear Cable Management
Integrated rear cable manager properly guides cables to and from the rear of the panel.

Quick Identification
Icon and label holder kits are included with every panel.

Ordering Information:

HD 5e Flat Patch Panels

Part #	Description
HD5-16	16-port category 5e UTP HD patch panel, T568A/B, 1U
HD5-24	24-port category 5e UTP HD patch panel, T568A/B, 1U
HD5-32	32-port category 5e UTP HD patch panel, T568A/B, 2U
HD5-48	48-port category 5e UTP HD patch panel, T568A/B, 2U
HD5-96	96-port category 5e UTP HD patch panel, T568A/B, 4U

Panels include rear cable manager, icon/label holders, designation labels, cable ties, and mounting hardware.

Ⓑ Add "B" for bulk project pack of 5 panels (rear cable managers (p/n: HD-RWM] not included but can be ordered separately).

Note: 1U = 44.5mm (1.75 in.)

S310 termination blocks on 16- and 32-port HD 5e panels are not compatible with S110 multi-pair termination tools.

HD® 5e Angled Patch Panels

Part #	Description
HD5-24A	24-port angled panel, T568A/B wiring, 1 RMS
HD5-48A	48-port angled panel, T568A/B wiring, 2 RMS
PNLA-CVR-01	Angled panel cover, black

Angled panels include one rear cable manager, designation labels, cable ties, and mounting hardware

Ⓑ Add "B" for bulk project pack of 5 panels (rear cable managers not included but can be ordered separately).

Note: 1 RMS = 44.5mm

HD5 Quick-Patch™ Panel*

Siemon's HD5 Quick-Patch panel provides a quick and easy category 5 channel patching solution for 10/100BASE-T hubs with 25-pair connectors. The HD5 Quick-Patch Panel incorporates many user-friendly features and benefits, including rear connectors that are staggered to enable easy routing of 25-pair cable to the connection point and a rear metal enclosure that protects printed circuitry. The black anodized panel can be mounted directly to a standard 19 inch rack or cabinet with the mounting hardware included. Icon/label holders and designation labels included.

Part #	Description
HD5-QP-48	48-port 10/100BASE-T panel (Active pins 1, 2, 3 & 6 only), four 25-pair connectors (female), 2 RMS

Panel includes icon/label holders, designation labels, and mounting hardware.
Note: 1 RMS = 44.5mm (1.75 in.)
**Not eligible for Premium 5e or Solution 5e warranty*

CT® Patch Panels

Oversized CT Panels

Oversized CT panels are available for applications that require additional labeling space. They provide the same flexibility as our standard CT panels and feature a write-on designation surface above each coupler opening that may also be used as a space for adhering your own label. Siemon offers adhesive-backed label holders with replaceable write-on labels that mount above the entire row of CT couplers.

Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-24-ID	24-port panel	3	12

Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-48-ID	48-port panel	4	24

**Number of ports when configured with two-port CT couplers.*
Note: 1 RMS = 44.5mm (1.75 in.)

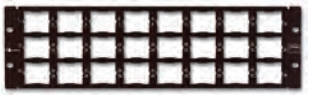
CT Patch Panels

Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-16	16-port panel	1	8

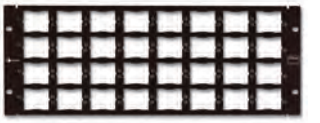
Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-24	24-port panel	2	12

Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-32	32-port panel	2	16

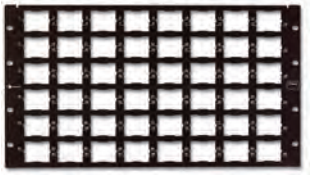
Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-48	48-port panel	3	24



Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-64	64-port panel	4	32



Part #	Description*	RMS	Maximum Quantity of CT Couplers
CT-PNL-96	96-port panel	6	48



**Number of ports when configured with two-port CT couplers.*
Note: 1 RMS = 44.5mm (1.75 in.)

HD® 5e UTP Patch Panel on S89D Bracket

Part #	Description
HD5-89D-12	12-port category 5e UTP panel, T568A/B, mounted on S89D bracket *height: 254.0mm (10.0 in.),* *width: 85.9mm (3.38 in.),* *depth: 47.8mm (1.88 in.)*

MAX® UTP Patch Panels

MAX UTP Patch Panels

Part #	Description
MX-PNL-16	16-port MAX patch panel, 1U

Part #	Description
MX-PNL-24	24-port MAX patch panel, 1U

Part #	Description
MX-PNL-48	48-port MAX patch panel, 2U

Part #	Description
MX-PNL-72	72-port MAX patch panel, 2U

Panels include rear cable manager, designation labels, cable ties, and mounting hardware.
MAX Panels are not compatible with shielded Z-MAX or TERA outlets. Use the TERA®-MAX or Z-MAX shielded panel.

Note: 1U = 44.5mm (1.75 in.)

Angled Max UTP Patch Panels

Siemon's MAX series angled patch panels route cables directly into the vertical cable managers, eliminating the need for horizontal cable management between panels.

Part #	Description
MX-PNLA-24	24-port angled MAX UTP patch panel, 1U

Part #	Description
MX-PNLA-48	48-port angled MAX UTP patch panel, 2U

Angled MAX panels are not compatible with shielded Z-MAX or TERA outlets. Use the angled TERA-MAX or Z-MAX shielded panel.
Angled MAX panels are not recommended for use with RS3 rack series. RS series racks are recommended.
Panels include mounting hardware. Rear cable manager not included.
Note: 1U = 44.5mm (1.75 in.)

MAX® In-Line Coupler Panel

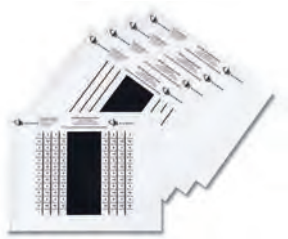
Siemon's In-Line Coupler Panel is a 1U patch panel that allows users the ability to patch on the front and rear of the patch panel with standard RJ45 patch cables..

Part #	Description
MX-K-C5-IL-24	.....In-Line Coupler Panel, Cat 5e UTP, 1U, Black
MX-K-C6-IL-24	.....In-Line Coupler Panel, Cat 6 UTP, 1U, Black

Optional Accessories

MX-PNL-LBL4* . . . . . .

10 sheets of laser printable labels for 16-port MAX panels



MX-PNL-LBL6* . . . . . .

10 sheets of laser printable labels for 24- and 48-port MAX panels

*Visit our web site or contact our Technical Support Department for labeling software.

MC® 5e UTP Modular Cords

Siemon uses the highest quality components combined with stringent manufacturing processes to produce the best performing, most durable modular patch cords available. The end result is a cord that exceeds all TIA/IEA and ISO/IEC component specifications for transmission performance.

Bend Fatigue — 24 AWG (7 strands @ 0.20mm) stranded wire for longer bend fatigue life

High Performance — MC 5e cords are constructed using high performance Siemon category 5e cable

Modular Plugs — Exceed FCC CFR 47 part 68 subpart F and IEC 60603-7 specifications and have 50 microinches minimum of gold plating over nickel

Factory Terminated

Cords are tested to consistently achieve category 5e compatibility. Field termination is not recommended.

Latch Guard

The MC 5e boot design incorporates a latch guard to protect the plug latch from snagging when pulling cords through pathways or cable managers.

Ordering Information:

MC5-8T-(XX)-B(XX)C . . . . . .Category 5e UTP MC double-ended, 4-pair stranded modular cord, color matching jacket/boot, T568A/B, CMG

Cord Length
03 = 0.9m (3 ft.)
05 = 1.5m (5 ft.)
07 = 2.1m (7 ft.)
10 = 3.1m (10 ft.)
15 = 4.6m (15 ft.)
20 = 6.1m (20 ft.)

Cord Color
01 = Black
02 = White
03 = Red
04 = Gray
05 = Yellow
06 = Blue
07 = Green

MC5-8-T-(XX)-(XX) . . . . . .Category 5e UTP MC double-ended, 4-pair stranded modular cord, no boot, T568A/B, CMG

Cord Length
03 = 0.9m (3 ft.)
05 = 1.5m (5 ft.)
07 = 2.1m (7 ft.)
10 = 3.1m (10 ft.)
15 = 4.6m (15 ft.)
20 = 6.1m (20 ft.)

Cord Color
01 = Black
02 = White
03 = Red
04 = Gray
05 = Yellow
06 = Blue
07 = Green

Ⓑ *Add "B" to end of part number for bulk project pack of 100 cords*

IC 5e Solid UTP Single-Ended Modular Cords

Siemon's solid, single-ended IC5e cable assemblies are designed for patching between the consolidation point and the work area (CMP) or as equipment cords in cross-connect applications (CMR). These assemblies are constructed using cable that exceeds all category 5e specifications.

IC5-8(X)-(XX)(X) . . . . . .Category 5e IC, single-ended UTP solid cord blue jacket, no boot

Wiring
A= T568B
B = T568A

Length
10 = 3.1m (10 ft.)
20 = 6.1m (20 ft.)
30 = 9.1m (30 ft.)
40 = 12.2m (40 ft.)
50 = 15.2m (50 ft.)
60 = 18.3m (60 ft.)

Jacket Rating
R = Riser
P = Plenum

IC5-8(X)-(XX)-B(XX)(X) . . . . . .Category 5e IC, single-ended UTP solid cord blue jacket with colored boot

Wiring
A= T568B
B = T568A

Length
10 = 3.1m (10 ft.)
20 = 6.1m (20 ft.)
30 = 9.1m (30 ft.)
40 = 12.2m (40 ft.)
50 = 15.2m (50 ft.)
60 = 18.3m (60 ft.)

Jacket Rating
R = Riser
P = Plenum

Boot Coloring
01 = Black
02 = White
03 = Red
04 = Gray
05 = Yellow
06 = Blue
07 = Green

Premium 5e® UTP Cable (North America)

COMPLIANCE

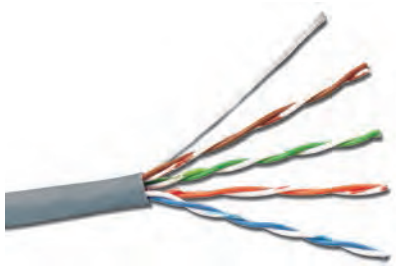
- ISO/IEC 11801:2002 (Category 5e)
- TIA568-C.2 (Category 5e)
- IEC 61156-5 (Category 5e)
- UL CMP and CSA FT6
- UL CMR and CSA FT4

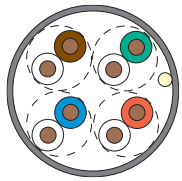
CABLE CONSTRUCTION

- UTP
- 0.51mm (0.020 in.) (24 AWG) solid bare copper
- 4.9mm (0.194 in.) max jacket diameter

Part #	Description
9C5P4-E2-(XX)-RXA	Plenum (CMP, CSA FT6) 305m (1000 ft.), Reelex
9C5R4-E2-(XX)-RXA	Riser (CMR, CSA FT4) 305m (1000 ft.), Reelex

Use (XX) to specify jacket color: 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green





ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38Ω/100m
DC resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100-350 MHz: 100 ± 22%
NVP	CMP - 70% CMR - 68%
TCL	40-10 x log(*f*) dB
Delay Skew	≤35ns

PHYSICAL PROPERTIES

	CMP	CMR
Pulling Tension (max)	110N (25 lbf)	110N (25 lbf)
Bend Radius (min)	20 mm (0.8 in.)	20mm (0.8 in.)
Installation Temperature	0 to 60°C (+32 to 140°F)	0 to 60°C (+32 to 140°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)	-20 to 75°C (-4 to 167°F)
Operating Temperature	-20 to 60°C (-4 to 140°F)	-20 to 60°C (-4 to 140°F)

TRANSMISSION PERFORMANCE

GUARANTEED WORSE CASE SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0	2.1	1.9	68.3	79.3	66.3	72.3	66.2	77.4	64.2	70.4	67.8	84.8	65.8	78.8	20.0	27.0	550	545
4.0	4.1	3.7	59.3	70.3	57.3	63.3	55.2	66.6	53.2	59.6	55.7	72.8	53.7	66.8	23.3	32.0	532	527
10.0	6.5	5.8	53.3	64.3	51.3	57.3	46.9	58.5	44.9	51.5	47.8	64.8	45.8	58.8	25.5	32.0	525	520
16.0	8.2	7.4	50.3	61.2	48.3	54.2	42.1	53.8	40.1	46.8	43.7	60.7	41.7	54.7	25.5	32.0	523	518
20.0	9.2	8.3	48.8	59.8	46.8	52.8	39.6	51.5	37.6	44.5	41.7	58.8	39.7	52.8	25.5	32.0	522	517
31.25	11.5	10.5	45.9	56.9	43.9	49.9	34.4	46.4	32.4	39.4	37.9	54.9	35.9	48.9	24.4	30.0	520	515
62.5	16.4	15.0	41.4	52.4	39.4	45.4	24.9	37.4	22.9	30.4	31.8	48.9	29.8	42.9	22.7	30.0	519	514
100.0	21.0	19.3	38.3	49.3	36.3	42.3	17.3	30.0	15.3	23.0	27.8	44.8	25.8	38.8	21.5	30.0	518	513
160.0*	26.8	25.1	35.3	46.2	33.3	39.2	8.4	21.1	6.4	14.1	23.7	40.7	21.7	34.7	20.4	28.0	517	512
200.0*	30.2	28.1	33.8	44.8	31.8	37.8	3.6	16.7	1.6	9.7	21.7	38.8	19.7	32.8	19.8	27.0	517	512
250.0*	34.0	31.4	32.3	43.3	30.3	36.3	-1.6	11.9	-3.6	4.9	19.8	36.8	17.8	30.8	19.2	26.0	516	511
300.0*	37.4	34.5	31.2	42.1	29.2	35.1	-6.3	7.6	-8.3	0.6	18.2	35.3	16.2	29.3	18.8	25.0	516	511
350.0*	40.7	39.4	30.2	41.1	28.2	34.1	-10.5	1.7	-12.5	-5.3	16.9	33.9	14.9	27.9	18.4	24.0	516	511

**Values above industry requirements are for information only.*

All performance based on 100 meters (328 ft.).

Premium 5e® UTP Cable (International)

COMPLIANCE

- ISO/IEC 11801: Ed 2.2 (Class D)
- IEC 61156-6-5 (Category 5e)
- IEEE 802.3
- TIA-568-C.2 (Category 5e)
- UL CM
- UL CMR and CSA FT4
- LSOH: IEC 60332-1, IEC 60754, AND IEC 61034

CABLE CONSTRUCTION

- UTP
- Nominal jacket OD: 5mm
- 0.5mm solid (non-tinned) copper (24 AWG)
- Reverse sequential numbering

Part # **Description**

9C5R4-E2.....PVC (CMR, CSA FT4), Blue Jacket, 305m Reelex
9C5M4-E2 .....PVC (CM), Gray Jacket, 305m Reelex
9C5L4-E2 .....LS0H (IEC 60332-1), Violet Jacket, 305m Reelex

Other cable lengths also available:
Add "-5CR" for 500m Reel, "-1KR" for 1000m Reel

ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38Ω/100m
DC resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100-350 MHz: 100 ± 22%
NVP	65%
Delay Skew	≤40ns

PHYSICAL PROPERTIES

	LSOH	CM/CMR
Pulling Tension (max)	110N	110N
Bend Radius (min)	25mm	25mm
Installation Temperature	0 to 60°C	0 to 60°C
Storage Temperature	-20 to 75°C	-20 to 75°C
Operating Temperature	-20 to 60°C	-20 to 60°C

TRANSMISSION PERFORMANCE

GUARANTEED WORSE CASE SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0	2.1	1.9	65.3	79.3	62.3	72.3	63.2	77.4	60.2	70.4	63.8	84.8	60.8	78.8	20.0	27.0	570	545
4.0	4.1	3.7	56.3	70.0	53.3	63.3	52.2	66.6	49.2	59.6	51.8	72.8	48.8	66.8	23.0	32.0	552	527
10.0	6.5	5.8	50.3	64.3	47.3	57.3	43.8	58.5	40.8	51.5	43.8	64.8	40.8	58.8	25.0	32.0	545	520
16.0	8.3	7.4	47.2	61.2	44.2	54.2	39.0	53.8	36.0	46.8	39.7	60.7	36.7	54.7	25.0	32.0	543	518
20.0	9.3	8.3	45.8	59.8	42.8	52.8	36.5	51.5	33.5	44.5	37.8	58.8	34.8	52.8	25.0	32.0	542	517
31.25	11.7	10.5	42.9	56.9	39.9	49.9	31.1	46.4	28.1	39.4	33.9	54.9	30.9	48.9	23.6	30.0	540	515
62.5	17.0	15.0	38.4	52.4	35.4	45.4	21.4	37.4	18.4	30.4	27.9	48.9	24.9	42.9	21.5	30.0	539	514
100.0	22.0	19.3	35.3	49.3	32.3	42.3	13.3	30.0	10.3	23.0	23.8	44.8	20.8	38.8	20.1	30.0	538	513
160.0*	28.6	25.1	32.2	46.2	29.2	39.2	3.7	21.1	0.7	14.1	19.7	40.7	16.7	34.7	18.7	28.0	537	512
200.0*	32.4	28.1	30.8	44.8	27.8	37.8	-1.6	16.7	-4.6	9.7	17.8	38.8	14.8	32.8	18.0	27.0	537	512
250.0*	36.9	31.4	29.3	43.3	26.3	36.3	-7.5	11.9	-10.5	4.9	15.8	36.8	12.8	30.8	17.3	26.0	536	511
300.0*	41.0	34.5	28.1	42.1	25.1	35.1	-12.8	7.6	-15.8	0.6	14.3	35.3	11.3	29.3	16.8	25.0	536	511
350.0*	44.9	39.4	27.1	41.1	24.1	34.1	-17.7	1.7	-20.7	-5.3	12.9	33.9	9.9	27.9	16.3	24.0	536	511

**Values above 100 MHz are for information only.*

All performance based on 100 metres (328 ft.).

Solution 5e™ UTP Cable (North America)

COMPLIANCE

- ISO/IEC 11801:2002 (Category 5e)
- TIA568-C.2 (Category 5e)
- IEC 61156-5 (Category 5e)
- UL CMP and CSA FT6

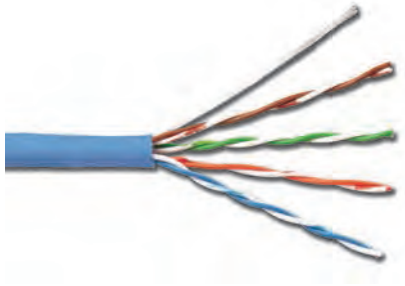
CABLE CONSTRUCTION

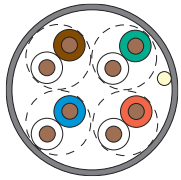
- UTP
- 0.51mm (0.020 in.) (24 AWG) solid bare copper
- 4.6mm (0.180 in.) max jacket diameter

Part # **Description**

9C5P4-E1-(XX)-RXA . . . . . Plenum (1000 ft.), Reelex

Use (XX) to specify jacket color: 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green





ELECTRICAL SPECIFICATIONS

DC Resistance	<9.38Ω/100m
DC resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<330 pF/100m
Characteristic Impedance (ohms)	1-100 MHz: 100 ± 15% 100-350 MHz: 100 ± 22%
NVP	CMP - 70% CMR - 68%
Delay Screw	≤45ns

PHYSICAL PROPERTIES

	CMP	CMR
Pulling Tension (max)	110N (25 lbf)	110N (25 lbf)
Bend Radius (min)	25 mm (1 in.)	25mm (1 in.)
Installation Temperature	0 to 60°C (+32 to 140°F)	0 to 60°C (+32 to 140°F)
Storage Temperature	-20 to 75°C (-4 to 167°F)	-20 to 75°C (-4 to 167°F)
Operating Temperature	-20 to 60°C (-4 to 140°F)	-20 to 60°C (-4 to 140°F)

TRANSMISSION PERFORMANCE

GUARANTEED WORSE CASE SIEMON TYPICAL

Frequency (MHz)	Insertion Loss (dB/100m)		NEXT (dB)		PS NEXT (dB)		ACR-N (dB)		PS ACR-N (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		Propagation Delay (ns)	
1.0	2.0	2.0	65.3	79.8	62.3	78.2	63.3	77.8	64.2	76.2	63.8	69.4	60.8	69.0	20.0	27.4	570	545
4.0	4.1	3.9	56.3	78.0	53.3	74.5	52.2	74.1	53.2	70.5	51.8	57.8	48.8	57.5	23.0	32.9	552	527
10.0	6.5	6.2	50.3	68.7	47.3	65.4	43.8	62.4	44.9	59.5	43.8	50.1	40.8	49.7	25.0	31.6	545	520
16.0	8.2	7.9	47.2	64.5	44.2	62.9	39.0	56.5	40.1	55.0	39.7	46.0	36.7	45.4	25.0	31.7	543	518
20.0	9.3	8.9	45.8	63.3	42.8	60.9	36.5	54.4	37.6	52.0	37.8	44.1	34.8	43.,4	25.0	32.2	542	517
31.25	11.7	11.2	42.9	59.4	39.9	57.5	31.2	48.2	32.4	46.4	33.9	40.4	30.9	39.5	23.6	33.3	540	515
62.5	17.0	16.0	38.4	50.6	35.4	49.4	21.4	34.6	22.9	33.4	27.9	34.6	24.9	33.7	21.5	28.1	539	514
100.0	22.0	20.5	35.3	48.0	32.3	46.8	13.3	27.5	15.3	26.3	23.8	31.8	20.8	31.3	20.1	25.0	538	513
160.0*	-	26.4	-	48.5	-	46.6	-	22.1	-	20.2	-	30.0	-	29.5	-	22.3	-	512
200.0*	-	29.6	-	42.9	-	41.8	-	13.3	-	12.2	-	29.6	-	29.2	-	19.8	-	512
250.0*	-	33.4	-	44.8	-	43.1	-	11.4	-	9.7	-	31.2	-	30.9	-	20.8	-	511
300.0*	-	36.9	-	38.9	-	38.7	-	2.0	-	1.8	-	33.7	-	31.1	-	18.5	-	511
350.0*	-	40.2	-	41.8	-	40.7	-	1.6	-	0.5	-	34.7	-	31.3	-	20.2	-	511

**Values above industry requirements are for information only.*

All performance based on 100 meters (328 ft.).

Category 5e UTP Cross-Connect Wire

Siemon's cross-connect wire utilizes a unique "webbing" manufacturing process which binds conductors of a twisted-pair together to maintain consistent conductor spacing and pair twists that will not loosen during cross-connect installation. This high performance product exceeds category 5e specifications and is ideal for use with our S66™and S110® wiring blocks.

Part #	Description
CJ5-W2-1000	Category 5e, 2-pair 24 AWG (0.51mm) webbed cross-connect wire, pair colors blue/orange, 305m (1,000 ft.) spool
CJ5-W2-1000-07	Category 5e, 2-pair 24 AWG (0.51mm) webbed cross-connect wire, pair colors orange/green, 305m (1,000 ft.) spool
CJ5-W1-1000-03	Category 5e, 1-pair 24 AWG (0.51mm) webbed cross-connect wire with red/white conductors, 305m (1,000 ft.) spool
CJ5-W1-1000-06	Category 5e, 1-pair 24 AWG (0.51mm) webbed cross-connect wire with blue/white conductors, 305m (1,000 ft.) spool

S110® Connecting Block System

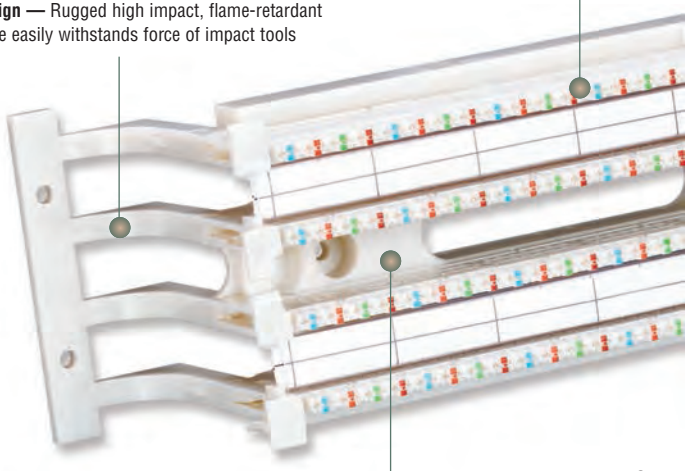
Siemon's S110 connecting block systems and accessories combine category 5e performance with user-friendly installation features.

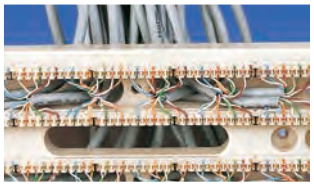
- **Multi-application support — Ideal for use in cross-connect and consolidation point applications**
- **Durable design — Rugged high impact, flame-retardant polycarbonate easily withstands force of impact tools**
- **Full line — Complete system includes field terminated and pre-wired blocks, connecting blocks, patch cords, cable managers and more.**

Section Contents

S110® Connection System

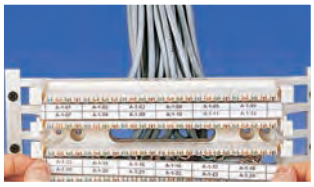
Siemon S110 field termination kits combine category 5e performance with unparalleled installation features. Each kit includes connecting blocks to complete each 25-pair termination strip on the S110 wiring block.





Patented Cable Access Openings
Allow cables to be routed through the rear of the block directly to the point of termination.

Detachable Blocks
Another patented Siemon innovation allows 50- and 100-pair wiring blocks to be detached from their mounting legs providing easy access to cables.



Labeling
Designation strips with interchangeable colored labels can be mounted in the center and/or outside positions.

S110 Field Termination Kits

Complete S110 installation kits include S110 wiring blocks with detachable legs*, S110 connecting blocks, and label holders with white designation labels.

Part #	Description
S110A(X)1-50FT	50-pair S110 field termination kit *height: 45.7mm (1.80 in.),* *width: 272mm (10.71 in.),* *depth: 82.8mm (3.26 in.)*
S110A(X)2-100FT	100-pair S110 field termination kit *height: 91.4mm (3.60 in.),* *width: 272mm (10.71 in.),* *depth: 82.8mm (3.26 in.)*
S110A(X)2-300FT*	300-pair S110 field termination kit *height: 274mm (10.80 in.),* *width: 272mm (10.71 in.),* *depth: 82.8mm (3.26 in.)*

Use (X) to specify connecting block size: A = 5-pair, B = 4-pair

**Legs detachable on 50- and 100-pair version only.*

S110® Connecting Blocks

Siemon category 5e S110C blocks terminate 22-26 AWG (0.64mm-0.40mm) solid or 7-strand wires. They also offer markings to designate tip and ring conductors and color-coded pairs on each block and a patented single-piece, robust construction.

S110C-4. . . . . .
4-pair connecting block,
blue/orange/green/brown

S110C-5. . . . . .
5-pair connecting block,
blue/orange/green/ brown/slate

S110 Wiring Blocks

Wiring Blocks With Legs

S110AW1-50 . . . . . .
50-pair, 110 wiring block with legs
height: 45.7mm (1.80 in.),
width: 272mm (10.71 in.),
depth: 82.8mm (3.26 in.)

S110AW2-100 . . . . . .
100-pair, 110 wiring block with legs
height: 91.4mm (3.60 in.),
width: 272mm (10.71 in.),
depth: 82.8mm (3.26 in.)

S110AW2-200 . . . . . .
200-pair, 110 wiring block with legs
height: 182.9mm (7.20 in.),
width: 272mm (10.71 in.),
depth: 82.8mm (3.26 in.)

S110AW2-300 . . . . . .
300-pair, 110 wiring block with legs
height: 274.3mm (10.80 in.),
width: 272mm (10.71 in.),
depth: 82.8mm (3.26 in.)

Wiring Blocks Without Legs

S110DW1-25 . . . . . .
25-pair, 110 wiring block without legs
height: 16.0mm (0.63 in.),
width: 216mm (8.50 in.),
depth: 35.8mm (1.41 in.)

S110DW1-50 . . . . . .
50-pair, 110 wiring block without legs
height: 42.4mm (1.67 in.),
width: 216mm (8.50 in.),
depth: 35.8mm (1.41 in.)

S110DW2-100 . . . . . .
100-pair, 110 wiring block without legs
height: 88.1mm (3.47 in.),
width: 216mm (8.50 in.),
depth: 35.8mm (1.41 in.)

Vertically Mounted S110 Blocks

This 50-pair S110 block can be mounted on the same S89B or S89D brackets that hold our S66™ blocks. The wiring base is available separately or as part of a field-terminated kit that includes the 4- or 5-pair connecting blocks and designation strips.

Part #	Description
S110DW1-50-89	50-pair S110 wiring base on an 89-type retainer.* S110 connecting blocks are not included *height: 254.0mm (10.0 in.),* *width: 85.9mm (3.4 in.),* *depth: 86.6mm (3.4 in.)* *(dimensions include S89 bracket)*
S110D(X)1-50FT-89.	50-pair S110 field termination kit on an 89-type retainer.* Includes S110 connecting blocks and designation strips *height: 254.0mm (10.0 in.),* *width: 85.9mm (3.4 in.),* *depth: 86.6mm (3.4 in.)* *(dimensions include S89 bracket)*

Shown with optional
S89D bracket

Use (X) to specify connecting blocks: A = 5-pair, B = 4-pair
**S89 brackets are not included and must be ordered separately .*

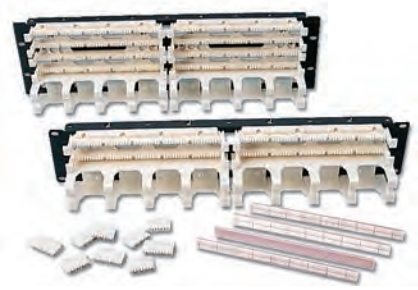
S110® 19 Inch Field Termination Panels

S110 panels allow wiring blocks to be mounted directly to a 19 inch CEA rack or cabinet. Each panel includes adequate connecting blocks to complete each 25-pair termination strip on the S110 block (e.g. S110DB1-100RFT would include five 4-pair and one 5-pair connecting block per 25-pair termination strip, or a total of twenty 4-pair and four 5-pair connecting blocks).

Part #	Description
S110D(X)1-100RFT	100-pair, 19 inch panel, S110 field termination kit, 1U
S110D(X)1-200RFT	200-pair, 19 inch panel, S110 field termination kit, 2U
S110D(X)1-300RFT	300-pair, 19 inch panel, S110 field termination kit, 3U

Use (X) to specify connecting block size: A = 5-pair, B = 4-pair
Note: 1U = 44.5mm (1.75 in.)

Field Terminated S110 19 Inch Panels with Cable Managers



Part #	Description	RMS
S110D(X)2-100RWM	100-pair, 19 inch panel, S110 field termination kit with cable managers and covers	2
S110D(X)2-200RWM	200-pair, 19 inch panel, S110 field termination kit with cable managers and covers	3

Use (X) to specify the connecting blocks: A = 5-pair, B = 4-pair
Note: 1 RMS = 44.5mm (1.75 in.)

S110 Designation Labels

Siemon S110 wiring blocks allow designation labels to be mounted between each row of connecting blocks. Each label has 2-, 3-, 4-, and 5-pair markings and may be used for color-coding services in accordance with TIA/EIA-606-A.

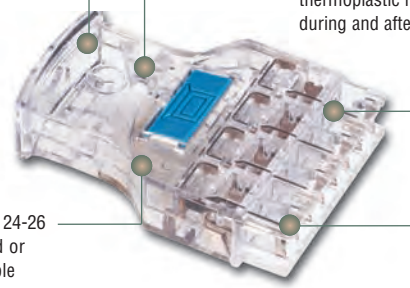
Part #	Description
S110-HLDR	Transparent plastic label holders, bag of 6
S110-LBL-(X)	2-, 3-, 4-, and 5-pair marked colored labels, bag of 6

Use (X) to specify color: 2 = white, 3 = red, 4 = gray, 5 = yellow, 6 = blue, 7 = green, 8 = violet, 9 = orange, 60 = brown

S110® Patch Plugs and Cable Assemblies

S110 Patch Plugs

Siemon S110 patch plugs are both category 5e compliant and can be field-terminated to either solid or stranded cable. 4-pair S110 patch plugs employ a patented design to improve electrical isolation between pairs, enhancing cross-talk performance so that the mated plug and connecting block significantly exceed category 5e transmission requirements.



Ergonomic Handle — Aids insertion and removal of patch plug

Clear Housing — Durable, flame-retardant, clear thermoplastic housing keeps conductors visible during and after termination

Easy Termination — Simply snap the base and cover together to mass terminate all conductors

Field Installable — Terminates 24-26 AWG (0.40mm-0.51mm) solid or 7-strand twisted-pair UTP cable

Polarization — Each plug housing includes polarization features to ensure proper tip-ring orientation during connection

S110P4 . . . . . .
4-pair, field-terminated, S110 patch plug

S110P2 . . . . . .
2-pair, field-terminated, S110 patch plug

S110P1* . . . . . .
1-pair, field-terminated, S110 patch plug

Ⓑ Add "-B" to end of part number for bulk project pack of 100 patch plugs.
**S110P1 includes protective insert for use with single pair cross-connect wire.*
Colored icons are available for color-coding 4-pair S110 plugs (sold separately)

S110 Cable Assemblies

The S110 cable assemblies utilize Siemon's S110P4 patch plugs for easy and reliable connections between S110 termination fields. These assemblies use high performance stranded cable which exceeds category 5e specifications and are factory transmission tested to ensure optimum category 5e channel performance. Colored icons are available for color-coding 4-pair S110 plugs.

Part #	Description
S110P4-P4-(XX)	4-pair, double-ended stranded S110 cord, CMG
S110P2-P2-(XX)	2-pair, double-ended stranded S110 cord, CMG
S110P1-P1-(XX)	1-pair, double-ended stranded S110 cord, CMG

Use (XX) to specify length: 03 = 0.91m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.13m (7 ft.), 10 = 3.05m (10 ft.), 15 = 4.57m (15 ft.), 20 = 6.10m (20 ft.)

S110 to MC® Cable Assemblies

The S110 to modular cable assemblies combine Siemon's high performance modular plugs for patching network equipment to S110 connecting blocks or providing test access to S110 termination fields. The combination of plugs, high performance cable and factory transmission testing ensures performance is compatible with Premium 5e or lower systems.

Part #	Description
S110P4-A4-(XX)	Category 5e, 4-pair, S110-to-modular plug, T568B, standard cable assembly, CMG
S110P4-T4-(XX)	Category 5e, 4-pair, S110-to-modular plug, T568A, standard cable assembly, CMG
S110P2-UT-(XX)	Category 5e, 2-pair, S110-to-modular 8-position plug, Token Ring, T568A, standard cable assembly, CMG
S110P2-E2-(XX)	Category 5e, 2-pair, S110-to-modular 8-position plug, 10/100BASE-T, T568B, standard cable assembly, CMG
S110P1-U1-(XX)	Category 5e, 1-pair, S110-to-modular 6-position plug, USOC, standard cable assembly, CMG
S110P1-U4-(XX)	Category 5e, 1-pair, S110-to-modular 8-position plug, USOC, standard cable assembly, CMG

Use 1st (XX) to specify length: 03 = 0.91m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.13m (7 ft.), 10 = 3.05m (10 ft.), 15 = 4.57m (15 ft.), 20 = 6.10m (20 ft.)

S110® Tower Kits

S110 Tower Field Termination Kits

The S110 Tower System provides a modular high-density cross-connect cable management system. S110 Tower Systems are shipped unassembled to simplify field assembly and termination.

Part #	Description
S110M(X)2-300FT	300-pair S110 Tower field termination kit height: 406.4mm (16 in.), width: 215.9mm (8.5 in.), depth: 152.6mm (6 in.)
S110M(X)2-400FT	400-pair S110 Tower field termination kit height: 541.3mm (21.3 in.), width: 215.9mm (8.5 in.), depth: 152.6mm (6 in.)
S110M(X)2-500FT	500-pair S110 Tower field termination kit height: 676.1mm (26.6 in.), width: 215.9mm (8.5 in.), depth: 152.6mm (6 in.)

Use (X) to specify connecting block size: A = 5-pair, B = 4-pair

S110 Tower Optional Accessories

S188-300

Large-scale vertical cable manager for use with 300-pair Tower
height: 406.4mm (16.0 in.),
width: 215.9mm (8.5 in.),
depth: 190.5mm (7.5 in.)

S110M-WM-300

Small-scale vertical cable manager for use with 300-pair Tower
height: 406.0mm (16.0 in.),
width: 76.2mm (3.0 in.),
depth: 153.0mm (6.1 in.)

Tower with S188

S188-400

Large-scale vertical cable manager for use with 400-pair Tower
height: 541.3mm (21.3 in.),
width: 215.9mm (8.5 in.),
depth: 190.5mm (7.5 in.)

S110M-WM-400

Small-scale vertical cable manager for use with 400-pair Tower
height: 541.2mm (21.3 in.),
width: 76.2mm (3.0 in.),
depth: 153.0mm (6.1 in.)

S188

S188-500

Large-scale vertical cable manager for use with 500-pair Tower
height: 676.1mm (26.6 in.),
width: 215.9mm (8.5 in.),
depth: 190.5mm (7.5 in.)

S110M-WM-500

Small-scale vertical cable manager for use with 500-pair Tower
height: 675.9mm (26.6 in.),
width: 76.2mm (3.0 in.),
depth: 153.0mm (6.1 in.)

S188-WD

S188-WD

Metal duct for additional horizontal cable management at base of Tower
height: 114.3mm (4.5 in.),
width: 215.9mm (8.5 in.),
depth: 203.2mm (8.0 in.)

S188-GND

Ground kit consists of one, 3-position grounding busbar
height: 9.0mm (0.4 in.),
width: 50.8mm (2.0 in.),
depth: 12.3mm (.5 in.)

S110M-WM

S188-GND

XLBET Frame

The Siemon XLBET (Extra Large Building Entrance Terminal) frames are designed for use in large installations where space is a premium. Compatible with Siemon's vertical patching (VPC-6) and cable management (RS-CNL) channels.

XLBET Frame

Part #	Description
XL-(XX)00	7 ft. x 23 in. XLBET frame. Includes rack, wire management and mounting hardware. S110® wiring blocks not included *height: 2133.6mm (84.00 in.),* *width: 617.5mm (24.31 in.),* *depth: 406.4mm (16.00 in.)*

Use (XX) to specify pair count: 36 = 3600-pair, 72 = 7200-pair

XLBET Frame with S110 Wiring Blocks

Part #	Description
XL-(XX)00-W	7 ft. x 23 in. XLBET frame. Includes rack, wire management, S110 wiring blocks, clear designation holders, labels, and mounting hardware (S110 connecting blocks not included)

Use (XX) to specify pair count: 36 = 3600-pair, 72 = 7200-pair

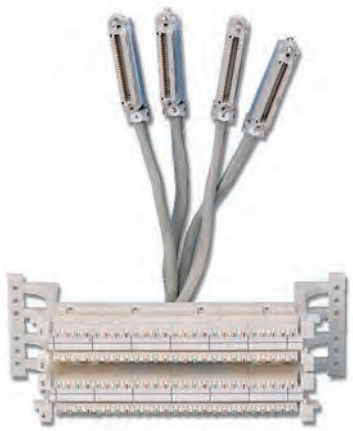
Optional Accessories

Part #	Description
XL-CK	Concrete mounting kit. Includes hardware to secure one 23 or 35 inch XLBET frame to a concrete floor
XL-(X)-3600	S110 connecting block kit. Includes the appropriate number of 4- or 5-pair connecting blocks to fully populate a 3600-pair frame. Two kits can be ordered for 7200-pair frames

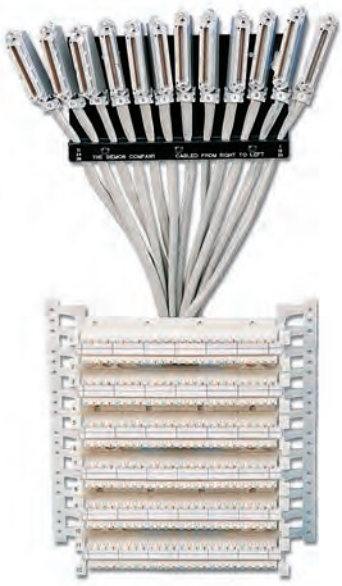
Use (X) to specify connecting blocks: A = 5-pair, B = 4-pair

Pre-Wired S110® Blocks

For quick, simple connection to phone equipment, the pre-wired S110 blocks provide connectorized 25-pair tails wired to 100- or 300-pair bases. The standard 6 in. (152mm) tails can be ordered extending from the top or bottom of the block with male or female connectors.



S110A(X)-100(XXX)-(X) . . . . . .
100-pair S110 pre-wired block

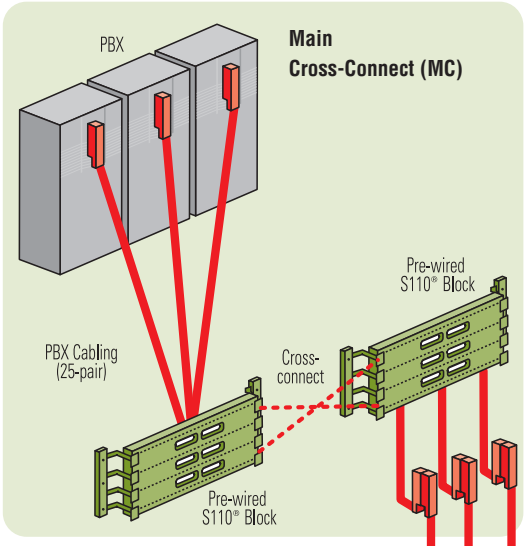


S110A(X)-300(XXX)-(X) . . . . . .
300-pair S110 pre-wired block

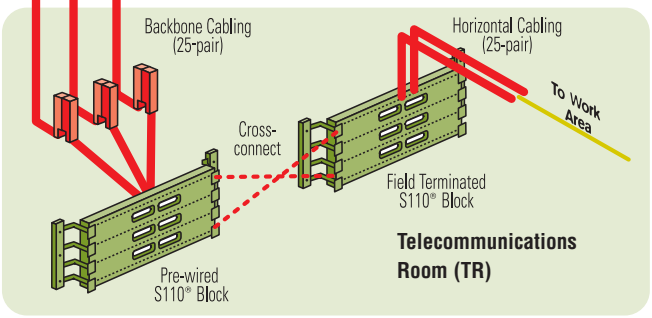
Use 1st (X) to specify connecting block subassembly: A = 5-pair, B = 4-pair

Use (XXX) to specify connector type: CT = connectorized top (female), CTM = connectorized top (male), CB = connectorized bottom (female), CBM = connectorized bottom (male)

Use 2nd (X) to specify cable length: Blank = standard 152mm (6 in.) tail, (X) = custom length, in feet

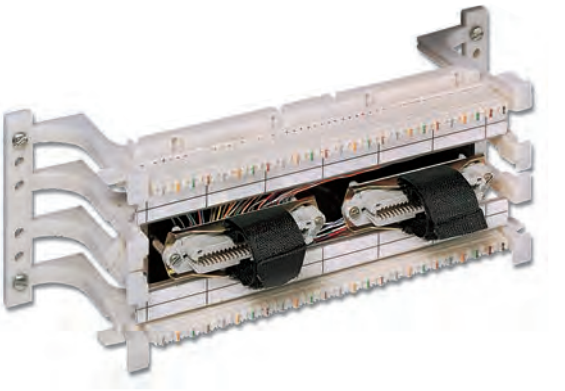


The pre-wired S110 block is ideal for use with phone systems due to its ability to easily accommodate connectorized 25-pair cables for fast and simple setup. In addition, the use of 25-pair cable for backbone cabling allows the pre-wired S110 block to provide an easy interface with your phone system all the way to the telecommunications room where connections can be made to the work area.



Pre-Wired S110® Blocks

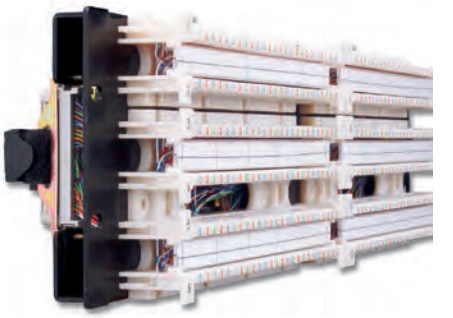
Siemon's S700 series blocks provide a simple interface method between 25-pair assemblies and punchdown fields using easily accessible connections. The blocks feature both fields on the face of the block eliminating the need to trace cables or access the rear of the block when making connections. Each block comes with label holders and white designation labels as well as hook and loop hold-downs to secure the 25-pair connectors.



Part #	Description
S700A110-B1-50	50-pair pre-wired S110 block with legs *height: 91.4mm (3.60 in.),* *width: 272mm (10.71 in.),* *depth: 82.8mm (3.26 in.)*

Pre-Wired S110 Panels

S110 pre-wired panels mount directly to a 19 inch EIA rack. The panels are available in either 100-, 200-, or 300-pair configurations pre-wired to female 25-pair connectors with black universal connector hold-downs. For optimum transmission performance, pre-wired blocks may be ordered with the pair twisting maintained between the wiring block and the connector. Each panel comes complete with mounting hardware, label holders, and white designation labels.



Part #	Description	RMS
S110D(X)(Y)-100RCT	100-pair pre-wired S110 panel, with 25-pair connectors	1
S110D(X)(Y)-200RCT	200-pair pre-wired S110 panel, with 25-pair connectors	2
S110D(X)(Y)-300RCT	300-pair pre-wired S110 panel, with 25-pair connectors	3

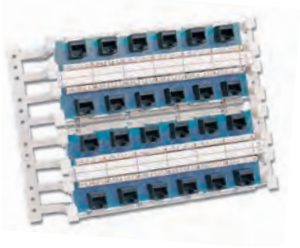
Use (X) to specify the connecting blocks: A = 5-pair, B = 4-pair
Use (Y) to specify twisted-pair option: 1 = without twisted-pairs, T = twisted-pairs
Note: 1 RMS = 44.5mm (1.75 in.)

S110® Modular Jack Blocks and Panels

S110 Modular Jack Wall Mount Blocks

Part #	Description
S110AB5-50JP	6-port, T568A/B, with detachable legs *height: 45.7mm (1.80 in.),* *width: 272mm (10.71 in.),* *depth: 82.8mm (3.26 in.)*

Part #	Description
S110AB5-100JP	12-port, T568A/B,with detachable legs *height: 91.4mm (3.60 in.),* *width: 272mm (10.71 in.),* *depth: 82.8mm (3.26 in.)*



Part #	Description
S110AB5-200JP	24-port, T568A/B, with permanent legs *height: 183mm (7.20 in.),* *width: 272mm (10.71 in.),* *depth: 82.8mm (3.26 in.)*

Part #	Description
S110AB5-300JP	36-port, T568A/B, with permanent legs *height: 274.3mm (10.8 in.),* *width: 272mm (10.71 in.),* *depth: 82.8mm (3.26 in.)*

Rack Mount Panels

Part #	Description
S110DB5-24RJP	24-port jack panel, on a 19 inch panel, T568A/B, 2 RMS

Note: 1 RMS = 44.5mm (1.75 in.)

Vertical Mount Panels

Part #	Description
S110DB5-50JP89	6-port, T568A/B for mounting on S89 bracket *height: 254.0mm (10.00 in.),* *width: 85.9mm (3.38 in.),* *depth: 86.6mm (3.41 in.)*

(dimensions include S89 bracket)

**S89 brackets are not included and must be ordered separately.*

S110 Tower Modular Jack Panels

Part #	Description
S110MB5-(XXX)JP	S110 Tower modular jack panel kit, T568A/B

Use (XXX) to specify port counts:
300 = 36 ports, height: 406.4mm (16.0 in.), width: 215.9mm (8.5 in.), depth: 152.6mm (6.0 in.)
400 = 48 ports, height: 541.3mm (21.3 in.), width: 215.9mm (8.5 in.), depth: 152.6mm (6.0 in.)
500 = 60 ports, height: 676.1mm (26.6 in.), width: 215.9mm (8.5 in.), depth: 152.6mm (6.0 in.)

S66™ Connecting Block System

The Siemon S66 connecting block system is a proven, economical connecting block solution supporting up to category 5e performance levels. It's familiar, user-friendly termination features, reliable performance and wide range of styles and configurations make the 66 block an ideal choice for supporting technologies such as analog voice, Voice over IP (VoIP) and Gigabit ethernet. The Siemon S66 block system is supported by a full range of mounting, cable management, labeling and over voltage protection accessories

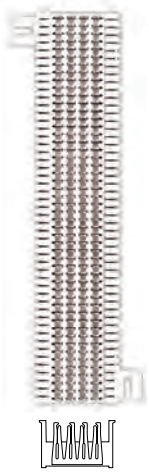
Section Contents

Field-Terminated M Series S66 Blocks

4 x 50 Blocks

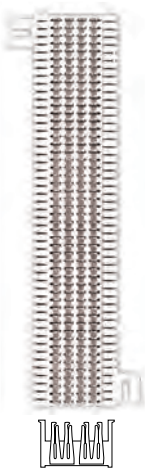
S66M1-50 . . . . . .
Pair Capacity: 50,
Quick Clip: 500

height: 254mm (10 in.),
width: 86.4mm (3.4 in.),
depth: 30.5mm (1.2 in.)



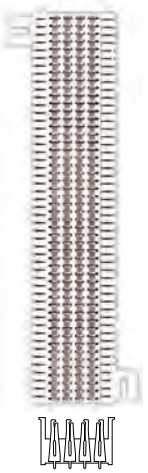
S66M1-25 . . . . . .
Pair Capacity: 25,
Quick Clip: 569

height: 254mm (10 in.),
width: 86.4mm (3.4 in.),
depth: 24.6mm (1.0 in.)



S66M1-100 . . . . . .
Pair Capacity: 100,
Quick Clip: 279MS*

height: 254mm (10 in.),
width: 86.4mm (3.4 in.),
depth: 30.5mm (1.2 in.)



4 x 25 Blocks

S66M4-12 . . . . . .
Pair Capacity: 12,
Quick Clip: 569

height: 127mm (5 in.),
width: 53.3mm (2.1 in.),
depth: 30.5mm (1.2 in.)

S66M4-24 . . . . . .
Pair Capacity: 24,
Quick Clip: 571

height: 127mm (5 in.),
width: 53.3mm (2.1 in.),
depth: 30.5mm (1.2 in.)

S66M4-50 . . . . . .
Pair Capacity: 50,
Quick Clip: 279MS*

height: 127mm (5 in.),
width: 53.3mm (2.1 in.),
depth: 30.5mm (1.2 in.)

6 x 25 Blocks

S66M6-24 . . . . . .
Pair Capacity: 24,
Quick Clip: 843

height: 127mm (5 in.),
width: 71.1mm (2.8 in.),
depth: 30.5mm (1.2 in.)

S66M6-36 . . . . . .
Pair Capacity: 36,
Quick Clip: 842

height: 127mm (5 in.),
width: 71.1mm (2.8 in.),
depth: 30.5mm (1.2 in.)

S66M6-75 . . . . . .
Pair Capacity: 75,
Quick Clip: 279MS*

height: 127mm (5 in.),
width: 71.1mm (2.8 in.),
depth: 30.5mm (1.2 in.)

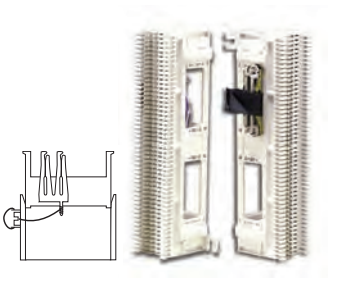
**All connecting blocks that use the 279MS quick clip have a tail pin that protrudes 3.3mm (0.13 in.) below the retainer base.*

Note: Center-to-center vertical spacing between rows of clips is 6.4mm (0.25 in.).

Pre-Wired M2 Series

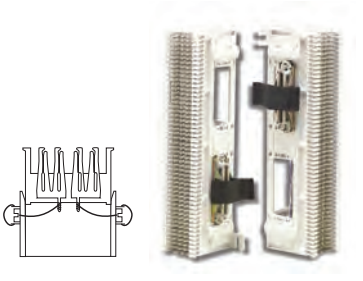
S66M2-3W . . . . . .

Pair Capacity: 25
One female 25-pair connector



S66M2-5W . . . . . .

Pair Capacity: 50
Two female 25-pair connectors



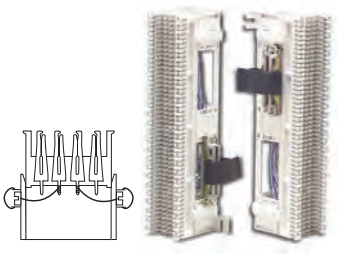
Add "B" for back mounted connector (not shown), add "M" for male connector. Please call for connector/block compatibility.

Note: all connector options not available for all blocks.

Pre-Wired M4 Series

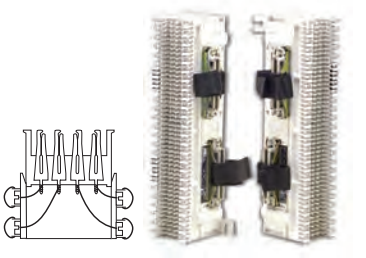
S66M4-2W . . . . . .

Pair Capacity: 50
(bridged)
Two female 25-pair connectors



S66M4-4W . . . . . .

Pair Capacity: 100
(unbridged)
Four female 25-pair connectors



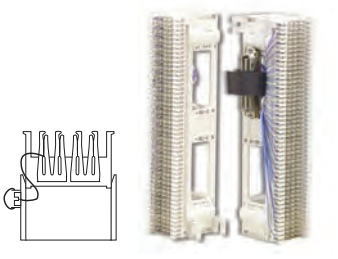
Add "B" for back mounted connector (not shown), add "M" for male connector. Please call for connector/block compatibility.

Note: all connector options not available for all blocks.

Pre-Wired 157 Series

157A. . . . . .

Pair Capacity: 25
One male 25-pair connector

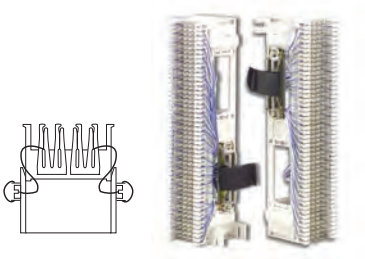


157B . . . . . .

Pair Capacity: 50 (unbridged)
Two male 25-pair connectors

157C . . . . . .

Pair Capacity: 50 (unbridged)
Two female 25-pair connectors



SIEMON

Modular Jack Blocks

S66M2-5T-68L . . . . . .

Six 8-position, 4-pair modular jacks, T568B

S66M2-5T-84L . . . . . .

Eight 6-position, 2-pair modular jacks, USOC

S66M2-5T-86L . . . . . .

Eight 6-position, 3-pair modular jacks, USOC

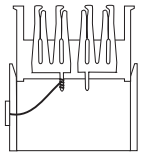
S66M2-5T-124LR. . . . . .

Twelve 6-position, 2-pair modular jacks, USOC

S66M2-5T-128LR. . . . . .

Twelve 8-position, 4-pair modular jacks, T568B

End view of blocks with modular jacks



Pre-Wired Modular Jack Blocks

S66M2-5T-68L-125R . . . . . .

Six 4-pair modular jacks, one 25-pair female connector, T568B

S66M2-5T-84L-125R . . . . . .

Eight 6-position, 2-pair modular jacks, one 25-pair female connector, USOC

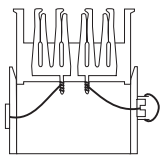
S66M2-5T-86L-125R . . . . . .

Eight 6-position, 3-pair modular jacks, one 25-pair female connector, USOC

S66M25T-124LR-125R . . . . . .

Twelve 6-position, 2-pair modular jacks, one 25-pair female connector, USOC

End view of blocks with modular jacks and a 25-pair connector



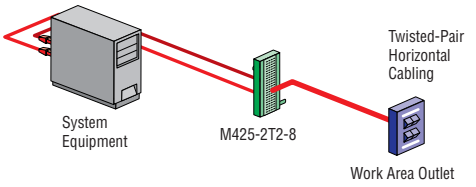
Modular Patch Blocks®

Our economical Modular Patch Blocks provide a convenient 24-port modular cross-connect field for equipment with 25-pair female connector input. They are excellent for use with voice, broadcast, or alarm systems. The blocks fit a standard 66M block footprint for backboard or rack mounting applications.

Part #	Description
SPB-V1	One, 25-pair connector wired to 24, 1-pair 6-position modular jacks, USOC. Black universal hold-down

S66M425-2T2-8

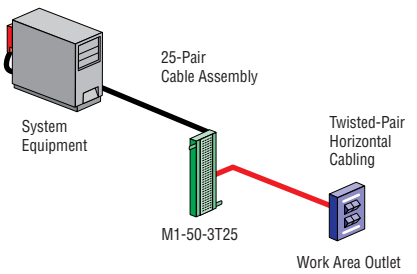
This block is pre-wired to eight 6-position, 2-pair modular cords, each 0.61m (2 ft) long, and it is also equipped with an S89E bracket, clear plastic cover, and designation labels. It is ideal for use with 2-pair key systems that have modular jacks. Two-pair station cables are punched down on the face of the block and the modular cords are plugged into the ports of the key service unit.



S66M1-50-3T25

Designed for use with key systems that have a 25-pair male connector, this block is also ideal for 10BASE-T hubs that have a 25-pair male connector. It provides a 0.91m (3 ft) long, high-performance 25-pair cable (female) that is category 3 compliant, punched down to Row D. Also comes with a protective cover and labels for 2- and 3-pair systems.

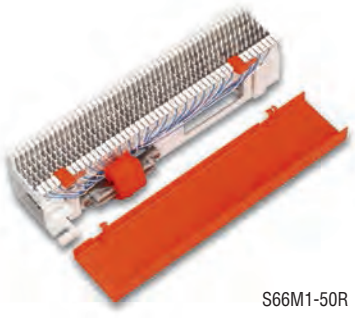
Add "M" for male connector.



Network Interface Block - S66M1-50R

The M1-50 block with one female 25-pair connector is oriented for bottom cable entry and pre-wired to Row D. Uses S89D bracket (included) and blue/white wiring between 25-pair connector and S66 quick clip. Orange hinged cover included.

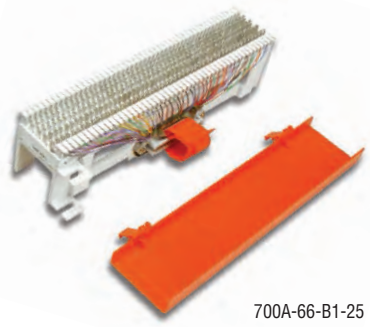
Add "M" for male connector.



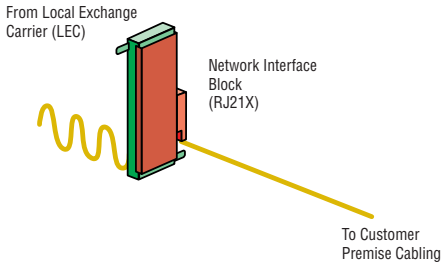
S66M1-50R

Network Interface Block - 700A-66-B1-25

Same as S66M1-50R except it uses S89B bracket and color-coded 25-pair cable between 25-pair connector and S66™ quick clips.

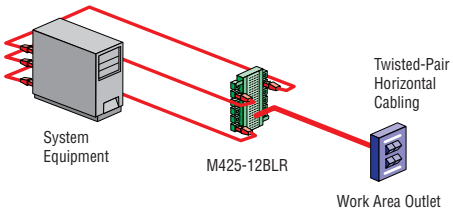


700A-66-B1-25



S66M425-128LR

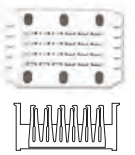
Designed for use with 4-pair key systems with modular jack connectors on the equipment. This block has twelve, 4-pair modular jacks wired to T568B specifications. It is also useful for 10BASE-T systems that use modular jack outputs. Jacks and the S66 block are mounted on a printed circuit board and are clearly labeled. The block is mounted on an S89E bracket and can be removed for cable management.



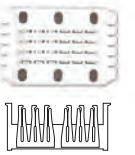
Field-Terminated B Series S66™ Blocks

6 x 4 Blocks

S66B4-2 . . . . . .
Pair Capacity: 2,
Quick Clip: 848



S66B3-4 . . . . . .
Pair Capacity: 4,
Quick Clip: 843



height: 48.3mm (1.9 in.),
width: 71.1mm (2.8 in.),
depth: 30.5mm (1.2 in.)

6 x 6 Blocks

S66B4-3 . . . . . .
Pair Capacity: 3,
Quick Clip: 848

S66B3-6 . . . . . .
Pair Capacity: 6,
Quick Clip: 843 Includes
CV-6 cover
(see page 11.13)

height: 61.0mm (2.4 in.),
width: 71.1mm (2.8 in.),
depth: 30.5mm (1.2 in.)

6 x 12 Blocks

S66B1-6 . . . . . .
Pair Capacity: 6,
Quick Clip: 848

S66B1-12 . . . . . .
Pair Capacity: 12,
Quick Clip: 843

height: 99.1mm (3.9 in.),
width: 71.1mm (2.8 in.),
depth: 30.5mm (1.2 in.)

6 x 50 Blocks

height: 340.0mm (13.4 in.),
width: 71.1mm (2.8 in.),
depth: 30.5mm (1.2 in.)

S66B4-25 . . . . . .
Pair Capacity: 25,
Quick Clip: 848

S66B3-50 . . . . . .
Pair Capacity: 50,
Quick Clip: 843

S66B3-75 . . . . . .
Pair Capacity: 75,
Quick Clip: 842

Note: Center-to-center vertical spacing between rows of clips is 6.4mm (0.25 in.).

SIEMON

Stand-Off Brackets for S66™ Blocks

All of our brackets are designed to create clean, efficient, and space-saving installations when used with S66 connecting blocks. They are open-ended to enable installers to lay in cable before snapping a block into place. 25-pair connectors and/or modular components can be mounted on the sides or back of the brackets. The brackets are molded from flame retardant thermoplastic.

Which bracket do you need?

It depends on the block you're ordering …

Block Type	Bracket
M4 X 50*	S89B or S89D
M4 X 25	S89E
M6 X 25	S89F
B6 X 50	SB6
All other B-type	SB8-10

**The M1-100 can only be used with the S89D bracket.*

The stand-off brackets (S89D shown) allow cables to be routed behind blocks and provide a means to route cables to the front of the block for termination.

S89D . . . . . .

Use with all M4 X 50 blocks. Can mount two 25-pair connectors on each side and four on the back

S89B . . . . . .

Use with M1-25 or M1-50 blocks. Can mount one 25-pair connector on each side

S89E . . . . . .

Use with all M4 X 25 blocks. Can mount one 25-pair connector on each side and two on the back

S89F. . . . . .

Use with all M6 X 25 blocks. Can mount one 25-pair connector on each side and three on the back

SB6 . . . . . .

Use with all B6 X 50 series blocks. Can mount three 25-pair connectors on each side and six on the back

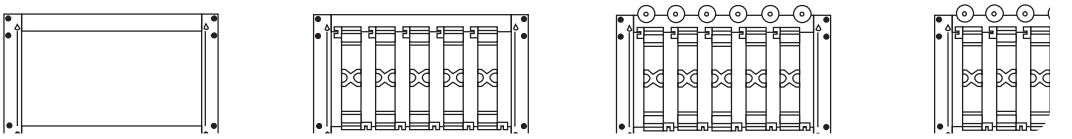
SB8-10 . . . . . .

Use for mounting all sizes of S66B blocks

Technical Tip!

When mounting blocks end-to-end using SB8-10 brackets, use three brackets for two blocks, four brackets for three blocks and so on.

Cross-Connect (CC) Frames

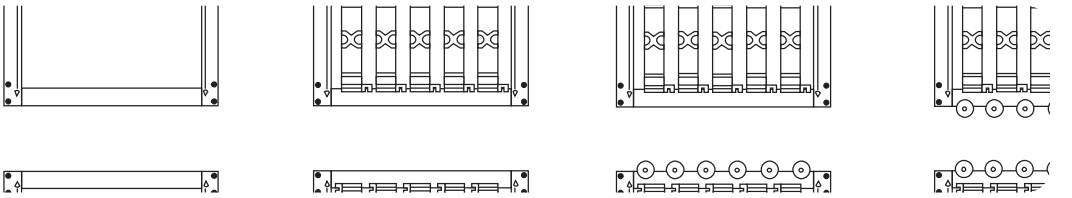


CC-2024-NS-NB. . . . . .
Full size frame (8 bracket capacity)

CC-2024-NS-DC. . . . . .
Full size frame, S89D Brackets (8)

CC-2024-TS-DC . . . . . .
Full size frame, S89D Brackets (8), top spool

CC-2024-TB-DC . . . . . .
Full size frame, S89D Brackets (8), top & bottom spools



CC-2014-NS-NB. . . . . .
Half size frame (4 bracket capacity)

CC-2014-NS-DC. . . . . .
Half size frame, S89D Brackets (4)

CC-2014-TS-DC. . . . . .
Half size frame, S89D Brackets (4), top spool

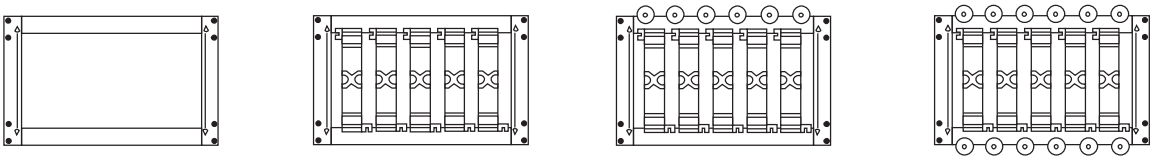
CC-2014-TB-DC. . . . . .
Half size frame, S89D Brackets (4), top & bottom spools

CC-2025-NS-NB. . . . . .
Full size frame (10 bracket capacity)

CC-2025-NS-DC. . . . . .
Full size frame, S89D Brackets (10)

CC-2025-TS-DC. . . . . .
Full size frame, S89D Brackets (10), top spool

CC-2025-TB-DC. . . . . .
Full size frame, S89D Brackets (10), top & bottom spools



CC-2015-NS-NB. . . . . .
Half size frame (5 bracket capacity)

CC-2015-NS-DC. . . . . .
Half size frame, S89D Brackets (5)

CC-2015-TS-DC. . . . . .
Half size frame, S89D Brackets (5), top spool

CC-2015-TB-DC. . . . . .
Half size frame, S89D Brackets (5), top & bottom spools

CC Frame Cable Manager Assemblies

For mid-to-large cross-connect installations these cable manager assemblies provide efficient and effective wire management on the CC Frames. They may be mounted either flush to a wall or on a relay rack.

Part #	Description	RMS
CC-2005-144	Cable manager with five S144 managers	2
CC-2005-145	Cable manager with five S145 managers	2
CC-2005-146	Cable manager with five S146 managers	2

Note: 1 RMS = 44.5mm (1.75 in.)

Metal Housings

Metal housings protect blocks and connections from damage when installed in "high risk" areas such as on a wall in a warehouse or factory. Our housings are manufactured from durable 18 gauge steel with a gray or beige finish. We provide two options — you can purchase housings with the blocks already assembled or just the housings to install your own blocks. These metal housing are not weatherproof and are recommended for indoor use only.

Part #	Description
MH-25-49	Housing for one 6 X 50 B block or one 4 X 50 M block, gray *height: 442mm (17.40 in.),* *width: 137mm (5.40 in.),* *depth: 45.7mm (1.80 in.)*
MH-50-49	Housing for two 6 X 50 B blocks or two 4 X 50 M blocks, gray *height: 442mm (17.40 in.),* *width: 229mm (9.03 in.),* *depth: 45.7mm (1.80 in.)*

Housing with Blocks

Part #	Description
S66M1-25MH-49	One S66M1-25 block in a MH-25 gray metal housing
S66M1-50MH-49	One S66M1-50 block in a MH-25 gray metal housing
S66M1-100MH-49	Two S66M1-50 blocks in a MH-50 gray metal housing
S66B4-25MH-49	One S66B4-25 block in a MH-25 gray metal housing
S66B4-50MH-49	Two S66B4-25 blocks in a MH-50 gray metal housing
S66B3-50MH-49	One S66B3-50 block in a MH-25 gray metal housing
S66B3-100MH-49	Two S66B3-50 blocks in a MH-50 gray metal housing

Snap-on Covers

These economical snap-on covers protect S66™ quick clips while providing a clear view of the wiring terminations. Made of flame-retardant plastic.

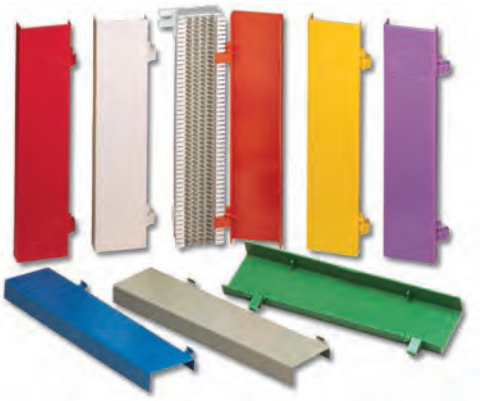
Part #	For Use With
MC4	M4 X 50

Part #	For Use With
MC425	M4 X 25

Part #	For Use With
BC612	B6 X 12

Part #	For Use With
BC6	B6 X 50

Lasting Hinge Covers



Use these lasting hinge covers and you'll save up to 90% of the cost of a colored backboard system — and with colored covers, the planner or installer can color-code individual blocks instead of working in groups of four or eight.

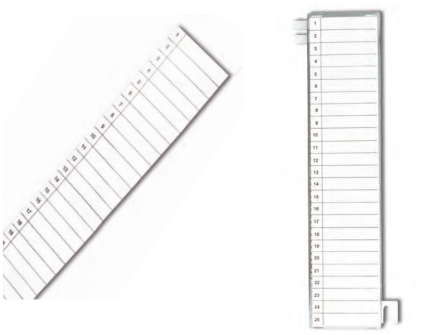
Made from flame-retardant thermoplastic, the covers protect the quick clips and provide a convenient surface for marking circuit designations.

Each cover is hinged and can be easily removed and replaced. There are two depths for the covers; the standard-profile allows for standard plug-on accessories, and the high-profile cover allows for larger accessories such as the Colored Bridging Clips.

Part #	Description
MC425LH-(X)	Cover for M425-type block
Use (X) to specify color: 6 = blue, 9 = orange	
MC4LH-(X)	Cover for M450-type block
Use (X) to specify color: 2 = white, 3 = red, 4 = gray, 5 = yellow, 6 = blue, 7 = green, 8 = violet, 9 = orange	
MC4LH-HP-9	High-profile orange cover for M450-type block

Labels

These adhesive backed, lined labels allow technicians to write and maintain circuit information on the MC4 plastic snap-on cover.



Part #	Description
MC4-LBL-25	Label for MC4 cover, numbered 1-25

Designation Strips

Designation strips mount quickly and easily on the fanning strips of both M and B series S66 blocks. The strips provide a convenient labeling surface for circuit identification.

For M Blocks

D10-10 . . . . . White lined designation strip

For B Blocks

D13-10 . . . . . White lined designation strip

Bridging Clips

These industry standard bridging clips are used to connect adjacent quick clips on S66™ blocks. The clips are easy to remove for isolating and testing incoming pairs from outgoing pairs and are reusable. Available in either tin-plated grade A copper alloy (voice and data) or stainless steel (voice only).

Tin-plated Copper Alloy Clips		Stainless Steel Clips*	
SA1-(XXXX)	2-position clip	SA1-SS-(XXXX)	2-position clip, stainless steel

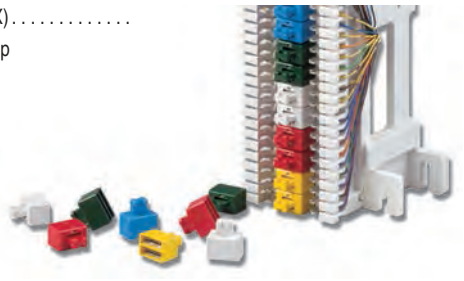
Use (XXXX) to specify quantity: 100 = 100/bag, 1000 = 1000/bag

**Not recommended for use with data applications.*

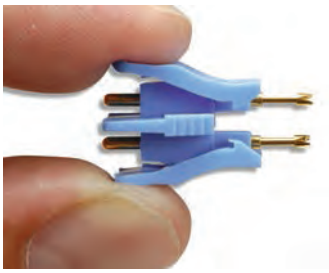
Colored Bridging Clips

Designed to fit the 66M type connecting block, each of these plug-on adapters contain two standard SA-1 bridging clips, so they actually bridge a complete pair when installed, not just a single wire. The plastic housings are color-coded and serve to protect the quick clip. Technicians can test lines with the clips in place by using our TPE in-line test probe.

SMBC-2-(X) . . . . . .
Bridging clip



TPE . . . . . .
Test probe/extractor



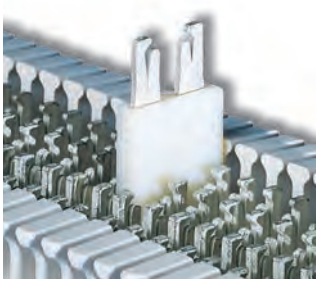
Use (X) to specify color: 2 = white, 3 = red, 5 = yellow, 6 = blue, 7 = green, 8 = violet

Special Service Markers

These red plastic markers slide over S66 quick clips and terminated wires and are ideal for marking special circuits on blocks.

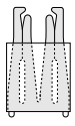
Part #	Description
S-857-916	2-position red marker

Capacity Expanding Adapters

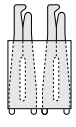


These adapters create additional capacity on S66 blocks by plugging directly onto the S66 quick clips — with or without wires punched down. The adapters come with either one or two additional quick clips. Use a high-profile lasting hinge cover to fit over the adapters . The adapters are top and bottom stackable, but not side-by-side stackable. Not designed for use on category 5e S66M1-50 blocks.

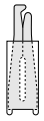
SA2 . . . . . .
Adapter with 1 double quick clip



SA2-1. . . . . .
Adapter with 2 single quick clips

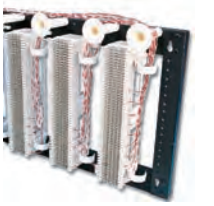


SA3 . . . . . .
Adapter with 1 single quick clip



Organizer Rings

These plastic rings snap directly onto the side of an S89-type mounting bracket to organize, position, and retain cable and cross-connect wire. They also work well as a patch cord manager when used with our Modular Patch Blocks.



Part #	Description
S606P	Organizer ring

Wire Distribution Spools

All of these high-impact plastic spools are used to neatly guide and retain cable or jumper wires. Cabling is held in place by the spool's rim to allow easy access for changes or modifications. The S20A and S20B are white and can be used with either a main cross-connect frame or backboard. The S20C is black to match our CC frames and modular patch panels, and screws directly into the mounting holes of a standard 19 or 23 inch relay rack.

S20A . . . . . .
White spool without screw
height: 42.7mm (1.68 in.),
width: 42.7mm (1.68 in.),
depth: 74.9mm (2.95 in.)

S20B . . . . . .
White spool with captive (#10) wood screw
height: 42.7mm (1.68 in.),
width: 42.7mm (1.68 in.),
depth: 74.9mm (2.95 in.)

S20C . . . . . .
Black spool with captive (#12-24) machine screw
height: 42.7mm (1.68 in.),
width: 42.7mm (1.68 in.),
depth: 74.9mm (2.95 in.)

Technical Tip!
We recommend a (#10) wood screw for wall mount applications and a (#12-24) machine screw for rack mount applications.

Tap® Adapters

The TAP is a flexible modular connecting adapter designed to access 66M connecting blocks. When installed, the TAP permits customer administration of moves and changes using modular cords, and provides test access. The TAP is designed in 1-, 2-, 3-, and 4-pair configurations and can be end-stacked (except TAP-2) or mounted side by side on a 66M block.

Part #	Description
TAP-2	1-pair, 6-position adapter, USOC
TAP-4	2-pair, 6-position adapter, USOC
TAP-6	3-pair, 6-position adapter, USOC
TAP-8	4-pair, 8-position adapter, T568B

Current Protection Module

Our CPM-2PLUS® prevents cable and equipment damage due to "sneak currents" (continuous foreign current levels exceeding 0.350 amperes). Sneak currents are not high enough to trigger overvoltage protectors but can pose fire hazards and cause damage to sensitive electronic equipment. They may be caused by direct or indirect contact with power lines, a low impedance connection to earth ground, or by a short circuit somewhere on the line.

Each Current Protection Module contains two fuses in a clear plastic carrier. They are installed across two adjacent pairs of 66 quick clips, establishing solid contact with the clips. When the module is activated, the fuse opens, cutting off the flow of excessive current, preventing fire risk and shock hazards on data and voice transmission lines.

The modules are side- and end-stackable, allowing up to 50-pair protection on a standard M1-100 block or 25-pair protection in a standard M1-50 block. Red plastic caps are available to designate priority circuits.

Part #	Description
CPM-2PLUS	Current protection module with two replaceable fuses

LightHouse
Advanced Fiber Cabling Solutions

Siemon's LightHouse® line of high-performance fiber optic cable and connectivity delivers a comprehensive solution set to meet nearly any network infrastructure need:

- **A complete line of rapidly-deployed, high-density Plug and Play solutions supporting up to 40 and 100Gb/s speeds - Including the innovative LightStack™ ultra high-density Plug and Play system**
- **Comprehensive family of fiber enclosures, supporting up to 1152 fiber ports per enclosure**
- **High-performance, factory tested jumpers and pigtails including Siemon's innovative push-pull LC BladePatch®**
- **Field-terminated connectivity — multiple LC, SC and ST configurations**
- **Preterminated and tested trunking cable assemblies available in custom lengths, fiber counts and configurations**
- **Fiber Cable — Multimode OM1 62.5/125, OM2, OM3 and OM4 50/125, and Singlemode OS1/OS2**
- **End-to-end line of fusion splice solutions**

Section Contents

LightStack™

Siemon's Ultra High Density Fiber Plug & Play System

The Perfect Combination...

Siemon's LightStack system combines superior performance and ultra high density with unmatched accessibility - all packaged in a sleek, modern enclosure that manages fiber cabling like never before.

LightStack was specifically designed for advanced data centers, network and storage area environments, while providing a seamless migration to 40 and 100 gigabit applications.

Ultra High Density
Elegantly designed enclosures facilitate up to 144 fibers (LC) and 864 fibers (MTP) within 1U or 576 (LC) and 3456 (MTP) fibers within 4U

Superior Jumper Management
Unlatch and swing open clips for complete access to any jumper with ample capacity to route all jumpers in one direction

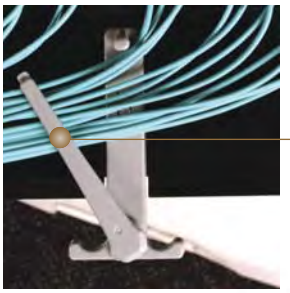
Unmatched Accessibility
Divider is there when you need it and gone when you don't. Slides inward for complete access to all connectivity at the rear of stacked enclosures

Low Loss Connectivity
Highest performing Plug and Play Modules and Adapters can be single-handedly installed and removed from the front or rear

To learn more about LightStack including its innovative labeling system and full range of preterminated trunks visit: www.siemon.com/lightstack

LightStack™ Enclosures

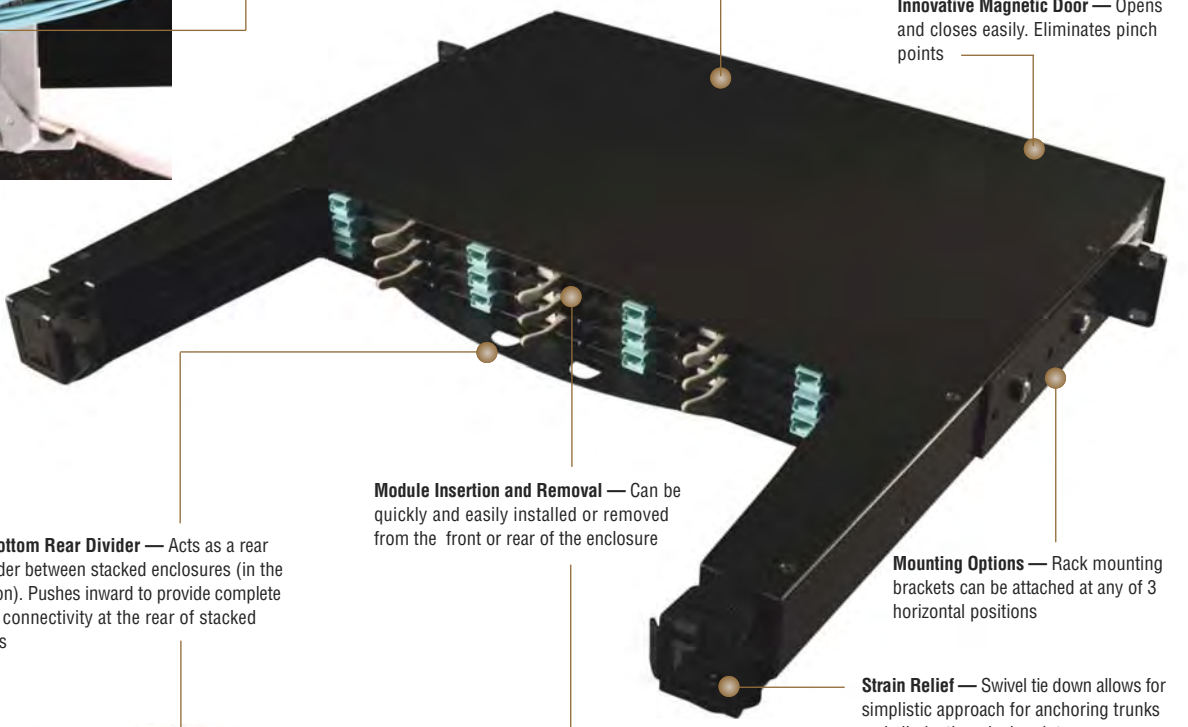
Siemon's LightStack ultra high density fiber Plug and Play enclosure offers superior density, port access and cable management in a sleek, modern enclosure that easily supports today's advanced data center and storage area network environments.



Cable Management Clips — Unlatch and swing open for full access to any jumper

Innovative Labeling Solution — Drop-down label strip holder for high visibility

Innovative Magnetic Door — Opens and closes easily. Eliminates pinch points

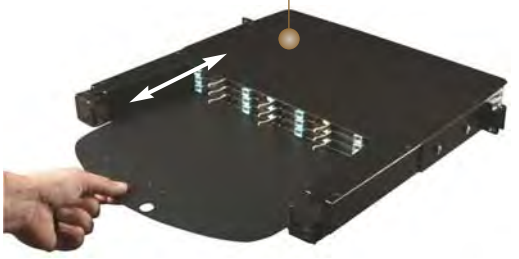


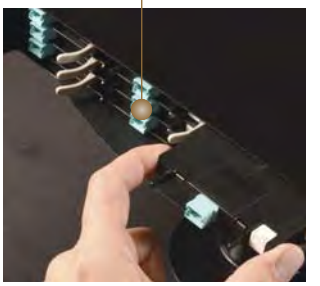
Module Insertion and Removal — Can be quickly and easily installed or removed from the front or rear of the enclosure

Sliding Bottom Rear Divider — Acts as a rear cable divider between stacked enclosures (in the out position). Pushes inward to provide complete access to connectivity at the rear of stacked enclosures

Mounting Options — Rack mounting brackets can be attached at any of 3 horizontal positions

Strain Relief — Swivel tie down allows for simplistic approach for anchoring trunks and eliminating pinch points





Ordering Information:

Part #	Description
LS-1U-01	1U Enclosure, 144 LC fibers or 864 MTP fibers, mounts in 19 in. racks or cabinets
LS-4U-01	4U Enclosure, up to 576 LC fibers or 3456 MTP fibers, mounts in 19 in. racks or cabinets

1U Enclosure

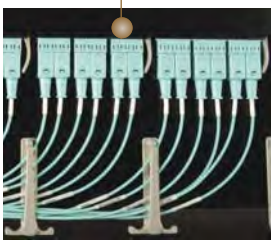
4U Enclosure

LightStack™ Modules

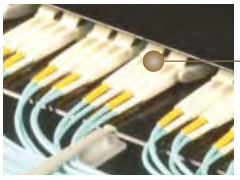
LightStack LC-to-MTP Low Loss Plug and Play modules deliver a quick and efficient way to deploy high-performance fiber cabling in a low-profile, high density package. Up to 12 of these ultra-slim modules can be installed in a single 1U LightStack enclosure, seamlessly providing up to 144 easily-managed LC fiber ports. Available in OM4 Multimode and Singlemode configurations, these modules offer industry leading loss performance of just 0.35dB.

Ultra Slim Design — LightStack modules have an ultra slim design to achieve maximum fiber density

High Fiber Count — Up to 12 fiber count per module

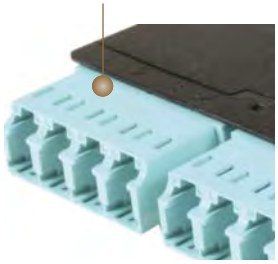


Standard Interfaces — LC to MTP interface. Available in OM4 and SM



Low Loss Options — Low loss performance (0.35dB per Multimode module)

Multiple Adapter Configurations — Aqua LC and MTP adapters for OM4; Blue LC adapters and black MTP adapters for SM



Rear Module Handles — Handles in the rear of module help facilitate removal from the back of the enclosure

Ordering Information:

Part #	Description
LS-12-LC5V-01	Module, 12 LC-to-MTP fibers, OM4, XGLO 550, Aqua LC and MTP adapters
LS-12-LCSM-01	Module, 12 LC-to-MTP fibers, Singlemode, Blue LC adapters, Black MTP adapters

PERFORMANCE SPECIFICATIONS

	Insertion Loss (dB)	Return Loss (dB)	Insertion Loss (dB)	Return Loss (dB)
	Multimode (850/1300nm)		Singlemode (1310/1550nm)	
MTP	0.20	20	0.60	65
LC	0.15	30	0.40	60
MTP to LC	0.35	20	1.00	60

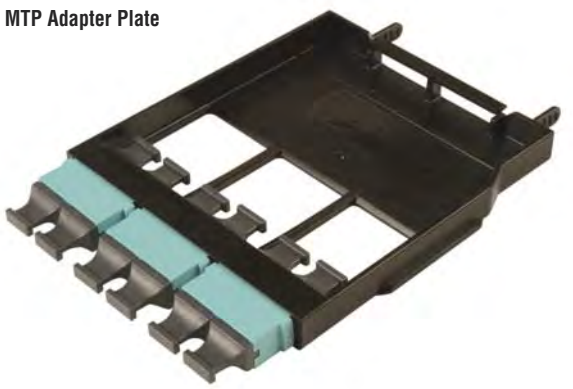
Reference Siemon's White Paper titled: "The Need for Low-Loss Multifibre Connectivity in Today's Data Center" for information and guidance on design options, channel models and distances for 10, 40, 100Gb Ethernet and Fibre Channel applications.

Insertion/Return loss testing is performed at 850nm/1300nm for MM and 1310/1550nm for SM

LightStack™ Adapter Plates

Fully ready to support 40 and 100 gigabit applications, LightStack low-loss 0.2dB MTP pass-through adapters are available in 2, 4 and 6-port designs supporting up to 72 fibers per adapter and are offered in both aligned and opposed key orientation to accommodate all polarity methods. In addition, LightStack also offers industry exclusive 12-fiber LC pass-through adapter plates for current 10 gigabit Ethernet or Fibre Channel SAN applications.

MTP Adapter Plate



LightStack MTP Adapter Plates

- Ultra slim design to achieve maximum fiber density
- Up to 72 fiber count
- Handles in the rear of module helps facilitate removal from the back of the enclosure

Ordering Information:

LS-MP(X)-01(X)(XX)

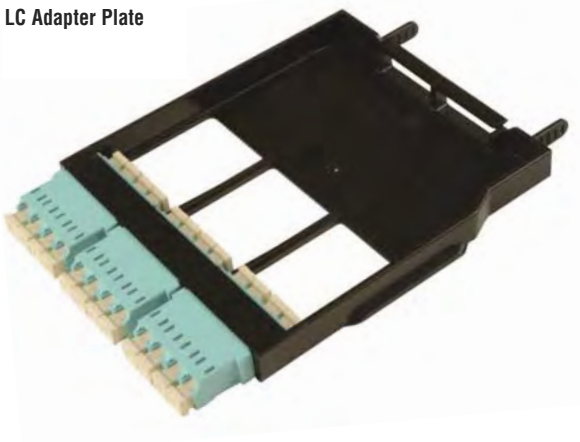
MTP Port Count
2 = 2 MTP Ports
4 = 4 MTP Ports
6 = 6 MTP Ports

Adapter Color
AQ = Aqua**
BK = Black**
GR = Gray*

Key Orientation
B = Aligned (key up to key up)
C = Opposed (key up to key down)

* Key Orientation B Only
** Key Orientation C Only

LC Adapter Plate



LightStack LC Adapter Plates

- Used in conjunction with LC BladePatch® RazorCore™ trunks for rear connections only
- Available in beige and aqua (MM) and blue (SM)
- 12 LC fibers

Ordering Information:

LS-LC12-01C-(XX)

Adapter Color
AQ = Aqua Multimode
BG = Beige Multimode
BL = Blue Singlemode

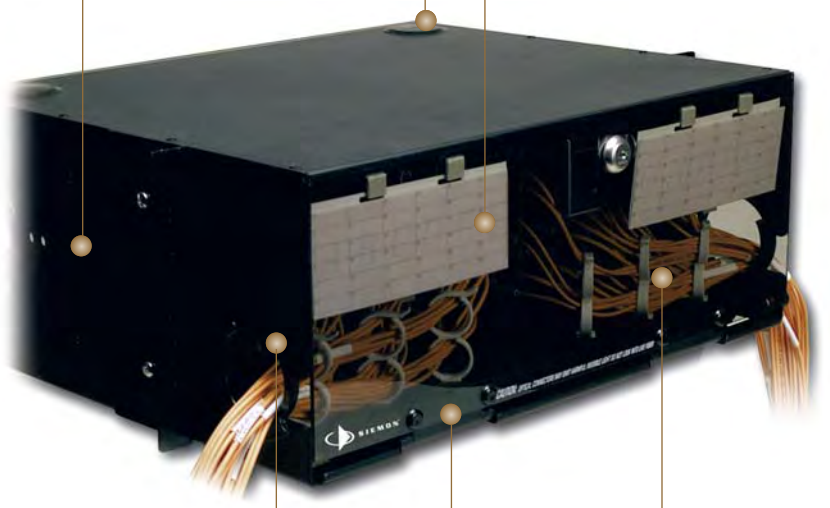
Rack Mount Interconnect Center (RIC3)

The RIC3 provides the best overall value for exceptional fiber management. The RIC3 enclosure offers superior fiber density without sacrificing fiber protection and accessibility. Features include a fully removable tray, improved labeling, standard front and rear door locks, and single-finger door latches. With superior cable management, port identification, fiber accessibility and security, the RIC3 is the best way to protect mission critical fiber connections.

Superior Design — Top and bottom access holes located at the rear of the enclosure allow fibers to be routed between tandem enclosures without having to run fibers outside of the enclosure

Complete Access — Management tray has a positive stop in both front and rear working positions providing complete access for moving, adding, changing, or cleaning of fiber connections

Enhanced Labeling — Label virtually any port configuration with our hinged labels. The labels hang on the front door for improved visibility. When the door is opened, labels flip down allowing ready viewing of the label and corresponding ports



Rotating Grommets — Patented rotating grommets facilitate loading and retention of jumpers and fiber while minimizing microbending stress when using the sliding tray

Quick-Release Hinges — Spring loaded quick-release hinges enable easy opening and removal of front and rear doors for complete access to fiber connections

Maximum Capacity — The RIC3 enables a maximum amount of fibers to be patched or patched and spliced in a 2, 3, and 4U enclosure without compromising accessibility. This allows more efficient utilization of rack space

Removable Tray

The RIC3 cable management tray is fixed in place, but can be removed from the front or rear of the enclosure and moved to a work table for greater convenience.

Latching and Locking

The RIC3 features a single-finger latch on both front and rear doors. Front and rear doors include a lock for added security.

Quick-Pack® Adapter Plates

Siemon Quick-Pack adapter plates can be inserted or removed with a single-finger latch for quick and easy access to fiber connections.

Rack Mount Interconnect Center (RIC3)

Siemon RIC3 enclosures are designed for enhanced fiber management and ease of use. They are compatible with an array of Siemon fiber Quick-Pack® and MTP adapter plates for your choice of fiber adapters and port density.

Part # **Description**

RIC3-24-01 . . . . . .24- to 96-fiber (384 fibers with MTP adapter plates) Rack Mount Interconnect Center, accepts (4) Quick-Pack adapter plates, 2U, black
height: 86.6mm (3.4 in.)
width: 432mm (17 in.)
depth: 380mm (15 in.)

Part # **Description**

RIC3-36-01 . . . . . .36- to 144-fiber (up to 576 fibers with MTP adapter plates) Rack Mount Interconnect Center, accepts (6) Quick-Pack adapter plates, 2U, black
height: 86.6mm (3.4 in.)
width: 432mm (17 in.)
depth: 380mm (15 in.)

RIC3-48-01 . . . . . .48- to 192-fiber (up to 768 fibers with MTP adapter plates) Rack Mount Interconnect Center, accepts (8) Quick-Pack adapter plates, 3U, black
height: 133mm (5.23 in.)
width: 432mm (17 in.)
depth: 380mm (15 in.)

RIC3-72-01 . . . . . .72- to 288-fiber (up to 1152 fibers with MTP adapter plates) Rack Mount Interconnect Center, accepts (12) Quick-Pack adapter plates, 4U, black
height: 178mm (7 in.)
width: 432mm (17 in.)
depth: 380mm (15 in.)

Note: 1U = 44.5mm

Note: All RIC products include laser-printable labels, cable ties, rack-mounting hardware, and pre-installed fiber management clips.*

*Visit www.siemon.com for labeling software.

MAXIMUM RIC3 FIBER CAPACITY

# Fibers per Quick-Pack	Adapter Options	RIC24	RIC36	RIC48	RIC72
6	ST, SC	24	36	48	72
8	ST, SC	32	48	64	96
12	ST, SC, LC	48	72	96	144
16	LC	64	96	128	192
24	LC	96	144	192	288
96	MTP	384	567	768	1152

MAXIMUM SPLICING CAPACITY

Splice Type	RIC24	RIC36	RIC48	RIC72
Fusion	96	96	96	144

Wall Mount Interconnect Center (SWIC3)

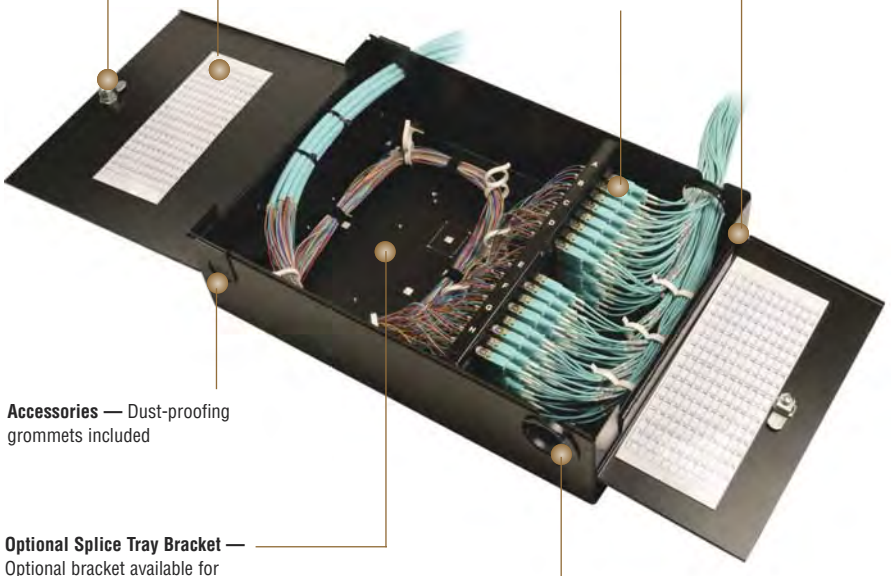
The Wall Mount Interconnect Center (SWIC3) is a cost-effective fiber enclosure designed to manage and protect up to 192 fibers using SC, ST or LC adapter plates and up to 768 with MTP adapter plates. The low-profile, compact design makes it ideal for telecommunications rooms or other installation areas where wall space is a premium. The adapter mounting method is based on Siemon's Quick-Pack® adapter plates also used in our family of Rack Mount Interconnect Centers (RIC3).

Door Options — Doors on enclosure and jumper guard can be ordered with independent key lock or latching options

Convenient Labeling — Convenient labeling system includes removable clear label holders for storing and protecting fiber documentation on each door

Fiber Jumper Guard — Integrated hinged fiber guard provides independent protection and management for fiber jumpers

Available with Quick-Pack Adapter Plates — Quick-Pack adapter plates are available with SC, ST, LC or MTP adapters



Accessories — Dust-proofing grommets included

Optional Splice Tray Bracket — Optional bracket available for mounting multiple splice trays (not shown)

Patented rotating grommets — Facilitate loading and retention of jumpers for extended SWIC only (SWIC3G-E)

SWIC3G-E

Easy Access

Doors on enclosures and jumper guard swing open a full 180° to provide complete front and side access.

Dual-Level Fiber Managers

Incorporates two independent levels of storage to enable the fiber to be routed at levels that correspond to the adapters.

Snap-In Adapter Plates

Utilizes same Quick-Pack adapter plates as RIC3 enclosures with integrated latches for snap-in installation and single-finger removal.

Ordering Information:

Part # **Description**

SWIC3-M-01* .....Mini Wall Mount Interconnect Center, black, accepts 2 Quick-Pack® adapter plates
height: 218.4mm (8.6 in.)
width: 185.4mm (7.3 in.)
depth: 82.6mm (3.25 in.)

Use (X) to specify type of latch door: A = key lock, C = thumb-turn latch
**Does not accept splice trays*

SWIC3-(X)-01 .....Wall Mount Interconnect Center, black. Includes dual-level fiber managers, port designation labels and removable pocket, dust-proofing grommets, strain relief hardware, cable ties, and mounting hardware, accepts 4 Quick-Pack adapter plates
height: 311mm (12.25 in.)
width: 311mm (12.25 in.)
depth: 82.6mm (3.25 in.)

SWIC3G-(X)(X)-01 .....Wall Mount Interconnect Center with integrated jumper guard, black. Includes dual-level fiber managers, port designation labels and removable pocket, stick-on port designation labels for guard, dust-proofing grommets, strain relief hardware, cable ties, and mounting hardware, accepts 4 Quick-Pack adapter plates
height: 311mm (12.25 in.)
width: 406mm (16 in.)
depth: 82.6mm (3.25 in.)

SWIC3G-E-(X)(X)-(XX) .....Wall Mount Interconnect Center with integrated jumper guard, black. Includes dual-level fibre managers, port designation labels and stick on holder for front and rear dust-proofing grommets, strain relief hardware, cable ties and mounting hardware,
accepts 8 Quick-Pack adapter plates
(XX) = Color: 01 = Black, 80 = Ivory
height: 355mm (14.0 in.)
width: 595mm (23.5 in.)
depth: 165mm (6.5 in.)

Use 1st (X) to specify type of lock on the enclosure (left) door:
A = key lock, C = thumb-turn latch
Use 2nd (X) to specify type of lock on the guard (right) door:
A = key lock, C = thumb-turn latch

MAXIMUM SWIC3 FIBER CAPACITY

# Fibers per Quick-Pack	Adapter Options	SWIC3-M	SWIC3	SWIC3G-E
6	ST, SC	12	24	48
8	ST, SC	16	32	64
12	ST, SC	24	48	96
16	LC	32	64	128
24	LC	48	96	192
96	MTP	192	384	768

MAXIMUM SPLICING CAPACITY

Splice Type	SWIC3	SWIC3G-E
Fusion	48	96

Accessories

Fiber Splice Tray Brackets

Part # **Description**

TRAY-B-01 .....Bracket for mounting splice trays to SWIC3 base

TRAY-EB-01 .....Bracket for mounting splice trays to SWIC3G-E base

Fiber Splice Trays

Part # **Description**

TRAY-M-3.....Mini splice tray for up to 12 fusion splices with sleeve protection

Fiber Adapter Bracket

Part # **Description**

SWIC3G-E-BRKT .....Bracket holds up to 4 FSC series Siemon fiber splitter cassettes

MAXIMUM SWIC3G-E FIBER SPLITTER CAPACITY

Type/Ratio	# Cassettes	Output		Input	
SC	**# Cassettes**	**# RIC-F-SC(X)8-01**	**# Ports**	**# MX-F1-SC(X)-(XX)**	**# Ports**
1x8	4	4	32	4	4
1x16	4	8	64	4	4
Dual 1x16	3	6	48	6	6
1x32	2	8	64	2	2
LC	**# Cassettes**	**# RIC-F-LC(X)16-01**	**# Ports**	**# MX-F1-LC(X)-(XX)**	**# Ports**
1x8	4	2	32	4	4
1x16	4	4	64	4	4
Dual 1x16	3	3	48	6	6
1x32	4	8	128	4	4
MTP	**# Cassettes**	**# RIC-F-MP48-01**	**# Ports**	**# MX-F1-MP-(XX)**	**# Ports**
1x32	4	4	128	4	4

Fiber Connect Panel (FCP3)

Siemon's popular Fiber Connect Panels (FCP3-DWR and FCP3-RACK) economically connect, protect, and manage up to 72 fibers in 1U (up to 288 fibers with MTP to MTP adapters). It accepts Siemon's Quick-Pack® adapter plates with patented single-finger access. The FCP3-DWR makes access to the connections easy via a fixed tray that can be released and slid out of the front or rear of the enclosure.

High Density

FCP3 enclosures accommodate up to 72 fibers (288 with MTP adapter plates) in only 1U on a 19 inch rack.

Sliding Tray

The FCP3-DWR (drawer version) features a tray that slides out from the front or rear, providing easy access to fiber connections. The entire tray can be removed and placed on a work table for more convenience.

MAXIMUM FCP3 FIBER CAPACITY

# Fibers per Quick-Pack	Adapter Options	FCP3
6	ST, SC	18
8	ST, SC	24
12	ST, SC, LC	36
16	LC	48
24	LC	72
96	MTP	288

MAXIMUM SPLICING CAPACITY

Splice Type	FCP3
Fusion	72

Fiber Connect Panel (FCP3)

Part #	Description
FCP3-DWR	6- to 72-fiber (up to 288 fibers with MTP adapter plates) Fiber Connect Panel with sliding tray, accepts (3) Quick-Pack® adapter plates, 1U, black. Includes mounting brackets, housing/tray, fiber managers, grommets, label holders, and labels *height: 43.2mm (1.7 in.)* *width: 482.6mm (19 in.)* *depth: 355.6mm (14 in.)*
FCP3-RACK	6- to 72-fiber (up to 288 fibers with MTP adapter plates) Fiber Connect Panel with fixed tray, accepts (3) Quick-Pack adapter plates, 1U, black. Includes mounting brackets, housing/cover, fiber managers and grommet *height: 43.2mm (1.7 in.)* *width: 482.6mm (19 in.)* *depth: 241.3mm (9.5 in.)*

Note: 1U = 44.5 mm (1.75 in.)

FCP3-DWR

FCP3-RACK

Compression Fittings

Compression fittings are utilized as an enhanced method for securing cables to FCP3 fiber enclosures. Acme threads on the body prevent skipping, allowing for faster installations of lock-nuts.

Part #	Description
CF-(XX)	Compression fitting

Use (XX) to specify fiber diameter:
40 = 5.8 – 13.9mm, (0.5 in.)
51 = 11.4 – 18.0mm (0.7 in.)
60 = 15.0 - 25.4mm (1 in.)

Splice Trays (XGLO® and LightSystem®)

These aluminium trays come with a clear, snap-on polycarbonate cover and can be stacked for high-density applications. The standard tray holds up to 24 splices. The mini-tray for use with the SWIC3, accommodates up to 12 splices.

Part #	Description
TRAY-3	Standard splice tray for up to 24 fusion splices with sleeve protection. For use with RIC3 and FCP3 fiber enclosures
TRAY-M-3	Mini splice tray for up to 12 fusion splices with sleeve protection.

TRAY-3

TRAY-M-3

Standard Tray Dimensions
height: 103mm (4 in.)
width: 298mm (11.7)
depth: 8.13mm (0.32 in.)

Mini Tray Dimensions
height: 103mm (4 in.)
width: 179mm (7.04 in.)
depth: 8.13mm (0.32 in.)

Heat Shrink Sleeves

Heat shrink sleeves provide a safe and efficient method for protecting fusion splices on either 250 or 900 micron coated fibers. Heat shrink sleeves are threaded on to fibers prior to fusion splicing and then positioned directly over splice and heated via an oven or heat gun.*

Part #	Description
HT-40	40mm (1.57 in.) heat shrink sleeve
HT-60	60mm (2.36 in.) heat shrink sleeve

**Heating times may vary depending on heat source.*

Quick-Pack® Adapter Plates

Siemon's patented Quick-Pack adapter plates feature an integrated latch, which provides single-finger access to fiber even in fully populated enclosures.

XGLO® & LightSystem®

RIC-F-SC6-01
3 duplex SC adapters
(6 fibers)

RIC-F-SC6Q-01
3 duplex SC adapters
(6 fibers), aqua adapters
(not shown)

RIC-F-SC8-01
4 duplex SC adapters
(8 fibers)

RIC-F-SC8Q-01
4 duplex SC adapters
(8 fibers), aqua adapters
(not shown)

RIC-F-SC12-01
6 duplex SC adapters
(12 fibers)

RIC-F-SC12Q-01
6 duplex SC adapters
(12 fibers), aqua adapters
(not shown)

RIC-F-LC12-01C
6 duplex LC adapters
(12 fibers), beige adapters
(not shown)

RIC-F-LCU12-01C
6 duplex LC adapters
(12 fibres), blue adapters
(not shown)

RIC-F-LCQ12-01C
6 duplex LC adapters
(12 fibers), aqua adapters

RIC-F-LC16-01C
4 quad LC adapters
(16 fibers), beige adapters
(not shown)

RIC-F-LCU16-01C
4 quad LC adapters
(16 fibres), blue adapters
(not shown)

RIC-F-LCQ16-01C
4 quad LC adapters
(16 fibers), aqua adapters

RIC-F-LC24-01C
6 quad LC adapters
(24 fibers), beige adapters
(not shown)

RIC-F-LCU24-01C
6 quad LC adapters
(24 fibres), blue adapters
(not shown)

RIC-F-LCQ24-01C
6 quad LC adapters
(24 fibers), aqua adapters

LightSystem®

RIC-F-SA6-01
3 duplex ST adapters
(6 fibers)

RIC-F-SA8-01
4 duplex ST adapters
(8 fibers)

RIC-F-SA12-01
6 duplex ST adapters
(12 fibers)
Only recommended for push-pull ST connectors due to limited access

RIC-F-BLNK-01
Blank adapter plate

Each adapter plate with icon pockets includes red, blue, black, and clear icons with paper labels. All SC and ST adapters are "universal" to support Multimode and Singlemode.

Fiber Management Tray (FMT)

The Siemon Fiber Management Tray (FMT) is an economical solution for managing fiber cable slack and splice trays. The management tray has been designed to easily retrofit any standard 1 RMS CT® or MAX® Series Patch Panel and can organize up to 32 fibers. The tray is only 254mm (10 in.) deep, allowing it to readily fit into cabinet enclosures. Each enclosure can accept up to two fiber splice trays.

Part #	Description	RMS
CT-FMT-16	Fiber tray for 1 RMS CT or MAX Panel	1

Note: 1 RMS = 44.5mm (1.75 in.)

Plug and Play Modules and Adapter Plates

Siemon Plug and Play Modules

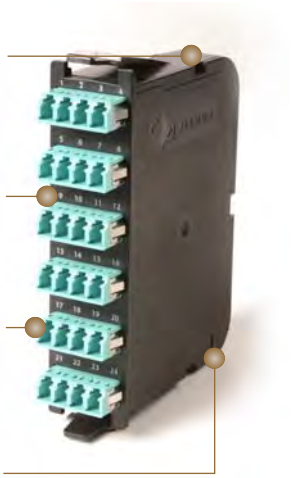
Siemon LC to MTP® and SC to MTP Plug and Play modules provide a quick and efficient way to deploy up to 24 LC or 12 SC fibers in a single module. These factory terminated and tested ports are protected within the housing for reliable high performance and simply connected via 12-strand MTP ports. Modules are available in Multimode (62.5/125, standard 50/125 and XGLO® laser optimized 50/125 OM3/OM4) and Singlemode cable.

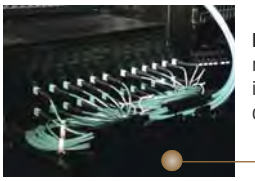
Compact Housing — Reduces mounting depth for greater cable management space within enclosures

Optimized Adapter Spacing — Enables easy finger access to fiber jumper connector latches in high density patching environments

Durable and Lightweight — High-impact molded plastic body with single-finger access

Multimode and Singlemode Modules — Utilize zirconia ceramic sleeves for optimum performance





Recessed Base — Allows cable to be fit under the modules for added cable management space when installed in the horizontal orientation (i.e. within FCP drawer)

Compatible with Existing Siemon Enclosures — Fits within RIC, FCP and SWIC Siemon fiber enclosures and VersaPOD® vertical patch panels

PP2-12-(XX)(X)-01(X) . . . . . 12 Fiber P&P Module with 1 MTP port, black

Interface
LC = LC
SC = SC

Configuration
L = Low Loss
Blank = Standard Loss

Fiber Type
6 = OM1, 62.5/125 Multimode beige LC adapters
5 = OM2, 50/125 Multimode beige LC adapters
5L = OM3, XGLO 300 50/125 Multimode aqua adapters
5V = OM4, XGLO 550 50/125 Multimode aqua adapters
SM = OS1/OS2, Singlemode blue LC adapters

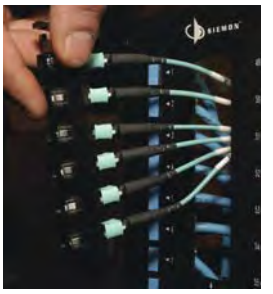
PP2-24-LC(X)-01(X) . . . . . 24 Fiber LC P&P Module with 2 MTP ports, black

Configuration
L = Low Loss
Blank = Standard Loss

Fiber Type
6 = OM1, 62.5/125 Multimode beige LC adapters
5 = OM2, 50/125 Multimode beige LC adapters
5L = OM3, XGLO 300 50/125 Multimode aqua adapters
5V = OM4, XGLO 550 50/125 Multimode aqua adapters
SM = OS1/OS2, Singlemode blue LC adapters

MTP to MTP Adapter Plates

Siemon MTP Adapter Plates offer a user friendly "pass-through" option for MTP connectors. Fitting within Siemon's fiber enclosures and VersaPOD vertical patch panels, these plates secure MTP connectors, allowing efficient implementation of MTP to MTP reels and extenders as well as MTP to LC Trunks for direct equipment and patching connections.



High Density
Supports up to 96 fibers per adapter plate - providing up to 1152 fibers in 4U

Flexible Configurations
1, 2, 4, 6 and 8 port versions available, supporting both Singlemode and Multimode

40 Gb/s and 100 Gb/s Ready
Enables simple upgrade path to future 40 Gb/s and 100 Gb/s applications over Multimode 50/125 laser optimized fiber

Popular RIC Adapter Footprint
Fits within RIC, FCP and SWIC Siemon fiber enclosures and VersaPOD vertical patch panels

RIC-F-MP(XX)-01-(X) . . . . . MTP Adapter Plate, black

Fiber Count
12 = 12 (1 MTP adapter)
24 = 24 (2 MTP adapters)
48 = 48 (4 MTP adapters)
72 = 72 (6 MTP adapters)
96 = 96 (8 MTP adapters)

Key Orientation
Blank = Opposed (key up to key down) black adapters
Q = Opposed (key up to key down) aqua adapters
B = Aligned (key up to key down) gray adapters

Copper/Fiber Combo Panel

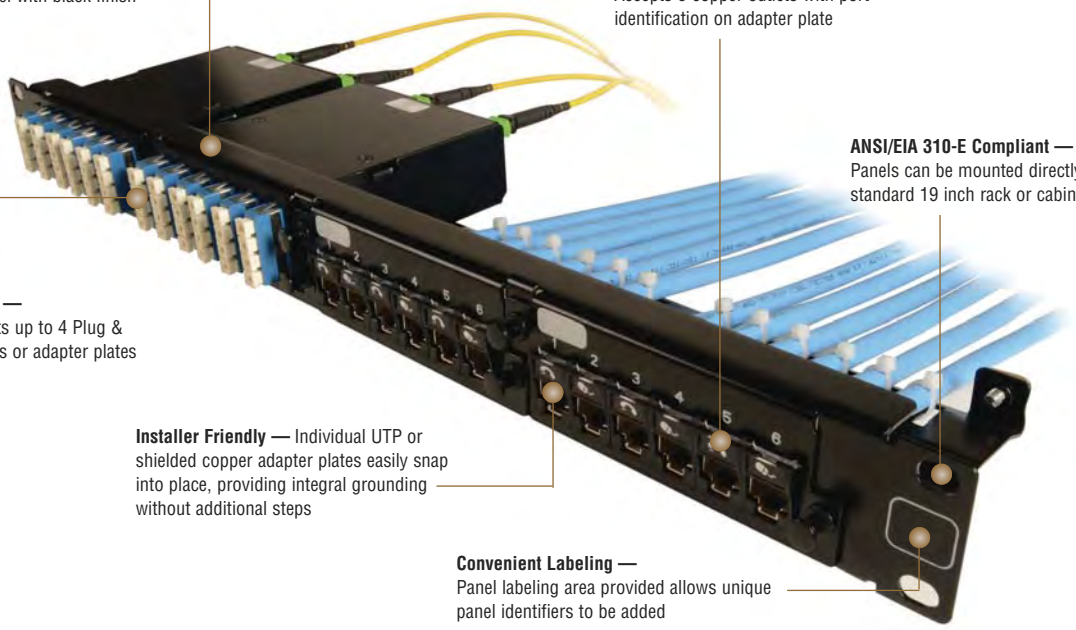
Siemon's Copper/Fiber Combo Panel provides users with exceptional versatility and robustness. The Combo Panel allows copper outlets to be mixed in the same rack mount space as fiber plug and play modules. The compact 1U design offers integrated cable management features and supports Category 5e to 7_A and all Multimode and Singlemode fiber applications.

Aesthetics — Lightweight high strength steel with black finish

Copper Adapter Plate — Accepts 6 copper outlets with port identification on adapter plate

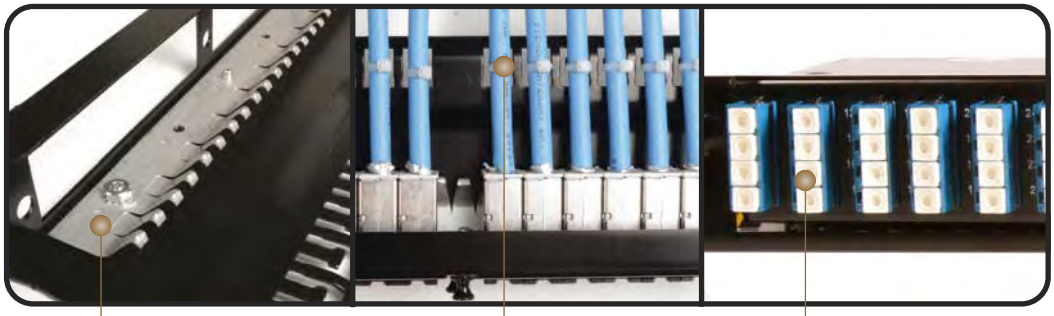
ANSI/EIA 310-E Compliant — Panels can be mounted directly on standard 19 inch rack or cabinet

Plug & Play — Panel accepts up to 4 Plug & Play Modules or adapter plates



Installer Friendly — Individual UTP or shielded copper adapter plates easily snap into place, providing integral grounding without additional steps

Convenient Labeling — Panel labeling area provided allows unique panel identifiers to be added



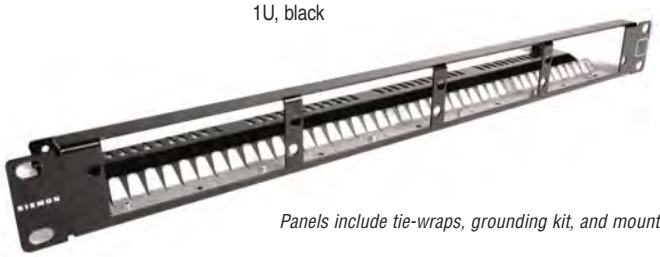
Installer Friendly — Panels feature an integrated grounding strip to ensure proper ground path from copper outlets to grounding point

Cable Management — Built in cable manager provides ability to secures cables for proper strain relief

Plug & Play — Panels utilize the Plug & Play adapter modules that utilize NY-LATCH (push-pull adapters) for ease of installation

Ordering Information:

Part #	Description
PPM-SPNL4-01	PNL, high density, shielded copper/fiber combo, 1U, black



Panels include tie-wraps, grounding kit, and mounting screws

Part #	Description
PPM-SMX6-01	Copper Adapter Plate, 6-port, black

High Density 1U Fiber Connect Panel System

High-Density FCP3 Fiber Connect Panel

Economically connect, protect and manage up to 96 fibers within 1 rack mount space. Designed to integrate with high-density FCP3 fiber Plug and Play modules.

High Density
Supports up to 96 fibers in just 1U

Enhanced Accessibility
Fiber drawer slides to the front and rear for maximum access to fiber connections

Bend Radius Management
Recessed modules provide a high-capacity jumper management zone that helps maintain proper fiber bend radius

Part #	Description
FCP3-DWR-4	High-density FCP3 Fiber Enclosure, black
PPM-BLNK	High-density FCP3 Blank Panel Filler, black

High-Density Combo Panel FCP3 Plug and Play Modules and Adapter Plates

Siemon LC to MTP® FCP3 Plug and Play modules and LC adapter plates are designed for simple, snap-in deployment within the high density FCP3 fiber connect panel. Providing 24 LC fibers per module, the factory terminated and tested modules are available in OM3 and OM4 Multimode and Singlemode configurations. The LC adapter plates provide a simple way to integrate traditional LC to LC connectivity within the ultra-high density FCP3 enclosure.

High Density
Modules provide 24 LC fibers per module, supporting up to 96 ports within the 1U FCP3 fiber connect panel

Fast Deployment
Snap-in mounting and multi-fiber MTP connectivity offers ultra-fast deployment of high-performance fiber channels

Compact Housing
Reduces mounting depth for greater cable management space within enclosures

Optimized Adapter Spacing
Enables easy finger access to fiber jumper connector latches in high density patching environments

Multimode and Singlemode Modules
Utilizes zirconia ceramic sleeves for optimum performance

Ordering Information:

PPM-(XX)-LC(XX)-01 . . . . . High-density LC to MTP Module, black

Fiber Count
12 = 12 Fiber
24 = 24 Fiber

Fiber Type
6 = OM1, 62.5/125 Multimode beige LC adapters
5 = OM2, 50/125 Multimode beige LC adapters
5L = OM3, XGLO 300 50/125 Multimode aqua adapters
5V = OM4, XGLO 550 50/125 Multimode aqua adapters
SM = OS1/OS2, Singlemode blue LC adapters

PPM-F-LC(X)(XX)-01. . . . . High-density FCP3 LC Adapter plates

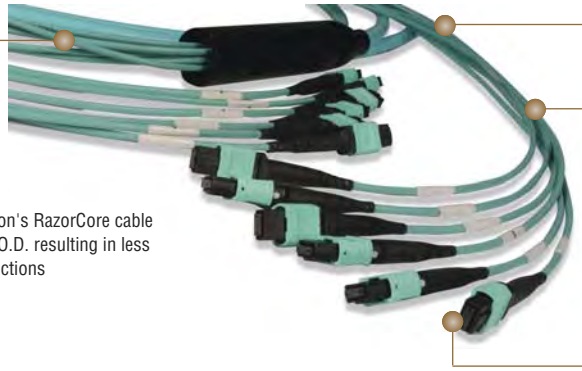
Adapter Color
Blank = Beige MM
Q = Aqua MM
U = Blue SM

Fiber Count
12 = 12 Fiber
24 = 24 Fiber

Plug and Play Cable Assemblies

MTP® to MTP Reels and Extenders

Combining Siemon's reduced-diameter RazorCore™ cable with 12-fiber MTP connectors, Plug and Play Reels are designed to be quickly pulled and connected to Siemon Plug and Play Modules and MTP Adapter Plates. Custom configurable to precise application requirements, these reels efficiently put high-performance, high-density fiber connections exactly where you need them. Extenders offer Male MTP Connectors on one end and female MTP adapters on the other to allow field extension of MTP Reels.



Reduced Pathway Fill — Siemon's RazorCore cable has significantly reduced cable O.D. resulting in less cable tray fill and pathway restrictions

Custom Configurations — Available from 12 to 144 fiber counts in increments of 12 fibers

Multiple Fiber Types — Available in Multimode (62.5/125, standard 50/125 and laser optimized 50/125 OM3/OM4) and Singlemode.

40 Gb/s and 100 Gb/s Ready — Enables simple upgrade path to future 40 Gb/s and 100 Gb/s applications over Multimode 50/125 laser optimized fiber

Ordering Information: Non-Armored

F(X)(XX)-(XX)(X)(XXX)(X)-(X) . . . . Fiber Plug & Play Cable Assembly, 12 Fiber MTP Connectors

Configuration
R = Standard Loss
L = Low Loss
E* = Standard Loss Extender
B* = Low Loss Extender

Fiber Count
12 = 12
24 = 24
36 = 36
48 = 48
72 = 72
96 = 96
144 = 144

Fiber Type
6 = OM1, 62.5/125 Multimode
5 = OM2, 50/125 Multimode
5L = OM3, XGLO 300 50/125 Multimode
5V = OM4, XGLO 550 50/125 Multimode
SM = OS1/OS2, Singlemode

Jacket Rating
R = Riser
P = Plenum
L = LSOH

Length**
Length must be 3 digits
Example: 003 = 3m
010 = 10 ft.

Length Unit
F = Feet
M = Meters

Polarity Method (Per TIA-568-C.0)
A = Method A
B = Method B
C = Method C
Blank = Fiber Extender (FE and FB)

Ordering Information: Armored

F(X)(XX)-(XX)(XX)(XXX)(X)(X). . . . Armored Fiber Plug & Play Cable Reel Assembly, 12 Fiber MTP Female Connectors

Configuration
R = Standard Loss
L = Low Loss

Fiber Count
12 = 12
24 = 24
36 = 36
48 = 48
72 = 72
96 = 96
144 = 144

Fiber Type
6 = OM1, 62.5/125 Multimode
5 = OM2, 50/125 Multimode
5L = OM3, XGLO 300 50/125 Multimode
5V = OM4, XGLO 550 50/125 Multimode
SM = OS1/OS2, Singlemode

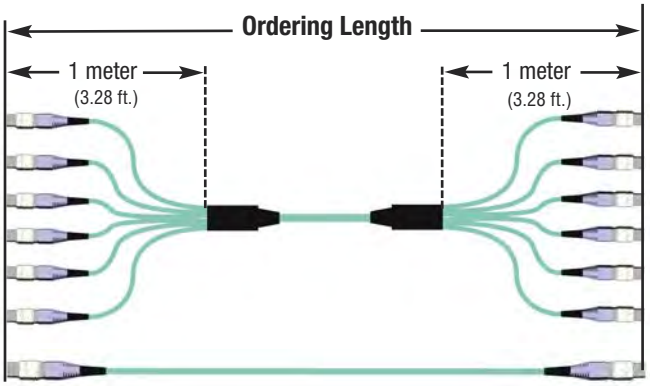
Jacket Rating
AR = Armored Riser
AP = Armored Plenum

Length**
Length must be 3 digits
Example: 003 = 3m
010 = 10 ft.

Length Unit
F = Feet
M = Meters

Polarity Method (Per TIA-568-C.0)
A = Method A
B = Method B
C = Method C
Blank = Fiber Extender (FE and FB)

Note: LSOH versions available. Contact Customer Service for details.



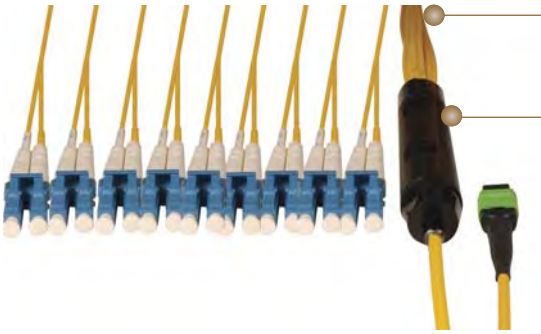
See performance details on page 6.18.

** Fiber Extenders ship with MTP Adapter for quick transition.*

*** Order length is measured connector tip to connector tip. Multi-leg versions offered with standard 1 meter (3.28 ft.) legs. Minimum order length is 1 meter (3.28 ft.) for 12 strand and 3 meters (9.8 ft.) for 24 strands or greater (See diagram at right)*

Plug and Play MTP® to LC Trunks

Utilizing high quality Siemon RazorCore™ cable, MTP to LC Trunks offer a connectivity transition from 12-fiber MTP connectors to duplex LC connectors. These may be implemented using Siemon's MTP to MTP Adapter Plates to provide direct MTP to LC patching options over a wide range of distances and infrastructure configurations.



Custom Configurations — Available from 12 to 144 fiber counts in increments of 12 fibers

Multiple Fiber Types — Available in Multimode (62.5/125, standard 50/125 and laser optimized 50/125 OM3/OM4) and Singlemode.

Ordering Information:

T(X)(X)(X)(XX)(X)(XX)LC(XXX)(X)..... MTP to LC Trunk (distribution to breakout)

Configuration
L = Low Loss (OM3/OM4 only)
F = Standard Loss

Fiber Count
B = 12
C = 24
E = 36
F = 48
G = 72
H = 96
J = 144

Pulling Eye
A = Side A
B = Side B
C = None

Fiber Type
6 = OM1, 62.5/125 Multimode
5 = OM2, 50/125 Multimode
5L = OM3, XGLO 300 50/125 Multimode
5V = OM4, XGLO 550 50/125 Multimode
SM = OS1/OS2, Singlemode

Jacket Rating
R = Riser
P = Plenum
L = LSOH

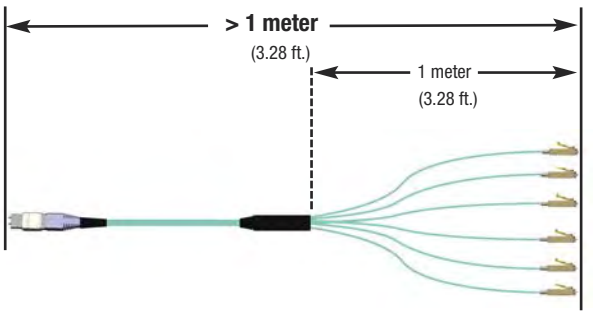
MTP Connector Gender
MM = Male
MF = Female

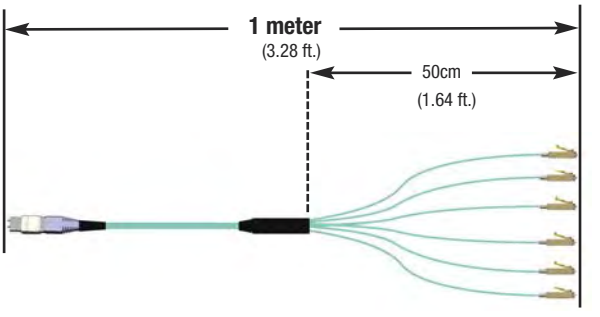
Length*
Length must be 3 digits
Example: **003** = 3m
010 = 10 ft.

Length Unit
F = Feet
M = Meters

See performance details on page 6.18.

** Minimum order length is 1 meter (3.28 ft.)*
Order length is measured connector tip to connector tip.
Trunks greater than 1 meter (3.28 ft.) have breakout length of 1 meter (3.28 ft.)
1 meter (3.28 ft.) trunks have a 50cm (1.64 ft.) breakout length
(See diagram below)





Next Generation MTP Trunks

Siemon's Next Generation MTP to MTP trunks are designed to achieve 45kgf (100 lbf.) pull strength to handle more aggressive pathway environments. They come with a foamed zipper pulling eye for quick removal saving on installation time and are reusable if relocation of a trunk is required after the initial installation. They are available in 12/24 fiber counts and Low Loss options only.

- OM3/OM4 Bend Insensitive Fiber (BIF)
- SM Non-Bend Insensitive Fiber
- 12 and 24 Fiber strand counts
- Polarity methods A, B and C options
- Low Loss performance (0.20dB for Multimode MTP and 0.60dB for Singlemode MTP)
- Integrated breakout and zipper pulling eye work together to achieve 45kg (100 lbf.) tensile pull strength
- Zipper pulling eye allows for quicker installs
  - Allows pulling eyes to be reused when relocating trunks during MAC work

Ordering Information:

FR2-(X)-(X)(X)(XXX)(X)(X)

Strand Count
B = 12
C = 24

Fiber Type
L = OM3, XGLO 300, 50/125 Multimode
V = OM4, XGLO 550, 50/125 Multimode
A = OS1/OS2, Singlmode

Cable Type
P = Plenum
R = Riser
L = LSOH

Polarity Method (Per TIA-568-C.0)
A = Method A
B = Method B
C = Method C

Length Unit
F = Feet
M = Meters

Length
Length must be 3 digits
Example:
003 = 3m
010 = 10 ft.

LC BladePatch® to MTP Hybrid Trunks

- LC BladePatch with push pull latch further improves accessibility
- Designed to facilitate an interconnect or cross connect point between active equipment
- OM3/OM4 Bend Insensitive Fiber (BIF)
- SM Non-Bend Insensitive
- 12 Fiber strand count
- Specific staggered lengths to active equipment
  - Nexus, Cisco MDS, Brocade and No stagger
- Low Loss performance 0.15 dB for LC and 0.20 dB for Multimode MTP
- Standard Loss performance 0.25 dB for LC and 0.60 dB for Singlemode MTP
- Integrated cable manager on breakout

Ordering Information:

T(X)2(X)(X)(X)(X)(X)(X)(XX)(XXX)(X)

Performance
L = Low Loss (OM3/OM4 Only)
F = Standard Loss (SM Only)

Strand Count
B = 12 Strand

Pulling Eye Option
A = MTP Side (Only available for length >5M
C = None

Fiber Type
L = OM3 XGLO 300 50/125 Multimode
V = OM4 XGLO 550 50/125 Multimode
A = OS1/OS2 Singlemode

Jacket Rating
P = Plenum
R = RISER
L = LSOH

MTP Gender
M = MTP Male
F = MTP Female

Stagger Type
1 = No Stagger
2 = Cisco 9512 & 9412
3 = Cisco NEXUS
4 = Brocade

LC BP Connector
LB = RFP (OM3, OM4, SM/UPC)
BL = CFP (OM3, OM4, SM/UPC)

Length*
Length must be 3 digits
Example**: 003 =** 3m
010 = 10 ft.

Length Unit
F = Feet
M = Meter

Plug and Play Fiber System Optical Performance

STANDARD MODULES AND ASSEMBLIES

Fiber Type		MAX Insertion (dB)		MAX Return Loss (dB)		Performance Class
		MTP	LC	MTP	LC	
5L-MM	50/125 (OM3)	0.4	0.25	20	30	XGLO® 300
5V-MM	50/125 (OM4)	0.4	0.25	20	30	XGLO 550
SM-LWP	SM (OS1/OS2)	0.6	0.40	55	55	XGLO

LOW LOSS MODULES AND ASSEMBLIES

Fibre Type		MAX Insertion (dB)		MAX Return Loss (dB)		Performance Class
		MTP	LC	MTP	LC	
5L-MM	50/125 (OM3)	0.20	0.15	20	30	XGLO 300
5V-MM	50/125 (OM4)	0.20	0.15	20	30	XGLO 550

Insertion/Return loss testing is performed at 850nm/1300nm for MM and 1310/1550nm for SM

Fiber Cleaning Tools

Simple to use and highly effective at removing contaminants that can degrade the optical performance of critical fiber connections, these dry cloth cleaning tools are specially designed to clean multi-fiber MTP® connectors as well as LC and SC fiber connectors. The MTP version cleans both male MTP connectors in Plug and Play modules and female connectors in adapter plates. LC and SC versions clean installed connectors as well as unmated connectors via an innovative dustcap/adapter.

Ordering Information:

Part #	Description
PP-CT-MP	MTP multi-fiber connector cleaning tool
PP-CT-LC	LC simplex fiber connector cleaning tool
PP-CT-SC	SC simplex fiber connector cleaning tool

LC BladePatch®

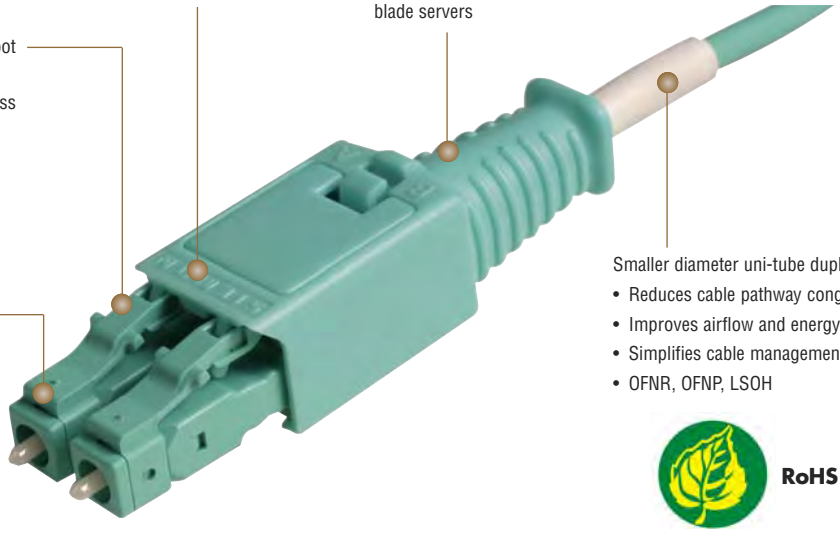
Siemon's LC BladePatch duplex jumper offers a unique solution for high-density fiber optic patching environments. It features a revolutionary and innovative push-pull boot design to control the latch, enabling easy access and removal in tight-fitting areas. The LC BladePatch utilizes a smaller diameter uni-tube cable design which reduces cable pathway congestion improving air flow and increasing energy efficiency while simplifying overall cable management. The LC BladePatch provides low-loss performance for Multimode and Singlemode supporting the precise optical performance requirements for high speed networks and improving network performance. The LC BladePatch is ideal for patching high density blade servers, patch panels and equipment.

Low profile boot design optimizes side-stackability

Designed specifically for high density data center applications and high density blade servers

Innovative, patent-pending push-pull boot design to control the latch.

- Enhances installation and removal access in high density patching environments



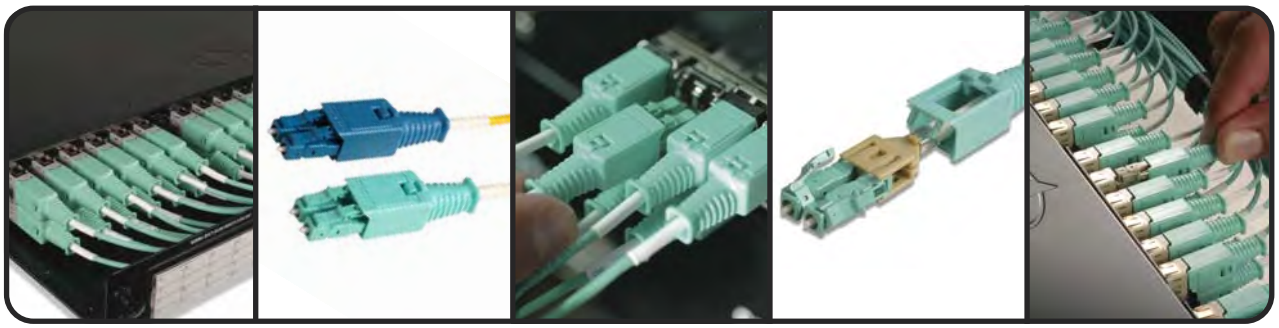
Patent-pending rotating latch design for easy polarity change

- Latch-only rotation to eliminate potential connector and fiber damage
- Clear identification if a polarity change has been made

Smaller diameter uni-tube duplex cable design

- Reduces cable pathway congestion
- Improves airflow and energy efficiency
- Simplifies cable management
- OFNR, OFNP, LSOH

RoHS Compliant



Low profile boot design optimizes side-stackability

OM3 and OM4 50/125 Multimode and OS1/OS2 Singlemode (UPC)

Fits within any standard LC adapter opening or LC SFP module (not compatible with internally shuttered LC adapters)

Rotating latch design eliminates potential fiber damage during polarity changes

The push-pull design enables easy access and removal via the boot in tight-fitting areas

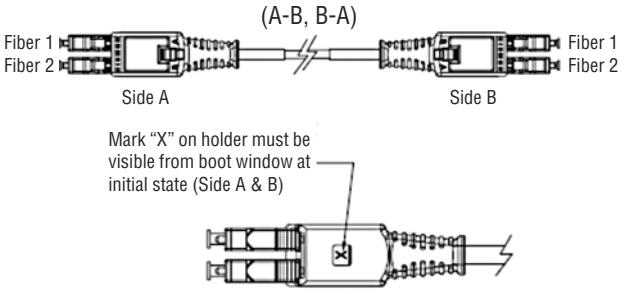
Product Information

PERFORMANCE SPECIFICATIONS

	OM3 50/125µm Multimode			OM4 50/125µm Multimode			OS1/OS2 Singlemode
Wavelength (nm)	850	1300	850*	850	1300	850*	1310/1550nm
Min. Cable Bandwidth (MHz•km)	1500 (OFL)	500 (OFL)	2000 (EMB)	3500 (OFL)	500 (OFL)	4700 (EMB)	N/A
Max. Insertion Loss (dB)	0.15 (0.10 Typical)			0.15 (0.10 Typical)			0.25 (0.10 Typical)
Min. Return Loss (dB)	30 (35 Typical)			30 (35 Typical)			55 (60 Typical)

**Laser Bandwidth*

Polarity Option - RFP (Reverse Fiber Position)



Ordering Information:

RFP (Reverse Fiber Position)

XGLO 300, 50/125µm Multimode, OM3

Part #	Jacket Rating
FBP-LCLC5L-(XX)AQ	OFNR
FBP-LCLC5L-(XX)AP	OFNP
FBP-LCLC5L-(XX)AH	LSOH

XGLO 550, 50/125µm Multimode, OM4

Part #	Jacket Rating
FBP-LCLC5V-(XX)AQ	OFNR
FBP-LCLC5V-(XX)AP	OFNP
FBP-LCLC5V-(XX)AH	LSOH

XGLO Singlemode, OS1/OS2 (UPC)

Part #	Jacket Rating
FBP-LCULCUL-(XX)	OFNR
FBP-LCULCUL-(XX)P	OFNP
FBP-LCULCUL-(XX)H	LSOH

Bulk Pack Option:
Available in lengths 5 meters (16.4 ft.) or less.
Remove dashes "-" and add "B" to the end of the part number for bulk pack of 100 jumpers (10 per bag)

Use (XX) to specify length: 01 =1 m (3.28 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft), 05 = 5m (16.4 ft.)

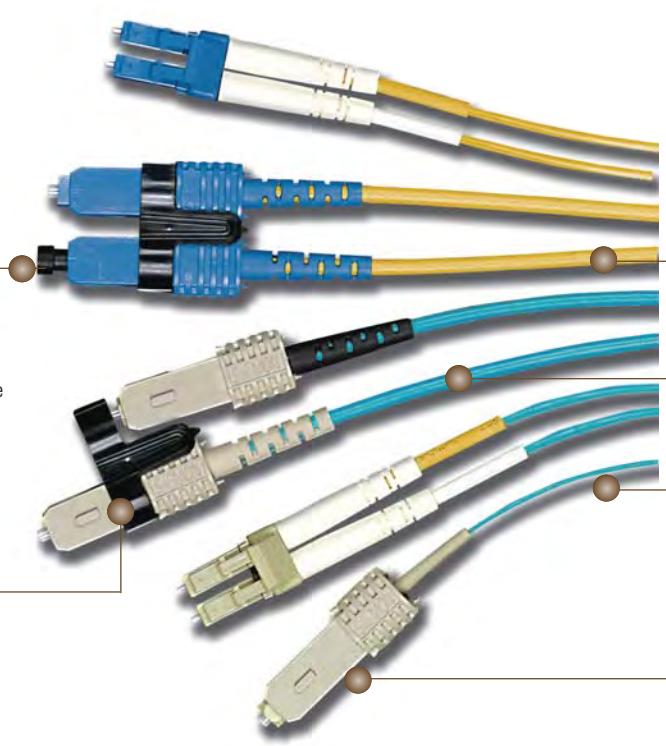
*Note: Polarity CFP (Continuous fiber position) is available as an option. Remove the first dash *-* and add C to the end of the RFP part number.*
Example: FBPLCLC5L-(XX)AQC

XGLO® Jumper & Pigtails

XGLO fiber optic cable assemblies are ideal for supporting 10 Gigabit fiber applications over extended distances and next-generation backbones. XGLO cable assemblies feature premium fiber that meets IEEE 802.3 10 Gigabit Ethernet Standard as well as IEC-60793-2-10 and TIA-492AAAC (OM3), TIA-492AAAD (OM4) specifications for laser bandwidth Differential Mode Delay (DMD) specifications. In addition, these assemblies offer a superior connector polish that meets stringent Telcordia and ISO/IEC specifications for end-face geometry and exceeds all ISO/IEC and ANSI/TIA insertion loss and return loss requirements.

These precision cable assemblies are warranted for 20 years and ensure optimum applications support for 10 Gigabit Ethernet serial transmission when installed in a qualified XGLO system. 100% factory inspection ensures superior performance and quality.

Supports 10 Gigabit Ethernet



Singlemode assemblies feature blue connectors with a yellow jacket; Multimode assemblies feature beige connectors with an aqua jacket

Dust caps included to protect factory polish from dirt and damage

50/125µm Multimode and Singlemode assemblies available

Laser bandwidth optimized cable reduces impurities in the core of fiber, ensuring robust 10 Gigabit Ethernet transmission

SC duplexing clip allows for polarity correction

Exceeds ISO/IEC and TIA/EIA requirements for aging, exposure to humidity, temperature extremes, impact, vibration, coupling strength, and cable resistance to stress and strain

PERFORMANCE SPECIFICATIONS

	OM3 50/125µm Multimode			OM4 50/125µm Multimode			OS1/OS2 Singlemode
Wavelength (nm)	850	1300	850*	850	1300	850*	1310/1550nm
Min. Cable Bandwidth (MHz*km)	1500 (OFL)	500 (OFL)	2000 (EMB)	3500 (OFL)	500 (OFL)	4700 (EMB)	N/A
Max. Insertion Loss (dB)	0.25 (0.10 Typical)			0.25 (0.10 Typical)			0.40 (0.10 Typical)
Min. Return Loss (dB)	30 (35 Typical)			30 (35 Typical)			55 (60 Typical)

**Laser Bandwidth*

Ordering Information:

OFNR

XGLO® 300, 50/125µm Multimode, OM3

Duplex Jumpers:

FJ2-SCSC5L-(XX)AQ.....SC to SC aqua duplex jumper
FJ2-LCLC5L-(XX)AQ.....LC to LC aqua duplex jumper
FJ2-LCSC5L-(XX)AQ .....LC to SC aqua duplex jumper
FJ2-SASA5L-(XX)AQ .....ST to ST aqua duplex jumper
FJ2-SASC5L-(XX)AQ.....ST to SC aqua duplex jumper
FJ2-LCSA5L-(XX)AQ.....LC to ST aqua duplex jumper

Simplex Pigtails - 900 micron buffered

FP1B-SC5L-(XX)AQ.....SC simplex pigtail, aqua
FP1B-LC5L-(XX)AQ .....LC simplex pigtail, aqua
FP1B-SA5L-(XX)AQ .....ST simplex pigtail, aqua

XGLO 550, 50/125µm Multimode, OM4

Duplex Jumpers:

FJ2-SCSC5V-(XX)AQ.....SC to SC aqua duplex jumper
FJ2-LCLC5V-(XX)AQ.....LC to LC aqua duplex jumper
FJ2-LCSC5V-(XX)AQ .....LC to SC aqua duplex jumper

Simplex Pigtails - 900 micron buffered

FP1B-SC5V-(XX)AQ.....SC simplex pigtail, aqua
FP1B-LC5V-(XX)AQ .....LC simplex pigtail, aqua

XGLO Singlemode, OS1/OS2 (UPC)

Duplex Jumpers:

FJ2-SCUSCUL-(XX).....SC to SC yellow duplex jumper
FJ2-LCULCUL-(XX).....LC to LC yellow duplex jumper
FJ2-LCUSCUL-(XX) .....LC to SC yellow duplex jumper
FJ2-SAUSAUL-(XX).....ST to ST yellow duplex jumper
FJ2-LCUSAUL-(XX).....LC to ST yellow duplex jumper
FJ2-SAUSCUL-(XX) .....ST to SC yellow duplex jumper

Simplex Pigtails - 900 micron buffered

FP1B-SCUL-(XX) .....SC simplex pigtail, yellow
FP1B-LCUL-(XX).....LC simplex pigtail, yellow
FP1B-SAUL-(XX).....ST simplex pigtail, yellow

Bulk Pack Option:
SC and LC interface only.
Available in lengths 5 meters (16.4 ft.) or less.
Multimode OM3, OM4 and Singlemode OS1/OS2 only.
Remove dashes "-" and add "B" to the end of the part number for bulk pack of 100 jumpers (10 per bag)

LSOH (IEC 60332-3C)

XGLO 300, 50/125µm Multimode, OM3

Duplex Jumpers:

FJ2-SCSC5L-(XX)AH.....SC to SC aqua duplex jumper
FJ2-LCLC5L-(XX)AH.....LC to LC aqua duplex jumper
FJ2-LCSC5L-(XX)AH .....LC to SC aqua duplex jumper
FJ2-SASA5L-(XX)AH .....ST to ST aqua duplex jumper
FJ2-SASC5L-(XX)AH .....ST to SC aqua duplex jumper
FJ2-LCSA5L-(XX)AH.....LC to ST aqua duplex jumper

Simplex Pigtails - 900 micron buffered

FP1B-SC5L-(XX)AH.....SC simplex pigtail, aqua
FP1B-LC5L-(XX)AH .....LC simplex pigtail, aqua
FP1B-SA5L-(XX)AH .....ST simplex pigtail, aqua

XGLO 550, 50/125µm Multimode, OM4

Duplex Jumpers:

FJ2-SCSC5V-(XX)AH.....SC to SC aqua duplex jumper
FJ2-LCLC5V-(XX)AH.....LC to LC aqua duplex jumper
FJ2-LCSC5V-(XX)AH .....LC to SC aqua duplex jumper

Simplex Pigtails: 900 micron buffered

FP1B-SC5V-(XX)AH.....SC simplex pigtail, aqua
FP1B-LC5V-(XX)AH .....LC simplex pigtail, aqua

XGLO Singlemode, OS1/OS2 (UPC)

Duplex Jumpers:

FJ2-SCUSCUL-(XX)H .....SC to SC yellow duplex jumper
FJ2-LCULCUL-(XX)H .....LC to LC yellow duplex jumper
FJ2-LCUSCUL-(XX)H.....LC to SC yellow duplex jumper
FJ2-SAUSAUL-(XX)H .....ST to ST yellow duplex jumper
FJ2-LCUSAUL-(XX)H .....LC to ST yellow duplex jumper
FJ2-SAUSCUL-(XX)H.....ST to SC yellow duplex jumper

Simplex Pigtails - 900 micron buffered

FP1B-SCUL-(XX)H.....SC simplex pigtail, yellow
FP1B-LCUL-(XX)H .....LC simplex pigtail, yellow
FP1B-SAUL-(XX)H .....ST simplex pigtail, yellow

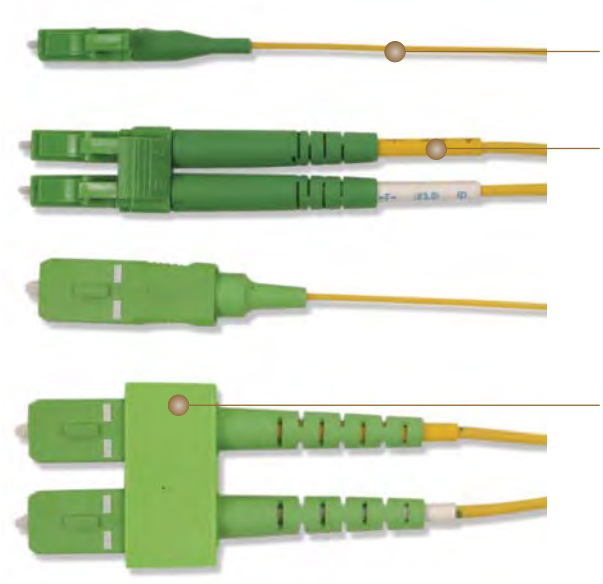
Custom lengths and jacket colors are available upon request.
Contact our Customer Service Department for more information.

Use (XX) to specify length: 01 = 1m (3.3 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft.), 05 = 5m (16.4 ft.)

XGLO® Singlemode LC & SC, APC Jumper & Pigtails

XGLO Singlemode LC and SC angled polish (APC) fiber optic cable assemblies are ideal for supporting high speed telecommunication network fiber applications such as FTXX, PON, POL, CATV, LAN, and WAN. XGLO APC cable assemblies feature premium fiber with a superior connector polish. The assemblies meet stringent TIA/EIA, Telcordia and ISO/IEC specifications for end-face geometry, mechanical, insertion loss and return loss requirements.

These precision cable assemblies are warranted for 20 years when installed in a qualified XGLO system. 100% inspection ensures superior performance and quality.



The Singlemode bend insensitive fiber provides supreme bending performance compared to traditional Singlemode fiber. The Singlemode fiber conforms to ITU-T G.657 A2, ITU-T G.657 B2 (edition 2009) and ITU-T G.652.D industry specifications

XGLO fiber optic cable assemblies meet all Telcordia and ISO/IEC specifications for ferrule end face geometry – including radius of curvature, apex offset, and spherical undercut. Compliance ensures minimum Return Loss, thereby reducing back reflection of laser energy which could degrade transmission performance or damage transceivers

APC assemblies feature green connectors with a yellow jacket

PERFORMANCE SPECIFICATIONS

Singlemode (OS1/OS2)	
Wavelength (nm)	1310 / 1550
Max. Insertion Loss (dB)	0.40 (0.15 Typical)
Min. Return Loss (dB)	65 (70 Typical)

STANDARDS COMPLIANCE

- TIA/EIA-568-C.3
- IEC 60874
- ISO/IEC 11801
- TELCORDIA GR-326-CORE issue 4

*Tested in accordance with the Service Life requirements of Telcordia GR-326-CORE issue 4.

*LC 900um simplex pigtails are TIA/EIA and ISO/IEC compliant.

Ordering Information:

OFNR

XGLO® Singlemode OS2 (APC)

Duplex Jumpers:

FJ2-SCASCAL-(XX) .....SC to SC yellow duplex jumper
FJ2-LCALCAL-(XX) .....LC to LC yellow duplex jumper
FJ2-LCASCAL-(XX) .....LC to SC yellow duplex jumper

Simplex Pigtails - 900 micron buffered

FP1B-SCAL-(XX).....SC simplex pigtail, yellow
FP1B-LCAL-(XX) .....LC simplex pigtail, yellow

Use (XX) to specify length: 01 = 1m (3.3 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft.), 05 = 5m (16.4 ft.)

LSOH (IEC 60332-3C)

XGLO Singlemode OS2 (APC)

Duplex Jumpers:

FJ2-SCASCAL-(XX)H.....SC to SC yellow duplex jumper
FJ2-LCALCAL-(XX)H.....LC to LC yellow duplex jumper
FJ2-LCASCAL-(XX)H .....LC to SC yellow duplex jumper

Simplex Pigtails - 900 micron buffered

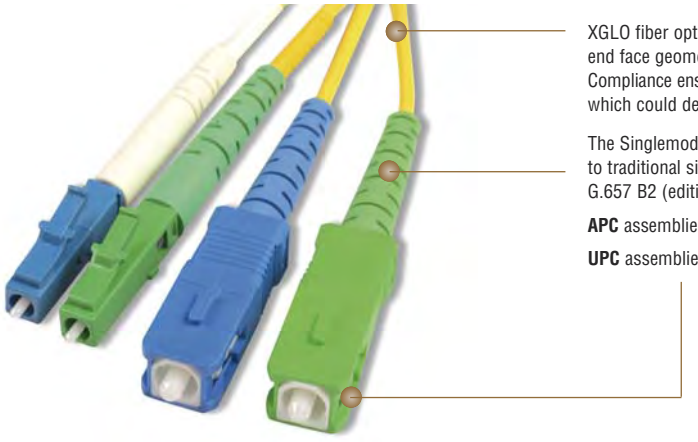
FP1B-SCAL-(XX)H .....SC simplex pigtail, yellow
FP1B-LCAL-(XX)H.....LC simplex pigtail, yellow

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information.

XGLO® Singlemode LC and SC, APC and UPC Simplex Jumpers

XGLO Singlemode LC and SC Simplex angled polish (APC) and ultra polish (UPC) fiber optic cable assemblies are ideal for supporting high speed telecommunication network fiber applications such as FTXX, PON, POL, CATV, LAN, and WAN. The cable assemblies feature Singlemode bend insensitive fiber with a superior connector polish. The assemblies meet stringent TIA/EIA, Telcordia and ISO/IEC specifications for endface geometry, mechanical, insertion loss and return loss requirements.

These precision cable assemblies are warranted for 20 years when installed in a qualified XGLO system. 100% inspection ensures superior performance and quality.



XGLO fiber optic cable assemblies meet all Telcordia and ISO/IEC specifications for ferrule end face geometry – including radius of curvature, apex offset, and spherical undercut. Compliance ensures minimum Return Loss, thereby reducing back reflection of laser energy which could degrade transmission performance or damage transceivers

The Singlemode bend insensitive fiber provides supreme bending performance compared to traditional singlemode fiber. The Singlemode fiber conforms to ITU-T G.657 A2, ITU-T G.657 B2 (edition 2009) and ITU-T G.652.D industry specifications

APC assemblies feature green connectors with a yellow jacket

UPC assemblies feature blue connectors with a yellow jacket

STANDARDS COMPLIANCE

- TIA/EIA-568-C.3
- IEC 60874
- ISO/IEC 11801
- ITU-T G.652 D
- ITU-T G.657 A2 , ITU-T G.657 B2 (2009)
- TELCORDIA GR-326-CORE issue 4

*Tested in accordance with the Service Life requirements of Telcordia GR-326-CORE issue 4.

PERFORMANCE SPECIFICATIONS

Singlemode (OS1/OS2)	APC	UPC
Wavelength (nm)	1310 / 1550	
Max. Insertion Loss (dB)	0.40 (0.15 Typical)	0.40 (0.10 Typical)
Min. Return Loss (dB)	65 (70 Typical)	55 (60 Typical)

Ordering Information:

LSOH (IEC 60332-3C)

XGLO Singlemode OS1/OS2

FJ1-LCALCAL-(XX)H.....LC APC to LC APC yellow simplex jumper
FJ1-SCASCAL-(XX)H.....SC APC to SC APC yellow simplex jumper
FJ1-LCASCAL-(XX)H.....LC APC to SC APC yellow simplex jumper
FJ1-LCULCUL-(XX)H.....LC UPC to LC UPC yellow simplex jumper
FJ1-SCUSCUL-(XX)H.....SC UPC to SC UPC yellow simplex jumper
FJ1-LCUSCUL-(XX)H.....LC UPC to SC UPC yellow simplex jumper
FJ1-LCALCUL-(XX)H.....LC APC to LC UPC yellow simplex jumper
FJ1-LCASCUL-(XX)H.....LC APC to SC UPC yellow simplex jumper
FJ1-LCUSCAL-(XX)H.....LC UPC to SC APC yellow simplex jumper
FJ1-SCUSCAL-(XX)H.....SC UPC to SC APC yellow simplex jumper

RISER (OFNR)

XGLO Singlemode OS1/OS2

FJ1-LCALCAL-(XX).....LC APC to LC APC yellow simplex jumper
FJ1-SCASCAL-(XX).....SC APC to SC APC yellow simplex jumper
FJ1-LCASCAL-(XX).....LC APC to SC APC yellow simplex jumper
FJ1-LCULCUL-(XX).....LC UPC to LC UPC yellow simplex jumper
FJ1-SCUSCUL-(XX).....SC UPC to SC UPC yellow simplex jumper
FJ1-LCUSCUL-(XX).....LC UPC to SC UPC yellow simplex jumper
FJ1-LCALCUL-(XX).....LC APC to LC UPC yellow simplex jumper
FJ1-LCASCUL-(XX).....LC APC to SC UPC yellow simplex jumper
FJ1-LCUSCAL-(XX).....LC UPC to SC APC yellow simplex jumper
FJ1-SCUSCAL-(XX).....SC UPC to SC APC yellow simplex jumper

PLENUM (OFNP)

XGLO Singlemode OS1/OS2

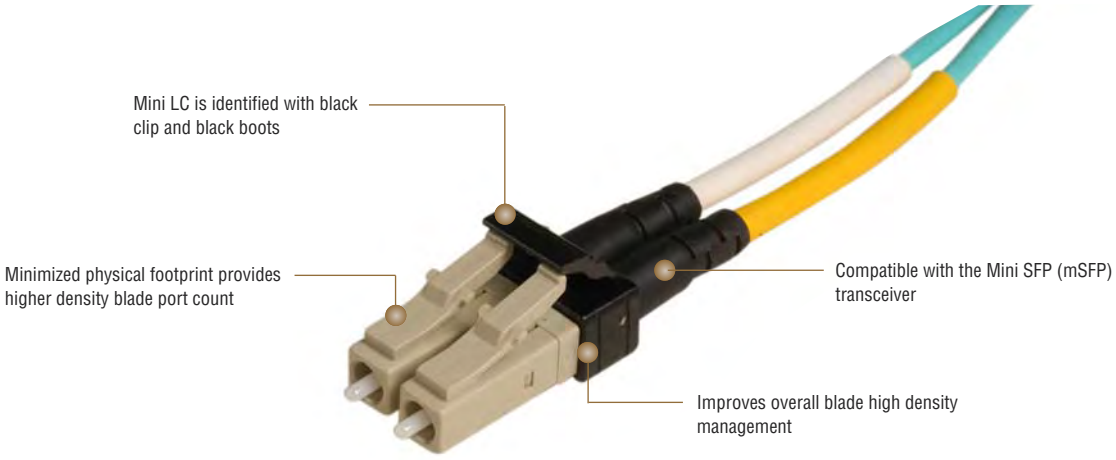
FJ1-LCALCAL-(XX)H.....LC APC to LC APC yellow simplex jumper
FJ1-SCASCAL-(XX)H.....SC APC to SC APC yellow simplex jumper
FJ1-LCASCAL-(XX)H.....LC APC to SC APC yellow simplex jumper
FJ1-LCULCUL-(XX)H.....LC UPC to LC UPC yellow simplex jumper
FJ1-SCUSCUL-(XX)H.....SC UPC to SC UPC yellow simplex jumper
FJ1-LCUSCUL-(XX)H.....LC UPC to SC UPC yellow simplex jumper
FJ1-LCALCUL-(XX)H.....LC APC to LC UPC yellow simplex jumper
FJ1-LCASCUL-(XX)H.....LC APC to SC UPC yellow simplex jumper
FJ1-LCUSCAL-(XX)H.....LC UPC to SC APC yellow simplex jumper
FJ1-SCUSCAL-(XX)H.....SC UPC to SC APC yellow simplex jumper

Use (XX) to specify length: 01 = 1m (3.28 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft), 05 = 5m (16.4 ft.)

Custom lengths and jacket colors are available upon request.
Contact our Customer Service Department for more information.

XGLO® Mini-LC Duplex Fiber Cable Assemblies

Mini-LC duplex Multimode cable assemblies are designed to operate with the Mini SFP (mSFP) transceiver and enable a higher density deployment of active devices. The Mini-LC has a reduced centerline pitch of 5.25mm (0.2 in.) compared to a standard LC pitch of 6.25mm (0.24 in.). The smaller pitch minimizes the physical footprint and provides higher-density port count for data center network equipment. Black color duplex latch clips and boots are used to distinguish the Mini-LC Duplex connectors from the standard LC Duplex.



PERFORMANCE SPECIFICATIONS

	50/125 µm Multimode (OM3)			50/125 µm Multimode (OM4)		
Wavelength (nm)	850	1300	850*	850	1300	850*
Min. Cable Bandwidth (MHz•km)	1500 (OFL)	500 (OFL)	2000 (EMB)	3500 (OFL)	500 (OFL)	4700 (EMB)
Max. Insertion Loss (dB)	0.25 (0.10 Typical)			0.25 (0.10 Typical)		
Min. Return Loss (dB)	30 (35 Typical)			30 (35 Typical)		

**Laser Bandwidth*

Ordering Information:

XGLO 300 50/125µm Multimode OM3 OFNR

Part #	Description
FJ2-LCMLC5L-(XX)A	Mini LC to Standard LC aqua duplex jumper
FJ2-LCMLCM5L(XX)A	Mini LC to Mini LC aqua duplex jumper

XGLO 550 50/125µm Multimode OM4 OFNR

Part #	Description
FJ2-LCMLC5V-(XX)A	Mini LC to Standard LC aqua duplex jumper
FJ2-LCMLCM5V(XX)A	Mini LC to MINI LC aqua duplex jumper

Use (XX) to specify length: 01 = 1m (3.28 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft.), 05 = 5m (16.4 ft.)

Reduced centerline pitch minimizes the physical footprint

Mini LC to Standard LC jumpers are available to connect Mini LC equipment to a standard channel

LightSystem® Jumper & Pigtails

Siemon offers a comprehensive line of Multimode fiber jumpers and pigtails available in standard and custom lengths. Each and every terminated connector is optically tested to assure that 100% of the Siemon-built cable assemblies meet stringent performance specifications.

PERFORMANCE SPECIFICATIONS

	OM1 62.5/125µm Multimode		OM2 50/125µm Multimode	
Wavelength (nm)	850	1300	850	1300
Min. Cable Bandwidth (MHz•km)	200	500	500	500
Max. Insertion Loss (dB)	0.50 (0.15 Typical)			
Min. Return Loss (dB)	25 (30 Typical)			

Ordering Information:

OFNR

LightSystem Multimode Duplex Jumpers

FJ2-SCSC(X)MM-(XX) .....SC to SC orange duplex jumper
FJ2-SASA(X)MM-(XX).....ST to ST orange duplex jumper
FJ2-SASC(X)MM-(XX) .....ST to SC orange duplex jumper
FJ2-LCLC(X)MM-(XX) .....LC to LC orange duplex jumper
FJ2-LCSC(X)MM-(XX).....LC to SC orange duplex jumper
FJ2-LCSA(X)MM-(XX).....LC to ST orange duplex jumper

LightSystem Multimode Simplex Pigtails - 900 micron buffered

FP1B-SC(X)MM-(XX) .....SC simplex pigtail, orange
FP1B-SA(X)MM-(XX) .....ST simplex pigtail, orange
FP1B-LC(X)MM-(XX).....LC simplex pigtail, orange

LSOH (IEC 60332-3C)

LightSystem Multimode Duplex Jumpers

FJ2-SCSC(X)MM-(XX)H .....SC to SC orange duplex jumper
FJ2-SASA(X)MM-(XX)H.....ST to ST orange duplex jumper
FJ2-SASC(X)MM-(XX)H.....ST to SC orange duplex jumper
FJ2-LCLC(X)MM-(XX)H .....LC to LC orange duplex jumper
FJ2-LCSC(X)MM-(XX)H.....LC to SC orange duplex jumper
FJ2-LCSA(X)MM-(XX)H .....LC to ST orange duplex jumper

LightSystem Multimode Simplex Pigtails - 900 micron buffered

FP1B-SC(X)MM-(XX)H .....SC simplex pigtail, orange
FP1B-SA(X)MM-(XX)H.....ST simplex pigtail, orange
FP1B-LC(X)MM-(XX)H.....LC simplex pigtail, orange

Use (X) to specify fiber type: 6 = 62.5/125µm (OM1); 5 = 50/125µm (OM2)

Use (XX) to specify length: 01 = 1m (3.28 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft.), 05 = 5m (16.4 ft.)

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information.

ValuLight™ Jumpers and Pigtails

ValuLight jumpers and pigtails provide exceptional value at a very competitive price. ValuLight fiber cable assemblies meet ISO/IEC 11801 and TIA-568-C.3 specifications for insertion loss and return loss. They are ideal for commercial cabling data applications up to and including 1 Gigabit.

PERFORMANCE SPECIFICATIONS

	OM1 62.5/125µm Multimode		OM2 50/125µm Multimode		OS1/OS2 Singlemode
Wavelength (nm)	850	1300	850	1300	1310/1550
Min. Cable Bandwidth (MHz•km)	200	500	500	500	N/A
Max. Insertion Loss (dB)	0.75 (0.15 Typical)				0.75 (0.25 Typical)
Min. Return Loss (dB)	20 (25 Typical)				50 (55 Typical)

Ordering Information:

Multimode Duplex Jumpers

Part #	Description
J2-SCSC(X)-(XX)	SC to SC orange duplex jumper, OFNR
J2-SASA(X)-(XX)	ST to ST orange duplex jumper, OFNR
J2-SASC(X)-(XX)	ST to SC orange duplex jumper, OFNR
J2-LCLC(X)-(XX)	LC to LC orange duplex jumper, OFNR
J2-LCSC(X)-(XX)	LC to SC orange duplex jumper, OFNR
J2-LCSA(X)-(XX)	LC to ST orange duplex jumper, OFNR

Multimode Pigtails

Part #	Description
P1B-SC(X)-(XX)	SC orange simplex pigtail, 900 micron, buffered
P1B-SA(X)-(XX)	ST orange simplex pigtail, 900 micron, buffered
P1B-LC(X)-(XX)	LC orange simplex pigtail, 900 micron, buffered

Use (X) to specify fiber type: 6 = 62.5/125µm (OM1); 5 = 50/125µm (OM2)
Use (XX) to specify length: 01 = 1m (3.28 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft), 05 = 5m (16.4 ft.)

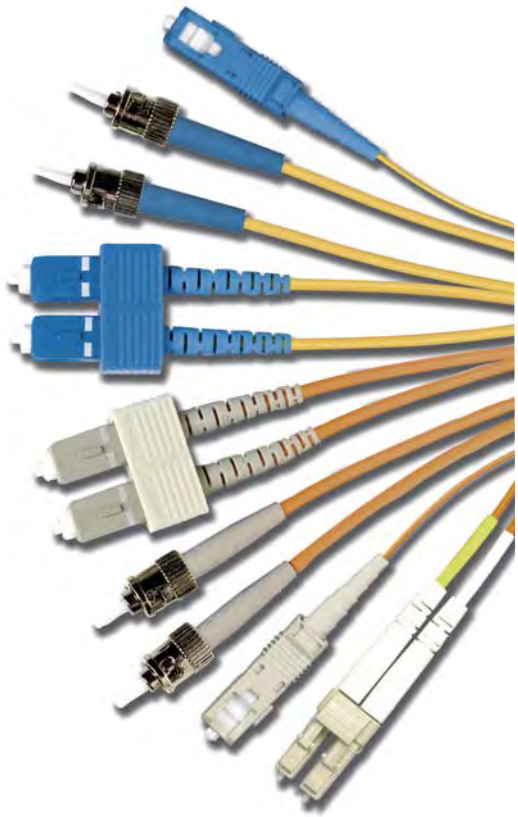
Singlemode OS2 Duplex Jumpers

Part #	Description
J2-SCSCP-(XX)	SC to SC yellow duplex jumper, OFNR
J2-SASAP-(XX)	ST to ST yellow duplex jumper, OFNR
J2-SASCP-(XX)	ST to SC yellow duplex jumper, OFNR
J2-LCLCP-(XX)	LC to LC yellow duplex jumper, OFNR
J2-LCSCP-(XX)	LC to SC yellow duplex jumper, OFNR
J2-LCSAP-(XX)	LC to ST yellow duplex jumper, OFNR

Singlemode OS2 Pigtails

Part #	Description
P1B-SCP-(XX)	SC yellow simplex pigtail, 900 micron, buffered
P1B-SAP-(XX)	ST yellow simplex pigtail, 900 micron, buffered
P1B-LCP-(XX)	LC yellow simplex pigtail, 900 micron, buffered

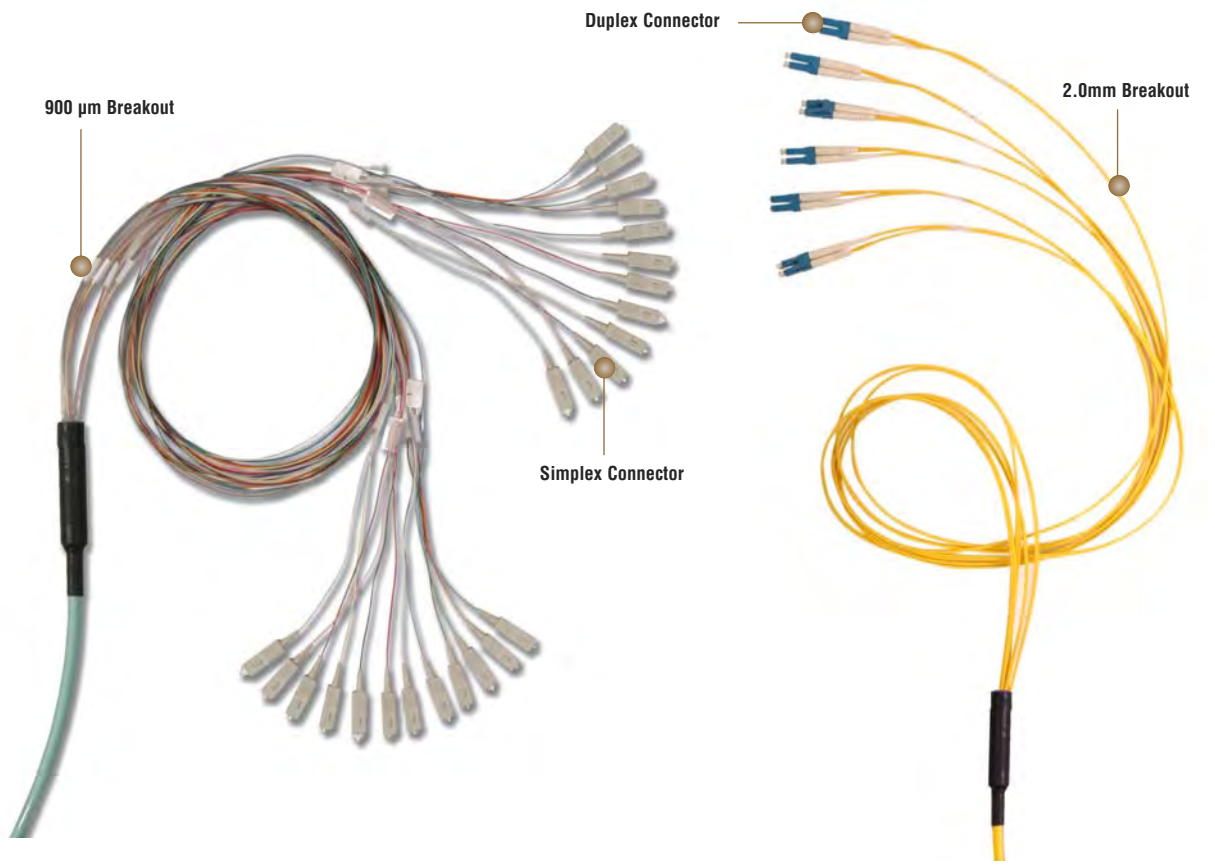
Use (XX) to specify length: 01 = 1m (3.28 ft.), 02 = 2m (6.56 ft.), 03 = 3m (9.8 ft.), 05 = 5m (16.4 ft.)



Custom lengths and jacket colors are available upon request.
Contact our Customer Service Department for more information.

XGLO® Fiber Trunking RazorCore™ Cable Assemblies

Siemon's RazorCore fiber trunking cable assemblies provide an efficient and cost effective alternative to individual field-terminated components. Combining factory terminated connectors with Siemon RazorCore reduced O.D. cable in a high-performance cable assembly, Siemon RazorCore fiber trunking cable assemblies were designed with Local Area Networks (LAN), Data Centers and Storage Area Networks (SAN) applications in mind. These assemblies allow up to 75% faster field installation times. Standard configurations also help maintain consistent cable layout and facilitate efficient moves, adds and changes. These precision cable assemblies are 100% inspected ensuring superior performance and quality. SC, LC and SC-LC hybrids available.



Reduced Pathway Fill —
Siemon's RazorCore cable has significantly reduced cable O.D. resulting in less cable tray fill and pathway restrictions

Proper Orientation —
Each leg is designated for proper connector orientation

Multiple Fiber Types —
Available in OM3 and OM4 Multimode 50/125 laser optimized and OS1/OS2 Singlemode. Jacket ratings in riser, plenum and LSOH

Custom Configurations —
Available in 12, 24, 36 and 48 fiber counts

Factory Terminated and Tested —
Every fiber cable assembly is factory terminated and tested for premium performance

XGLO® Fiber Trunking RazorCore™ Cable Assemblies

Ordering Information:

TFU(X)(X)(X)(X)(X)(X)(X)(X)(XXX)(X)

Fiber Count †
B = 12
D = 24
E = 36
F = 48

Pulling Eye
A = Side A
B = Side B
C = None
D = Side A&B

Fiber Type
L = OM3 XGLO 300 50/125 Multimode - Aqua
V = OM4 XGLO 550 50/125 Multimode - Aqua
A = OS1/OS2 Singlemode* - Yellow

Cable Type
P = Plenum - Indoor Distribution (OFNP)
R = Riser - Indoor Distribution (OFNR)
L = LSOH - Indoor Distribution (IEC 60332-3C)

LEG OD (Side A)
A = 900µm
B = 2.0mm
C = 2.4mm (LC BLadePatch only)
D = Simplex 900µm APC
E = Duplex 2.0mm APC

LEG OD (Side B)
A = 900µm
B = 2.0mm
C = 2.4mm (LC BLadePatch only)
D = Simplex 900µm APC
E = Duplex 2.0mm APC

Connector Type (Side A)
L = LC
S = SC
B = LC BladePatch (RFP Polarity only)

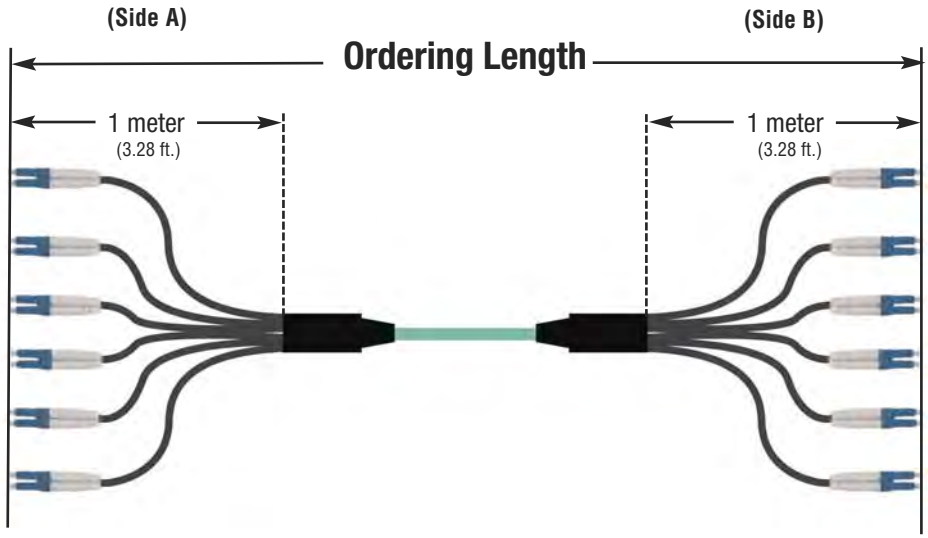
Connector Type (Side B)
L = LC
S = SC
B = LC BladePatch® (RFP Polarity only)

Cable Length**
Length must be 3 digits
Example: **004 =** 4m
012 = 12 ft.

Unit of Measure
F = Feet
M = Meters

** Non-armored only*

*** Ordering length is measured connector tip to connector tip. 2.0mm duplex and simplex 900 micron, buffered, 1m (3.28 ft.) breakout. Minimum order length is 4 metres (13.1 ft).*



Note: These products are made to order. Call for lead time and availability.

†: Additional fiber counts 72, 96, and 144 available upon request.

XGLO® Fiber Trunking RazorCore™ Cable Assemblies

CABLE — Optical and Physical Specifications

Cable Type	Multimode		Singlemode
	**XGLO® OM3 50/125 µm (850/1300 nm)	**XGLO OM4 50/125 µm (850/1300 nm)	XGLO OS1/OS2 Singlemode (1310/1550 nm)
Fiber Cable Attenuation, Max (dB/km)	3.0/1.0	3.0/1.0	0.4/0.4/0.3*
LED Bandwidth, min (MHz•km)	1500/500	3500/500	N/A
Effective Modal Bandwidth, min (MHz•km)	2000	4700	N/A
Cable Outer Jacket Color (Per TIA-598-C)	Aqua	Aqua	Yellow

*XGLO Singlemode fiber meets Low Water Peak specifications per ITU-T G.652.C/D

**XGLO Multimode cable premium fiber that meets IEEE 802.3 10 Gigabit Ethernet Standard as well as IEC-60793-2-10 and TIA-492AAAC (OM3) TIA-492AAAD (OM4) specifications for laser bandwidth Differential Mode Delay (DMD) specifications.

CONNECTORS — Optical Specifications

Fiber Type	Performance Class	Max Insertion Loss (dB)	Min Return Loss (dB)
OM3 10G 50/125 µm Multimode	XGLO 300	0.25	30
OM4 10G 50/125 µm Multimode	XGLO 500	0.25	30
0S1/0S2 Singlemode (UPC)	XGLO	0.40	55

CONNECTORS — Physical Specifications

Connector Type	IEC Intermateability Compliance	TIA Intermateability Compliance	Housing Color		Boot Color	
			SM (UPC)	MM	SM (UPC)	MM
SC	IEC 60874-14	TIA/EIA-604-3	Blue	Beige	Blue	Beige
LC	IEC 61754-20	TIA/EIA-604-10	Blue	Beige	White	White

CABLE OUTSIDE DIAMETER COMPARISON

Strand Count	RazorCore Cable mm (in.)	Traditional Distribution mm (in.)	% Reduction using RazorCore
12	3.0 (0.11 in.)	5.8 (0.22 in.)	48%
24	3.8 (0.14 in.)	8.8 (0.34 in.)	57%
36	8.7 (0.34 in.)	16.5 (0.64 in.)	47%
48	8.7 (0.34 in.)	16.5 (0.64 in.)	46%

CABLE & PULLING EYE ASSEMBLY

Fiber Strand Count	Cable Diameter mm (in.)	Min Pulling Eye Bend Radius mm (in.)	Max Pulling Eye Diameter mm (in.)	*Required Duct Diameter mm (in.)	Max Pull Force kgf (lbf.)
12	3.0 (0.11 in.)	380	44.5 (1.75 in.)	69.9 (2.75 in.)	18.1 (39.9 lbf.)
24	3.8 (0.14 in.)	380	44.5 (1.75 in.)	69.9 (2.75 in.)	18.1 (39.9 lbf.)
36	8.7 (0.34 in.)	915	63.5 (2.5 in.)	69.9 (2.75 in.)	18.1 (39.9 lbf.)
48	8.7 (0.34 in.)	915	63.5 (2.5 in.)	88.9 (3.5 in.)	18.1 (39.9 lbf.)

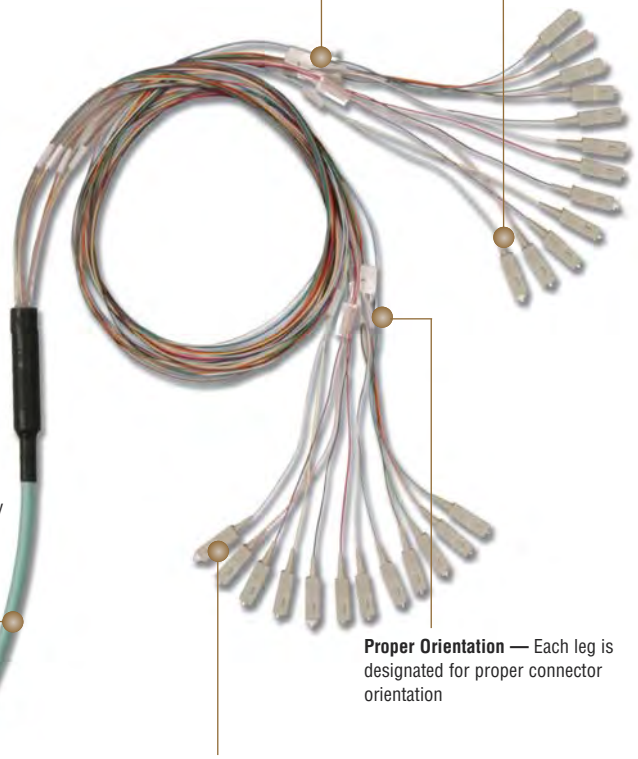
* Pulling eye assembly shall be capable of passing through these minimum duct diameter requirements during product installation

XGLO® & LightSystem® Fiber Trunking Cable Assemblies

Siemon's fiber trunking cable assemblies provide an efficient and cost effective alternative to individual field-terminated components. Combining factory terminated connectors with Siemon cable in a high-performance cable assembly, Siemon fiber trunking cable assemblies were designed with Local Area Networks (LAN), Data Centers and Storage Area Networks (SAN) applications in mind. These assemblies allow up to 75% faster field installation times.

Factory Terminated and Tested — Every fiber cable assembly is factory terminated and tested for premium performance

Custom Assembly — Fiber assemblies can be created to custom lengths and configurations based on a flexible part number scheme for performance options to best suit each installation



Siemon Cable — Utilizes high quality Siemon cable in both armored and non-armored choice of construction

Proper Orientation — Each leg is designated for proper connector orientation

Identification — Each cable assembly is coded with a unique identification number for administrative purposes

Superior Design — Each cable assembly utilizes an epoxy breakout with spiral wrap to protect the fibers when entering an enclosure

Pulling Eye
An optional encapsulated protection sleeve with cable pulling eye protects the factory terminations during installation.

Enclosure Compatibility
Siemon fiber trunking assemblies are compatible with all Siemon fiber enclosures.

Protective Packaging
Dual shelf reel keeps unprotected connectivity from harm during payout

See ordering information next page

Fiber Trunking Cable Assemblies

Ordering Information:

TF-(X)(X)(X)(X)(XX)(XX)(XXX)(X)

Fiber Count
A = 6*
B = 12
C = 24
E = 36*
F = 48*
G = 72*

Pulling Eye
A = Side A
B = Side B
C = None

Fiber Type
B = 62.5/125 Multimode
C = 50/125 Multimode
L = XGLO 300 50/125 Multimode OM3
V = XGLO 550 50/125 Multimode OM4
A = Singlemode OS1/OS2

Cable Type
P = Plenum - Indoor Distribution (OFNP)
R = Riser - Indoor Distribution (OFNR)
L = LSOH - Indoor Distribution (IEC 60332-3C)
A = Plenum - Interlocking Armored (OFCP)

Connector (Side A)
LC = LC
SC = SC
SA = ST

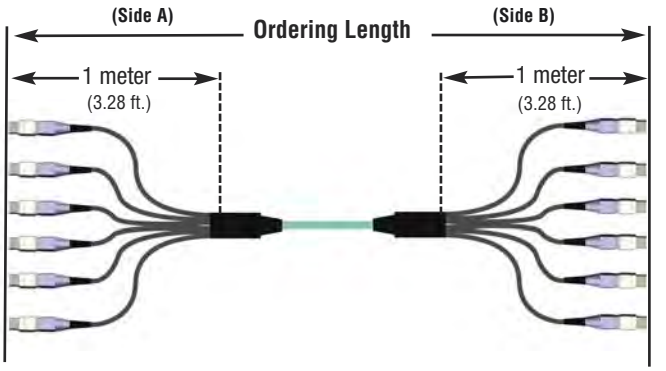
Connector (Side B)
LC = LC
SC = SC
SA = ST
(blank) = Pigtail

Length**
Length must be 3 digits
Example: **004** = 4m
012 = 12 ft.

Length Unit
F = Feet
M = Meters

** Non-armored only*

*** Ordering length is measured connector tip to connector tip. 900 micron, buffered, 1m (3.28 in.) breakout. Minimum order length is 4 meters (13.1 ft.)*



Note: These products are made to order. Call for lead time and availability.

Fiber Trunking Cable Assemblies

CABLE — Optical and Physical Specifications

Cable Type	Mulitmode				Singlemode
	LightSystem® 50/125 µm (OM1) (850/1300nm)	Lightsystem 50/125 µm (OM2) (850/1300 nm)	**XGLO® 50/125 µm (OM3) (850/1300 nm)	**XGLO 50/125 µm (OM4) (850/1300 nm)	XGLO Singlemode (OS1/OS2) (1310/1550 nm)
Fiber Cable Attenuation, Max (dB/km)	3.5/1.0	3.5/1.0	3.0/1.0	3.0/1.0	0.5/0.5*
OFL Bandwidth, min (MHz•km)	200/500	500/500	1500/500	3500/500	N/A
Effective Modal Bandwidth, min (MHz•km)	N/A	N/A	2000/NS	4700/NS	N/A
Cable Outer Jacket Color	Orange	Orange	Aqua	Aqua	Yellow
Break-Out Colors: Single Fiber Strands**	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua				
Sub-Unit Colors and/or Markings**	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua				

*XGLO Singlemode fiber meets Low Water Peak specifications per ITU-T G.652.C/D

**XGLO Multimode cable premium fiber that meets IEEE 802.3 10 Gigabit Ethernet Standard as well as IEC-60793-2-10 and TIA-492AAAC (OM3) TIA-492AAAD (OM4) specifications for laser bandwidth Differential Mode Delay (DMD) specifications.

CONNECTORS — Optical Specifications

Fiber Type	Performance Class	Max Insertion Loss (dB)	Min Return Loss (dB)
62.5/125 µm Multimode (OM1)	LightSystem	0.65 (0.15 Typical)	25 (30 Typical)
50/125 µm Multimode (OM2)	LightSystem	0.65 (0.15 Typical)	25 (30 Typical)
50/125 µm Laser Optimized (OM3, OM4)	XGLO	0.25 (0.10 Typical)	30 (35 Typical)
Singlemode (OS1/OS2)	XGLO	0.40 (0.25 Typical)	55 (57 Typical)

CONNECTORS — Physical Specifications

Connector Type	IEC Intermateability Compliance	TIA Intermateability Compliance	Housing Color		Boot Color	
			SM	MM	SM	MM
SC	IEC 60874-14	TIA/EIA-604-3	Blue	Beige	Blue	Beige
ST	IEC 60874-10	TIA/EIA-604-2	N/A	N/A	Blue	Beige
LC	IEC 61754-20	TIA/EIA-604-10	Blue	Beige	White	White

CABLE DIAMETERS BY FIBER COUNT (ALL VALUES ARE NOMINAL)

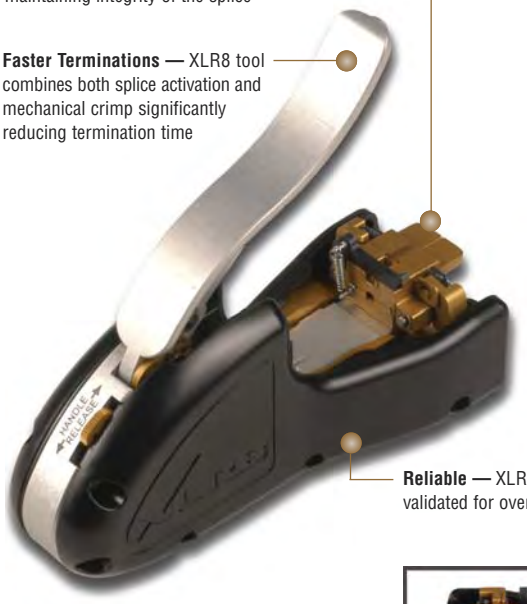
Cable Type	Fiber Strand Count	Sleeve Diameter mm / in.	Cable Diameter mm / in.	Minimum Bend Radius mm / in.	Required Duct Diameter mm / in.	Maximum Pull Force kgf/lbf.
Non-Armored	6	44.5 (1.75 in.)	5.8 (0.22 in.)	15x cable diameter	70 (2.75 in.)	45.4 (100 lbf.)
	12	44.5 (1.75 in.)	5.8 (0.22 in.)	15x cable diameter	70 (2.75 in.)	45.4 (100 lbf.)
	24	44.5 (1.75 in.)	8.8 (0.34 in.)	15x cable diameter	70 (2.75 in.)	45.4 (100 lbf.)
	36	63.5 (2.5 in.)	16.5 (0.64 in.)	20x cable diameter	90 (3.54 in.)	45.4 (100 lbf.)
	48	63.5 (2.5 in.)	16.0 (0.62 in.)	20x cable diameter	90 (3.54 in.)	45.4 (100 lbf.)
	72	63.5 (2.5 in.)	19.5 (0.76 in.)	20x cable diameter	90 (3.54 in.)	45.4 (100 lbf.)
Armored	12	44.5 (1.75 in.)	13.0 (0.51 in.)	15x cable diameter	90 (3.54 in.)	45.4 (100 lbf.)
	24	44.5 (1.75 in.)	14.8 (0.58 in.)	15x cable diameter	90 (3.54 in.)	45.4 (100 lbf.)

XLR8™ Fiber Termination Kit

Siemon's XLR8 mechanical splice termination kit incorporates an exclusive dual-process activation tool which dramatically reduces termination time per connector. This process is intended for use with 900μm tight buffered fiber cables.

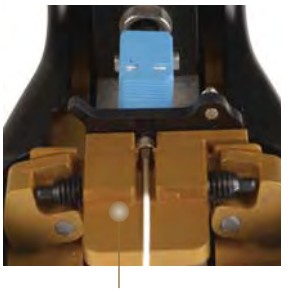
Robust Process — Single-step termination prevents fiber movement by eliminating the need to handle the connector between splice and crimp processes, maintaining integrity of the splice

Faster Terminations — XLR8 tool combines both splice activation and mechanical crimp significantly reducing termination time



Reliable — XLR8 tool has been validated for over 500,000 cycles

Flexible Ergonomics — Tool optimized for use in handheld or table-top orientation



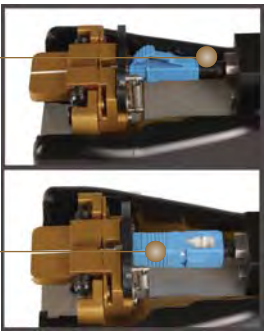
Fiber Alignment Aid — Smooth alignment channel simplifies fiber insertion and avoids damage to fiber end face

Oil Dampening System — Oil dampening system allows the blade to cleave at a uniform speed eliminating user variance resulting in a consistent high quality cleave

Precision Cleaver — Kit features a user-friendly fiber cleaver designed to provide clean, precise and high performance cleaves on an array of fiber types

Reduced Risk of Polish Contamination — All termination steps completed with connector dust cap in place

Universal LC/SC Compatibility — Tool terminates both LC and SC connectors with no time-consuming changeover required



Cleaver Life Span — Increased blade life span resulting in 48,000 cleaves

Safety — Integrated cleaver fiber collection bin eliminates handling of cleaved fiber

Ordering Information:

Part #	Description
FTERM-XLR8	XLR8 fiber termination kit

Kit Includes:

- Activation tool
- Jacket stripper
- Buffer stripper
- Scissors
- Precision cleaver
- Strip template
- Marker
- Alcohol pads
- Electrical tape
- Convenient carrying case
- DVD instructions

Replacement Parts

Part #	Description
FTERM-XLR8-A	Fiber activation tool, replacement
FTERM-XLR8-C2	Precision fiber cleaver, replacement

XLR8™ Pre-Polished Connectors

Combined with the patent-pending XLR8 activation tool, Siemon's pre-polished XLR8 mechanical splice connectors can be deployed with unsurpassed termination speed and quality. Available in both LC and SC configurations, these connectors support both the Multimode and Singlemode versions of Siemon's 10 Gb/s XGLO® and Gigabit LightSystem® solutions.

Optical Performance

Insertion Loss
- SM: 0.20dB Typ
- MM: 0.20dB Typ

Return Loss
- SM: -55dB Typ
- MM: -37dB Typ

Fewer Termination Steps – XLR8 SC connectors ship factory-assembled, eliminating time-consuming field assembly of inner and outer connector bodies

Enhanced Splice Integrity – XLR8 connector termination process combines splicing and crimping in a single step, eliminating connector handling that can impact splice integrity

Robust Polish Protection – Entire connector termination process is completed with dust-cap in place, protecting the critical end face polish from contamination

High Quality Performance – Exceeds TIA standards for optical performance and fiber retention strength

Ordering Information:

LC Multimode

Part #	Description
FC1M-LC-5V-B12	LC Simplex connector, beige, 50/125µm (OM3/OM4) laser optimized, 900µm buffered fiber*, aqua boot (XGLO)
FC1M-LC-6MM-B80	LC Simplex connector, beige, 62.5/125µm Multimode, 900µm buffered fiber*, beige boot (LightSystem)
FC1M-LC-5MM-B01	LC Simplex connector, beige, 50/125µm Multimode, 900µm buffered fiber*, black boot (LightSystem)

LC Singlemode

Part #	Description
FC1M-LC-SM-B06	LC Simplex connector, blue, Singlemode, 900µm buffered fiber*, blue boot (XGLO and LightSystem)
FC1M-LCA-SM-B07	LC Simplex connector, green, angled polished Singlemode, 900µm buffered fiber*, green boot (XGLO and LightSystem)

SC Multimode

Part #	Description
FC1M-SC-5V-B12	SC Simplex connector, beige, 50/125µm (OM3/OM4) laser optimized, 900µm buffered fiber*, aqua boot (XGLO)
FC1M-SC-6MM-B80	SC Simplex connector, beige, 62.5/125µm Multimode, 900µm buffered fiber*, beige boot (LightSystem)
FC1M-SC-5MM-B01	SC Simplex connector, beige, 50/125µm Multimode, 900µm buffered fiber*, black boot (LightSystem)

SC Singlemode

Part #	Description
FC1M-SC-SM-B06	SC Simplex connector, blue, Singlemode, 900µm buffered fiber*, blue boot (XGLO and LightSystem)
FC1M-SCA-SM-B07	SC Simplex connector, green, angled polished Singlemode, 900µm buffered fiber*, green boot (XGLO and LightSystem)

** For use with 900µm tight buffer terminations only - Fan-out kits to transition from 250µm to 900µm cannot be used with XLR8 connectivity.*

SC and ST Epoxy Polish Connectors

SC Epoxy Polish Connectors

SC duplex connectors have a duplexing clip, which allows each connector to be removed individually. In the event fiber polarity is reversed during termination, there's no need to discard the connector. Simply remove connectors from the clip and switch to correct the mistake, saving valuable installation time and money. The duplexing clip also speeds troubleshooting. In the event there's a fault with a single connection, an individual connector can be removed from the clip and re-terminated without disturbing the adjacent connector.

SC connectors employ an outer housing that is color-coded in accordance with ISO/IEC 11801 Ed. 2.0 and ISO/IEC TIA/EIA-568-B.3 requirements (beige for Multimode and blue for Singlemode).

Multimode (XGLO® and LightSystem®)

Part #	Description
FC1-SC-MM-J80	SC simplex connector, beige, jacketed fiber, beige boot
FC1-SC-MM-B80	SC simplex connector, beige, buffered fiber, beige boot
FC2-SC-MM-B80	SC duplex connector, beige, buffered fiber, two beige boots
FC2-SC-MM-J	SC duplex connector, jacketed fiber, one black boot and one biege boot

Add "-B" to the end of part number for bulk pack (Simplex: 100/box, Duplex: 50/box).

Simplex

Singlemode (XGLO)

Part #	Description
FC1-SC-SM-B06	SC simplex connector, blue, buffered fiber, blue boot
FC1-SC-SM-J06	SC simplex connector, blue, jacketed fiber, blue boot
FC2-SC-SM-B06	SC duplex connector, blue, buffered fiber, two blue boots
FC2-SC-SM-J06	SC duplex connector, blue, jacketed fiber, blue boot

Add "-B" to the end of part number for bulk pack (Simplex: 100/box, Duplex: 50/box).

Duplex

ST Epoxy Polish Connectors

The ST connector employs a rugged metal bayonet coupling ring with radial ramps which facilitate engagement to the studs of the mating adapter.

Multimode (XGLO and LightSystem)

Part #	Description
FC1-SA-MM-J80	ST simplex connector, jacketed fiber, beige boot
FC1-SA-MM-B80	ST simplex connector, buffered fiber, beige boot

Add "-B" to the end of part number for bulk pack (100/box).

Jacketed

Singlemode (XGLO)

Part #	Description
FC1-SA-SM-J06	ST simplex connector, jacketed fiber, blue boot
FC1-SA-SM-B06	ST simplex connector, buffered fiber, blue boot

Add "-B" to the end of part number for bulk pack (100/box).

Buffered

LC Epoxy Polish Connectors (XGLO® & LightSystem®)

Siemon LC products offer all the benefits of SC and ST connections in a Small Form Factor (SFF), high-density design. LC adapter products are compatible with MAX®, CT®, FOB, and MX-SM™ work area and telecommunications room products, providing a wide variety of installation options. LC connectors take just two minutes to terminate, using the Siemon *LightSpeed*® Termination Kit.

Multimode

Part #	Description
FC1-LC-MM-B80	LC simplex connector, beige, Multimode, buffered fiber, beige boot
FC2-LC-MM-J80	LC duplex connector, beige, Multimode, jacketed fiber, beige boots

Singlemode

Part #	Description
FC1-LC-SM-B02	LC simplex connector, blue, Singlemode, buffered fiber, white boot
FC1-LC-SM-J02	LC simplex connector, blue, Singlemode, jacketed fiber, white boot

Add "-B" to the end of part number for bulk pack (Simplex: 100/box, Duplex: 50/box).

LightSpeed® ST, SC Fiber Termination Kit

Achieve faster fiber terminations and higher performance with Siemon's *LightSpeed* Termination Kit. The Siemon fiber termination kit contains all the tools required for termination of Multimode or Singlemode ST or SC connectors — packaged in a rugged canvas carrying case. Kit includes LC microscope head. Use the optional LC Upgrade Kit (see below) for LC connector terminations. All consumables must be ordered separately as noted below.*

Part #	Description
FTERM-L2	*LightSpeed* Fiber Termination Kit for ST and SC Multimode connectors*

Note: Select tools and other termination products supplied with the kit can be ordered separately.

**All consumables including primer, adhesive and polishing films are contained in the consumables kit and must be ordered separately.*

LC Fiber Termination *LightSpeed*® Upgrade Kit

The Siemon LC upgrade kit is used in conjunction with the *LightSpeed* Termination Kit (FTERM-L2) and has all the accessories to terminate LC connectors using Siemon's exclusive *LightSpeed* adhesive. The kit includes an LC polishing puck and a micro-torch* (to shrink the color-coded LC crimp sleeve tubing).The LC microscope head is included with the FTERM-L2 kit.

Part #	Description
FTERM-LC	LC Fiber Termination Upgrade Kit (used in conjunction with FTERM-L2)

Note: Contents of FTERM-LC are also available individually.
Contact our Customer Service Department for more information.
**Butane fuel not included.*

LightSpeed® Fiber Consumables Kit

Siemon's *LightSpeed* fiber terminations consumables kit features a premium abrasive film to polish ceramic ferrules and glass at the same level. The films have been qualified to assure exceptional insertion and return loss results when used in accordance with Siemon instructions.

Part #	Description
FT-CKIT-L2*	Consumables kit for use with fiber termination kit (FTERM-L2). Includes enough consumables to perform a minimum of 200 Multimode or Singlemode terminations

Individual components may be ordered separately as replacements. Part numbers listed below.

FT-PRBOT-L	Primer bottle (3.5mL)
FT-ADH-L*	Adhesive Syringe (5cc)
FT-ALPAD	Alcohol pads
FT-WIPES	Dry lint-free wipes
FT-SYRMTIP	Syringe tip needles w/covers
FT-PF12	12µm air polish film, gray
FT-PF3	3µm polish film, pink
FT-PF1	1µm polish film, purple
FT-FF	Finishing film, white
FT-PF6**	6µm recovery film, bronze

**This product contains material with a time and temperature sensitive shelf life.*
Store between 4.4 to 38.5°C (39.2 to 101.3°F) and verify expiration date marked on product prior to use.

***This recovery film is optional and not included with the consumables kit.*

Replacement Tools for Fiber Termination Kits

Siemon offers a full line of replacement tools in the event that a tool is lost or has used up its life expectancy. The replacement tools are the exact tools provided in the fiber termination kits.

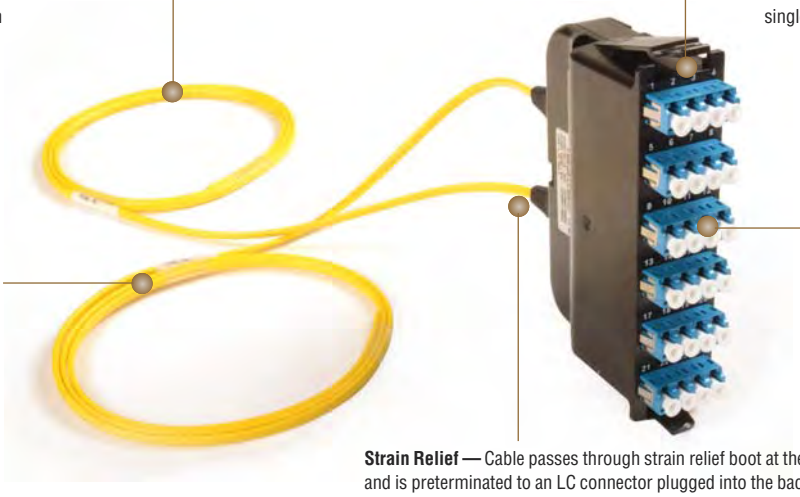
Part #	Description
FT-MS400	400X power microscope
FT-SCRIBE	Double bladed fiber cleaver
CI-SCISSORS	Electrician scissors
FT-CRIMP	Crimp tool w/3-position die for ST/SC/LC
FT-PAD	152.4 x 152.4mm (6 x 6 in.) polishing pad
FT-PUCK	SC/ST compatible polishing puck
FT-TMPL	Template for SC/ST and LC connectors
FT-JSTRP	Jacket stripper
FT-BSTRP	Buffer stripper
FT-LCPUCK	Duplex LC Polishing Puck
FT-MSLC2HEAD	Duplex LC Scope Adapter

Fusion Splice Solutions - Fiber Splice Modules

Siemon Splice Modules provide an interface between bulk cable and LC duplex jumpers that connect directly to active equipment. The splice modules are offered in ribbon or 900um tight buffer pigtail options. These modules allow mass-fusion splicing of ribbon pigtails directly to ribbon cable or 900um tight buffer pigtails to loose fiber cable. The splice modules are designed using Siemon's Quick-Pack® footprint and work in conjunction with Siemon's Expanded RIC or FCP3 fiber enclosures.

Color Coded Fibers — Allows for like-color fibers to be fusion spliced on each side of the channel to eliminate confusion

Quick-Pack® Splice Modules — Can be inserted or removed with a single finger for quick and easy access



LC Interface — Available in 12 or 24 fibers

Jacketed Pigtail — Available in ribbon or 900um tight buffer fiber

Strain Relief — Cable passes through strain relief boot at the rear of the module and is preterminated to an LC connector plugged into the back of the LC adapter. Custom designed boot maintains bend radius for the fiber exiting the modules

LC Fiber Port Position		
Pigtail Color	**A Side Polarity***	**B Side Polarity***
Blue	1/13	2/14
Orange	2/14	1/13
Green	3/15	4/16
Brown	4/16	3/15
Slate	5/17	6/18
White	6/18	5/17
Red	7/19	8/20
Black	8/20	7/19
Yellow	9/21	10/22
Violet	10/22	9/21
Rose	11/23	12/24
Aqua	12/24	11/23

Fiber Splice Module Performance			
Fiber Type		**MAX. Insertion Loss (db)**	**MIN. Return Loss (db)**
6MM	62.5/125 (OM1)	0.50	25
5MM	50/125 (OM2)	0.50	25
5L-MM	50/125 (OM3)	0.25	30
5V-MM	50/125 (OM4)	0.25	30
SM-LWP	SM (OS1/OS2)	0.25	55

** Opposing splice module types must be used on opposite ends (example: "A" side & "B" side) of the same fiber link to maintain proper polarity from transmitter to receiver*

Ordering Information

FSM-(X)-(XX)-LC(X)(XX)-01(X)

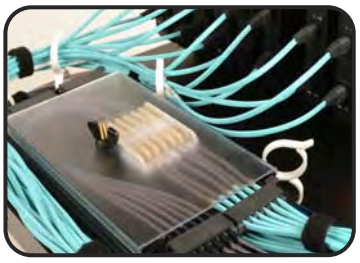
Fiber Construction
Blank = Ribbon
2 = 900µm Tight Buffer

Port
12 = 12 port
24 = 24 port

Polish
Blank = UPC
A = APC (Singlemode Only)

Fiber Type
6 = OM1 62.5/125 Multimode beige adapters
5 = OM2 50/125 Multimode beige adapters
5L = OM3 XGLO 300 50/125 Multimode aqua adapters
5V = OM4 XGLO 550 50/125 Multimode aqua adapters
SM = OS1/OS2 Singlemode blue adapters

Module Type
A = A Side Polarity
B = B Side Polarity

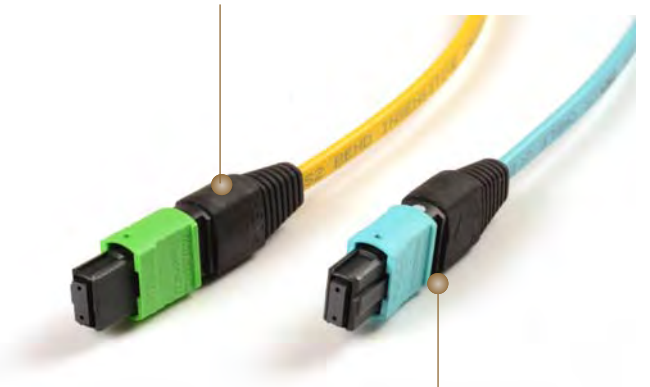


Expanded RIC Fiber Enclosures
The fiber splice modules can be used in Siemon's Expanded RIC or FCP3 fiber enclosures.

Fusion Splice Solutions - MTP Pigtails

Siemon's fusion splice solutions include an MTP pigtail option which can be connected to a RIC MTP adapter plate or plug and play module and then mass fusion spliced within the fiber enclosures. MTP pigtails are the ideal solution when field-installing an MTP interface for a 40/100G application.

MTP Connector Gender —
Options for both male or female



Performance —
All MTP pigtails are manufactured to Low Loss specifications

Identification —Pigtails are serialized for easy identification and reference to test data that ships with every pigtail

Jacketed Pigtail —
Available in ribbon fiber, OM3, OM4 and Singlemode

MTP PIGTAIL OPTICAL SPECIFICATIONS

Fiber Type	Perfomance Class	Max. Inserion Loss (db)	Min. Return Loss (db)
5L	OM3 XGLO 300 Low Loss	0.20	20
5V	OM4 XGLO 500 Low Loss	0.20	20
SM-LWP	OS1/OS2 XGLO Singlemode	0.75	55

Ordering Information

FP12(X)-(XX)(XX)(X)-(XX)(X)

Cable Jacket
A = Ribbon Jacket

MTP Gender
MM = MTP Male
MF = MTP Female

Fiber Type
5L = OM3 XGLO 300 62.5/125 Multimode
5V = OM4 XGLO 550 50/125 Multimode
SM = OS1/OS2 Singlemode

Length Unit
F = Feet
M = Meter

Length*
Length must be 3 digits
Example**: 03 =** 3m
10 = 10 ft.

Cable Jacket Rating
P = Plenum
L = LSOH

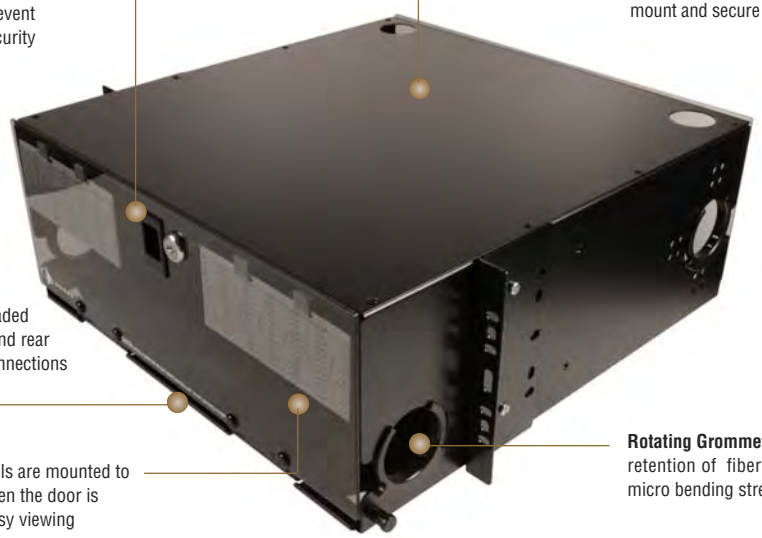
MTP Pigtail
The MTP pigtail allows for field installable MTP connectivity using ribbon cable and mass fusion splice installation practices

Fusion Splice Solutions - Expanded RIC Enclosure

Siemon's Rack Mount Interconnect Center provides superior fiber density without sacrificing protection and accessibility. Key features include extending the depth of the enclosure to allow added space for fusion splicing and cable slack storage. With superior cable management, port identification, fiber accessibility and security, the Expanded RIC is the best way to protect mission critical fiber connections.

Security — Single finger latch on both front and rear doors. Included key locks prevent unauthorized access for enhanced security

Splicing Capability — Extra space provided to mount and secure multiple splice trays in position



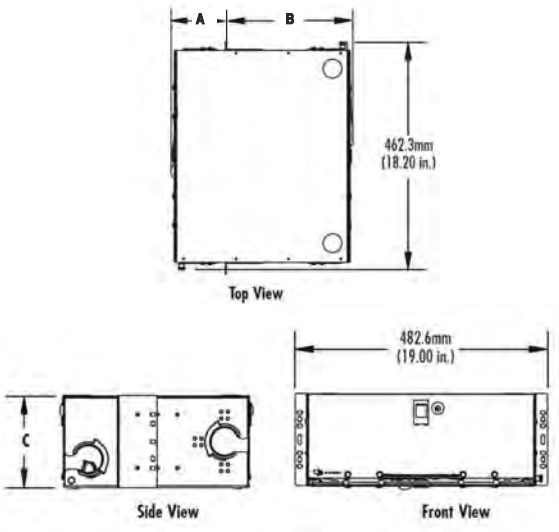
Quick Release Hinges — Spring loaded hinges enable easy removal of front and rear doors for complete access to fiber connections

Port Identification — Hinged labels are mounted to the front door for full visibility. When the door is opened, the labels flip down for easy viewing

Rotating Grommets — Facilitate loading and retention of fiber jumpers while minimizing micro bending stress when using the sliding tray

EXPANDED RIC ENCLOSURE DIMENSIONS

Expanded RIC3 Part #	Mounting Bracket Position	A	B	C
		mm/in.	mm/in.	mm/in.
RIC3-E-24-01	1	109.7 (4.31 in.)	360.4 (14.1 in.)	85.7 (3.37 in.)
	2	147.8 (5.81 in.)	322.3 (12.6 in.)	85.7 (3.37 in.)
	3	185.9 (7.31 in.)	284.2 (11.1 in.)	85.7 (3.37 in.)
RIC3-E-36-01	1	109.7 (4.31 in.)	360.4 (14.1 in.)	85.7 (3.37 in.)
	2	147.8 (5.81 in.)	322.3 (12.6 in.)	85.7 (3.37 in.)
	3	185.9 (7.31 in.)	284.2 (11.1 in.)	85.7 (3.37 in.)
RIC3-E-48-01	1	109.7 (4.31 in.)	360.4 (14.1 in.)	130.2 (5.12 in.)
	2	147.8 (5.81 in.)	322.3 (12.6 in.)	130.2 (5.12 in.)
	3	185.9 (7.31 in.)	284.2 (11.1 in.)	130.2 (5.12 in.)
RIC3-E-72-01	1	109.7 (4.31 in.)	360.4 (14.1 in.)	174.6 (6.87 in.)
	2	147.8 (5.81 in.)	322.3 (12.6 in.)	174.6 (6.87 in.)
	3	185.9 (7.31 in.)	284.2 (11.1 in.)	174.6 (6.87 in.)



FUSION SPLICE MAX CAPACITY

Solution)	Splice Type	FCP3	RIC3-24	RIC3-36	RIC3-48	RIC3-72
MTP Pigtail	Fusion Ribbon	216	288	288	288	432
Fiber Splice Module	Fusion Ribbon	72	96	144	192	288
	Fusion 900m	72	96	96	96	144

RIC3-E-(XX)-01 . . . . . .Expanded RIC Enclosures

Enclosure Size

24 = 2RMS Enclosure with 4 adapter/module mounting spaces
36 = 2RMS Enclosure with 6 adapter/module mounting spaces
48 = 3RMS Enclosure with 8 adapter/module mounting spaces
72 = 4RMS Enclosure with 12 adapter/module mounting spaces

Fiber Connect Panel

The Fiber Connect Panel is a rack-mounted fiber enclosure that can be fitted with hard-mount adapters. It is designed to connect, protect, and manage up to 48 fibers in a low profile 1U rack space. The FCP3-R can be supplied empty (FCP3-R-01) or fully-loaded — and populated to provide terminations for 24 fibers in SC and 48 fibers in the LC version.

Part #	Description
FCP3-R-01	Fixed patch panel, 1U, C/W 12 blanks, Fiber management, black
FA2-SCSC-01	Fiber adapter, SC duplex, MM or SM, PB**
FA4-LCLC-06C	Fiber adapter, LC quad, SM, PB sleeve, blue**
FA4-LCLC-80C	Fiber adapter, LC quad, MM, PB sleeve, beige**
FA-BLANK	Fiber adapter Blank, black**

** Add "B" to the end of part number for bulk pack of 48.

FCP3-RACK	6- to 72-fiber (up to 288 fiber with MTP adapter plates) Fiber Connect Panel with fixed tray, accepts (3) Quick-Pack® adapter plates, 1U, black. Includes mounting brackets, housing/cover, fiber managers and grommet *height: 43.2mm (1.7 in.)* *width: 482.6mm (19 in.)* *depth: 241.3mm (9.5 in.)*

Note: 1U = 44.5 mm (1.75 in.)

Mass Fusion Splice Accessories

Part #	Description
HT-MFS	40mm mass fusion heat shrink sleeve for ribbon fiber
TRAY-4-R-MFS	Mass fusion spice tray for up to (6) 12 fiber splices with sleeve protection holder

Single Fiber Fusion Splice Accessories

Part #	Description
HT-40	40mm single fiber heat shrink sleeve
HT-60	60mm single fiber heat shrink sleeve

**Heating times may vary depending on heat source.*

TRAY-3	Standard splice tray for up to 24 fusion splices with sleeve protection. For use with Expanded RIC and FCP3 fiber enclosures
TRAY-M-3	Mini splice tray for up to 12 fusion splices with sleeve protection

XGLO® Indoor Ribbon Fiber Cable (Global)

Siemon indoor ribbon fiber cables are ideal for data centers, campus and building backbones. Ribbon cables enable the migration to high fiber count systems required to support high bandwidth applications including 10, 40 and 100Gb/s. These cables contain 12-fiber ribbon units inside a central tube with dielectric strength members for tensile strength and color coded fibers with individual ribbon unit ID numbers for clear identification. Siemon fiber optic cables are offered in XGLO configurations supporting high-speed, applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

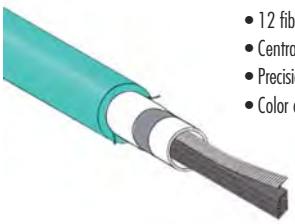
Ordering Information

XGLO Multimode Laser Optimized 50/125 OM3 and OM4 (Aqua Jacket), Singlemode OS1/OS2 (Yellow Jacket)

Part #	Fiber Count	Construction
9BR(X)(X)012G-(XXXX)(Y)	12	1 ribbon with 12 fibers
9BR(X)(X)024G-(XXXX)(Y)	24	2 ribbons with 12 fibers
9BR(X)(X)036G-(XXXX)(Y)	36	3 ribbons with 12 fibers
9BR(X)(X)048G-(XXXX)(Y)	48	4 ribbons with 12 fibers

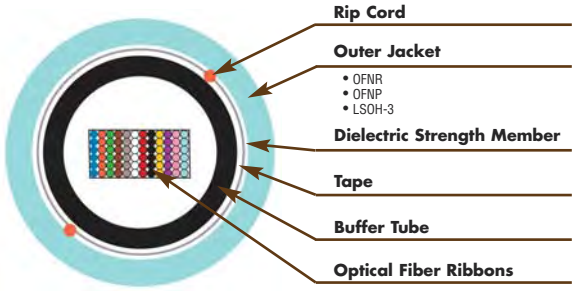
Part #	Fiber Count	Construction
9BR(X)(X)072G-(XXXX)(Y)	72	6 ribbons with 12 fibers
9BR(X)(X)096G-(XXXX)(Y)	96	8 ribbons with 12 fibers
9BR(X)(X)144G-(XXXX)(Y)	144	12 ribbons with 12 fibers
9BR(X)(X)216G-(XXXX)(Y)	216	18 ribbons with 12 fibers
9BR(X)(X)R288G-(XXXX)(Y)	288	24 ribbons with 12 fibers

Use first (X) to specify fiber type: 5 = 50/125µm, 8 = Singlemode
Use second (X) to specify fiber jacket type: R = Riser OFNR, P = Plenum OFNP, H = LSOH
Use (XXXX) to specify class performance: T312 = OM3 50µm Laser Optimized, T512 = OM4 50µm Laser Optimized, E205 = OS1/OS2 Singlemode
Use (Y) to specify unit of measure: A = feet for North America, M = meter for International
Note: 288 strand count is only available in a Riser (OFNR) jacket.



HIGHLIGHTS

- 12 fiber ribbon design
- Central tube design
- Precision fiber and ribbon geometries
- Color coded per TIA-598-C



XGLO 300 Multimode 50/125, OM3

STANDARDS COMPLIANCE

- ISO/IEC 11801:2002 OM3
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAC
- Telcordia GR-409-CORE
- OFNR: Communications Type OFNR (ETL) and CSA FT4 (ETL)
- OFNP: Communications Type OFNP (ETL) and CSA FT6 (ETL)
- IEC 60332-3
- IEC 60332-1-2 (Single strand)
- IEC 60754-2 (Acid gas)
- IEC 61034-2 (Smoke density)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	300
10GBASE-LX4 (1300 nm)	300
1000BASE-S (850 nm)	1000
1000BASE-LX (1300 nm)	600
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO 550 Multimode 50/125, OM4

STANDARDS COMPLIANCE

- ISO/IEC 11801:2002 OM3
- ISO/IEC 11801:2002 Ammendment 2 OM4
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAD
- IEC 60793-2-10 Fibre Type A1a.3
- Telcordia GR-409-CORE
- OFNR: Communications Type OFNR (ETL) and CSA FT4 (ETL)
- OFNP: Communications Type OFNP (ETL) and CSA FT6 (ETL)
- IEC 60332-3
- IEC 60332-1-2 (Single strand)
- IEC 60754-2 (Acid gas)
- IEC 61034-2 (Smoke density)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	550
10GBASE-LX4 (1300 nm)	300
1000BASE-S (850 nm)	1100
1000BASE-LX (1300 nm)	600
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO Singlemode, OS1/OS2

STANDARDS COMPLIANCE

- ISO/IEC 11801:Ed 2.0 Amendment:1:2008
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- Telcordia GR-409-CORE
- ITU-T G.652 C/D
- OFNR: Communications Type OFNR (ETL) and CSA FT4 (ETL)
- OFNP: Communications Type OFNP (ETL) and CSA FT6 (ETL)
- IEC 60332-3
- IEC 60332-1-2 (Single strand)
- IEC 60754-2 (Acid gas)
- IEC 61034-2 (Smoke density)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-L (1310 nm)	8,000
10GBASE-E (1550 nm)	30,000
10G Fibre Channel (Serial-1310 nm)	10,000
10G Fibre Channel (WDM-1310 nm)	10,000
1000BASE-LX (1300 nm)	5,000
Fibre Channel 266/1062 (1300 nm)	10,000
ATM 52/155/622 (1300 nm)	15,000

XGLO® Indoor Ribbon Fiber Cable (Global)

Minimum Performance Parameters for XGLO 50/125µm Multimode Fiber

Fiber Type	Guaranteed Gigabit Transmission Distance (m)		Guaranteed 10 Gigabit Transmission Distance (m)		Minimum Bandwidth (MHz•km)		Maximum Attenuation (dB/km)		Group Index of Refraction	
	850 nm	1300 nm	850 nm†	1300 nm††	850 nm	1300 nm	850 nm	1300 nm	850 nm	1300 nm
50/125 (OM3)	1000	600	300	300	RML - 2000 OFL - 1500	OFL - 500	3.0	1.0	1.483	1.479
50/125 (OM4)	1100	600	550	300	RML - 4700 OFL - 3500	OFL - 500	3.0	1.0	1.483	1.479

† 10GBASE-S †† 10GBASE-LX4

Minimum Performance Parameters for XGLO Singlemode Fiber

Fiber Type	Wavelength (nm)	Maximum Attenuation (dB/km)	Zero Dispersion Wavelength (nm)	Zero Dispersion Slope (nm^2-km)	Index of Refraction
Singlemode (OS1/OS2)	1310	0.40	1317	≤0.092	1.468
	1300 - 1324	0.40	1317	≤0.092	1.468
	1383	0.40	1317	≤0.092	1.468
	1550	0.30	1317	≤0.092	1.468

PHYSICAL SPECIFICATIONS (All Values Are Nominal)

Fiber Count	Nominal Cable Diameter mm	Maximum Pulling Tension Newtons		Maximum Net Weight kg/km		
		Installation	Long Term			
	OFNR/ OFNP/ LSOH	OFNR/ OFNP/ LSOH	OFNR/ OFNP/ LSOH	OFNR	OFNP	LSOH
12, 24, 36	9.7	1320	400	88	99	93
72, 96	12.4			140	156	147
144, 216	15.2			184	220	193
288	20.1 (OFNR only)			309	n/a	n/a

Fiber Count	Maximum Crush Resistance (N/mm)	Maximum Flex Resistance (N/mm)	Operating Temperature °C			Installation Temperature °C			Storage Temperature °C			Minimum Bend Radius (cm)	
			OFNR	OFNP	LSOH	OFNR	OFNP	LSOH	OFNR	OFNP	LSOH	Installation	Long Term
12, 24, 36, 48	100	25	-20 to 70	0 to 70	-40 to 70	-10 to 60	0 to 60	-30 to 60	-40 to 70	-40 to 70	-40 to 70	9.6	14.4
72, 96												12.4	18.6
144, 216												15.5	22.8
288				n/a	n/a		n/a	n/a		n/a	n/a	21.0	31.7

Custom lengths are available upon request. Contact our Customer Service Department for more information.
Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.

XGLO® & LightSystem® Indoor Tight Buffer (International)

Siemon indoor tight buffer cables are ideal for data centers, campus and building backbones. Siemon fiber optic cables are offered in XGLO and LightSystem configurations supporting high-speed applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

Ordering Information

LightSystem: Multimode 62.5/125 OM1, Multimode 50/125 OM2 (Orange Jacket)

Part #	Fiber Count	Construction
9F(X)B(X)-2F(XXXX)	2	1 tube of 2 fibers
9F(X)B(X)-4A(XXXX)	4	1 tube of 4 fibers
9F(X)B(X)-6B(XXXX)	6	1 tube of 6 fibers
9F(X)B(X)-8C(XXXX)	8	1 tube of 8 fibers
9F(X)B(X)-12D(XXXX)	12	1 tube of 12 fibers
9F(X)B(X)-16K(XXXX)	16	1 tube of 16 fibers
9F(X)B(X)-24L(XXXX)	24	1 tube of 24 fibers
9F(X)B(X)-48D(XXXX)	48	4 tubes of 12 fibers
9F(X)B(X)-72D(XXXX)	72	6 tubes of 12 fibers

Use first (X) to specify fiber type: 6 = OM1 62.5/125µm, 5 = OM2 50/125µm
Use second (X) to specify cable rating: 1 = Riser OFNR, 2 = Plenum OFNP, 3 = LSOH
Use (XXXX) to specify length in kilometer. Use 4 characters including decimal point

For orders less than kilometer first "X" must be zero.
Example p/n: 9F5LB1-12D1.50: (1.5 kilometers [1500 meters] of 50/125µm laser optimized 12-strand riser rated fiber optic cable)
For orders of less than 1km, the first "X" must be zero (0).
Example: 9F5LB1-12D0.55 (.550 kilometers [550 meters] of 50/125µm laser optimized 12-strand riser rated fiber optic cable)

XGLO: Multimode 50/125 OM3 and OM4 (Aqua Jacket), Singlemode OS1/OS2 (Yellow Jacket)

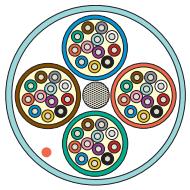
Part #	Fiber Count	Construction
9F(XX)B(X)-2F(XXXX)	2	1 tube of 2 fibers
9F(XX)B(X)-4A(XXXX)	4	1 tube of 4 fibers
9F(XX)B(X)-6B(XXXX)	6	1 tube of 6 fibers
9F(XX)B(X)-8C(XXXX)	8	1 tube of 8 fibers
9F(XX)B(X)-12D(XXXX)	12	1 tube of 12 fibers
9F(XX)B(X)-16K(XXXX)	16	1 tube of 16 fibers
9F(XX)B(X)-24L(XXXX)	24	1 tube of 24 fibers
9F(XX)B(X)-48D(XXXX)	48	4 tubes of 12 fibers
9F(XX)B(X)-72D(XXXX)	72	6 tube of 12 fibers

Use (XX) to specify fiber type: 5L = OM3 50/125µm Laser Optimized, 5V = OM4 50/125µm Laser Optimized, 8L = OS1/OS2 Singlemode
Use (X) to specify cable rating: 1 = Riser OFNR, 2 = Plenum OFNP, 3 = LSOH
Use (XXXX) to specify length in kilometer. Use 4 characters including decimal point

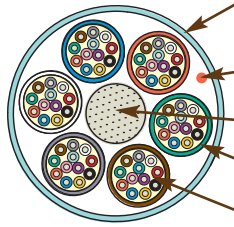
HIGHLIGHTS

- 900µm tight buffer
- 250µm coated optical fiber
- Length markings in 0.6m (2 ft.) increments
- Color code per TIA-598-C

2-24 Fiber



48 Fiber



72 Fiber

Jacket (Aqua)
- Material:
  - OFNR - PVC
  - OFNP - FRPVC
  - LSOH - LSOH Compound

Rip Cord
- Applied longitudinally under cable jacket

Central Strength Member
- Light-weight solid dielectric
- 48, 72 Strand

Aramid Yarn
- Water blocking swellable yarn

Identification
- Color-coded fibers
- Color-coded buffer tubes

LIGHTSYSTEM Multimode 62.5/125, OM1
Multimode 50/125, OM2

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM1 (62.5/125)
- ISO/IEC 11801:2002 OM2 (50/125)
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAB
- Telcordia GR-409-CORE
- LSOH IEC 60332-3

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	N/A
50/125µm	82
62.5/125µm	26
1000BASE-S (850 nm)	N/A
50/125µm	550
62.5/125µm	275
1000BASE-LX (1300 nm)	550
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO 300 Multimode 50/125, OM3

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM3
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAC
- Telcordia GR-409-CORE
- LSOH IEC 60332-3

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	550
10GBASE-LX4 (1300 nm)	300
1000BASE-S (850 nm)	1100
1000BASE-LX (1300 nm)	600
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO 550 Multimode 50/125, OM4

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM3
- ISO/IEC 11801:2002 Ammendment 2 OM4
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAD
- IEC 60793-2-10 Fiber Type A1a.3
- Telcordia GR-409-CORE
- LSOH IEC 60332-3

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	300
10GBASE-LX4 (1300 nm)	300
1000BASE-S (850 nm)	1000
1000BASE-LX (1300 nm)	600
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO Singlemode, OS1/OS2

STANDARDS COMPLIANCE
- ISO/IEC 11801:Ed 2.0 Amendment:1:2008
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- Telcordia GR-409-CORE
- ITU-T G.652 C/D
- LSOH IEC 60332-3

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-L (1310 nm)	8,000
10GBASE-E (1550 nm)	30,000
10G Fibre Channel (Serial-1310 nm)	10,000
10G Fibre Channel (WDM-1310 nm)	10,000
1000BASE-LX (1300 nm)	5,000
Fibre Channel 266/1062 (1300 nm)	10,000
ATM 52/155/622 (1300 nm)	15,000

XGLO® & LightSystem® Indoor Tight Buffer (International)

LightSystem® Gigabit Ethernet Fiber Optic Cable

Minimum Performance Parameters for LightSystem 62.5/125µm & 50/125µm Multimode Fiber

Fiber Type	Wavelength nm	Maximum Attenuation (dB/km)	Minimum Modal Bandwidth (MHz•km)	Guaranteed Gigabit Transmission Distance (Meters)	Index of Refraction
62.5/125 (OM1)	850	3.5	200	275	1.495
	1300	1.0	500	550	1.490
50/125 (OM2)	850	3.5	500	550	1.483
	1300	1.0	500	550	1.479

**The protocol pertinent to the transmission distance as noted is Gigabit Ethernet per IEEE 802.3:2005.*

Minimum Performance Parameters for XGLO 50/125µm Multimode Fiber

Fiber Type	Guaranteed Gigabit Transmission Distance (m)		Guaranteed 10 Gigabit Transmission Distance (m)		Minimum Bandwidth (MHz•km)		Maximum Attenuation (dB/km)		Group Index of Refraction	
	850 nm	1300 nm	850 nm†	1300 nm††	850 nm	1300 nm	850 nm	1300 nm	850 nm	1300 nm
50/125 (OM3)	1000	600	300	300	RML - 2000 OFL - 1500	OFL - 500	3.0	1.0	1.483	1.479
50/125 (OM4)	1100	600	550	300	RML - 4700 OFL - 3500	OFL - 500	3.0	1.0	1.483	1.479

† 10GBASE-S †† 10GBASE-LX4

Minimum Performance Parameters for XGLO Singlemode Fiber

Fiber Type	Wavelength (nm)	Maximum Attenuation (dB/km)	Zero Dispersion Wavelength (nm)	Zero Dispersion Slope (nm^2-km)	Index of Refraction
Singlemode (OS1/OS2)	1310	≤0.40	1312 ± 10	≤0.093	1.468
	1550	≤0.40	1312 ± 10	≤0.093	1.468
	1300 - 1324	≤0.30	1312 ± 10	≤0.093	1.468

XGLO and LightSystem Indoor Tight Buffer Physical Specifications

PHYSICAL SPECIFICATIONS (All Values Are Nominal)

Fiber Count	Nominal Cable Diameter mm	Maximum Pulling Tension Newtons				Nominal Net Weight kg/km	
		Installation		Long Term			
	OFNR/ LSOH/ OFNP	OFNR/ LSOH	OFNP	OFNR/ LSOH	OFNP	OFNR/ LSOH	OFNP
2	4.8	400	400	120	120	17	20
4	4.8	660	440	198	132	19	22
6	4.8	660	440	198	132	22	25
8	5.8	900	560	270	168	28	31
12	5.8	900	560	270	168	32	36
16	7.8	1320	660	396	198	49	52
24	8.8	1320	660	396	198	61	65
48	16.0	2700	1000	810	300	200	207
72	19.6	2700	1000	810	300	310	322

Fiber Count	Maximum Crush Resistance (N/mm)	Maximum Crush Resistance (N/mm)	Operating Temperature °C	Storage Temperature °C	Minimum Bend Radius	
					Installation	Long Term
2-24	22	25/ 100	-20 to 70	-40 to 70	15 x DIA.	10 x DIA.
48-72	22	25/ 100	-20 to 70	-40 to 70	20 x DIA.	10 x DIA.

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information.

XGLO® & LightSystem® Indoor Tight Buffer Distribution (North America)

Siemon indoor tight buffer cables are ideal for data centers, campus and building backbones. Siemon fiber optic cables are offered in XGLO and LightSystem configurations supporting high-speed, applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

Ordering Information

LightSystem Multimode 62.5/125 OM1, 50/125 OM2 (Orange Jacket)
XGLO Multimode Laser Optimized 50/125 OM3, OM4 (Aqua Jacket), Singlemode OS1/OS2 (Yellow Jacket)

Part #	Fiber Count	Construction
9BB(X)(X)002B-(XXXX)A	2	1 tube of 2 fibers
9BB(X)(X)004C-(XXXX)A	4	1 tube of 4 fibers
9BB(X)(X)006D-(XXXX)A	6	1 tube of 6 fibers
9BB(X)(X)008E-(XXXX)A	8	1 tube of 8 fibers
9BB(X)(X)012G-(XXXX)A	12	1 tube of 12 fibers

Part #	Fiber Count	Construction
9BB(X)(X)016C-(XXXX)A	16	4 tubes of 4 fibers
9BB(X)(X)024L-(XXXX)A	24	1 tube of 24 fibers
9BB(X)(X)036D-(XXXX)A	36	6 tubes of 6 fibers
9BB(X)(X)048G-(XXXX)A	48	4 tubes of 12 fibers
9BB(X)(X)072G-(XXXX)A	72	6 tubes of 12 fibers

Use 1st (X) to specify fiber type: 6 = 62.5/125µm, 5 = 50/125µm, 8 = Singlemode OS1/OS2
Use 2nd (X) to specify fiber jacket type: R=Riser OFNR, P= Plenum OFNP
Use (XXXX) to specify class performance: G109 = OM1 62.5µm, T109 = OM2 50µm,T312 = OM3 50µm Laser Optimized,T512 = OM4 50µm Laser Optimized, E205 = OS1/OS2 Singlemode
Note: Contact Siemon Customer Service for cables available in fixed reel lengths. (unit of measure) F=feet

HIGHLIGHTS

- 900µm tight buffer
- 250µm coated optical fiber
- Length markings in 2 ft. increments
- Color code Per TIA-598-C

2,4,6,8,12,24 FIBER **16, 48 FIBER** **72 FIBER**

LIGHTSYSTEM Multimode 62.5/125, OM1 50/125, OM2

STANDARDS COMPLIANCE

- ISO/IEC 11801:2002 OM1 (62.5/125)
- ISO/IEC 11801:2002 OM2 (50/125)
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAB
- Telcordia GR-409-CORE
- OFNR: Communications Type OFNR (UL) and CSA FT4 c(UL
- OFNP: Communications Type OFNP (UL) and CSA FT6 c(UL)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-SX (850 nm)	N/A
50/125µm	82
62.5/125µm	26
1000BASE-SX (850 nm)	N/A
50/125µm	550
62.5/125µm	275
1000BASE-LX (1300 nm)	550
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO 300 Multimode 50/125, OM3

STANDARDS COMPLIANCE

- ISO/IEC 11801:2002 OM3
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAC
- Telcordia GR-409-CORE
- OFNR: Communications Type OFNR (UL) and CSA FT4 c(UL
- OFNP: Communications Type OFNP (UL) and CSA FT6 c(UL)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-SX (850 nm)	300
10GBASE-LX4 (1300 nm)	300
1000BASE-SX (850 nm)	1000
1000BASE-LX (1300 nm)	600
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO 550 Multimode, 50/125, OM4

STANDARDS COMPLIANCE

- ISO/IEC 11801:2002 OM3
- ISO/IEC 11801:2002 Ammendment 2 OM4
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAD
- IEC 60793-2-10 Fiber Type A1a.3
- Telcordia GR-409-CORE
- OFNR: Communications Type OFNR (UL) and CSA FT4 c(UL)
- OFNP: Communications Type OFNP (UL) and CSA FT6 c(UL)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-SX (850 nm)	550
10GBASE-LX4 (1300 nm)	300
1000BASE-SX (850 nm)	1100
1000BASE-LX (1300 nm)	600
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO Singlemode, OS1/OS2

STANDARDS COMPLIANCE

- ISO/IEC 11801:Ed 2.0 Amendment:1:2008
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- Telcordia GR-409-CORE
- ITU-T G.652 C/D
- OFNR: Communications Type OFNR (UL) and CSA FT4 c(UL
- OFNP: Communications Type OFNP (UL) and CSA FT6 c(UL)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-L (1310 nm)	8,000
10GBASE-E (1550 nm)	30,000
10G Fibre Channel (Serial-1310 nm)	10,000
10G Fibre Channel (WDM-1310 nm)	10,000
1000BASE-LX (1300 nm)	5,000
Fibre Channel 266/1062 (1300 nm)	10,000
ATM 52/155/622 (1300 nm)	15,000

LightSystem® Gigabit Ethernet Fiber Optic Distribution Cable (North America)

Minimum Performance Parameters for LightSystem 50/125µm & 62.5/125µm Multimode Fiber

Fiber Type	Wavelength nm	Maximum Attenuation (dB/km)	Minimum Modal Bandwidth (MHz • km)	Guaranteed Gigabit Transmission Distance (Meters)	Index of Refraction
62.5/125µm (OM1)	850	3.5	200	275	1.495
	1300	1.0	500	550	1.490
50/125µm (OM2)	850	3.5	500	550	1.483
	1300	1.0	500	550	1.479

**The protocol pertinent to the transmission distance as noted is Gigabit Ethernet per IEEE 802.3:2005.*

XGLO® 10 Gigabit Ethernet Fiber Optic Cable (North America)

Minimum Performance Parameters for XGLO 50/125µm Multimode Fiber

Fiber Type	Guaranteed Gigabit Transmission Distance (m)		Guaranteed 10 Gigabit Transmission Distance (m)		Minimum Bandwidth (MHz • km)		Maximum Attenuation (dB/km)		Group Index of Refraction	
	850 nm	1300 nm	850 nm†	1300 nm††	850 nm	1300 nm	850 nm	1300 nm	850 nm	1300 nm
50/125 (OM3)	1000	600	300	300	RML - 2000 OFL - 1500	OFL - 500	3.0	1.0	1.483	1.479
50/125 (OM4)	1100	600	550	300	RML - 4700 OFL - 3500	OFL - 500	3.0	1.0	1.483	1.479

† 10GBASE-S †† 10GBASE-LX4

Minimum Performance Parameters for XGLO Singlemode Fiber

Fiber Type	Wavelength (nm)	Maximum Attenuation (dB/km)	Zero Dispersion Wavelength (nm)	Zero Dispersion Slope (nm^2-km)	Index of Refraction
Singlemode (OS1/OS2)	1310	0.50	1312 ± 10	≤0.093	1.468
	1550	0.50	1312 ± 10	≤0.093	1.468
	1300-1324	<0.40	1312 ± 10	≤0.093	1.468

XGLO and LightSystem Physical Specifications

PHYSICAL SPECIFICATIONS (All Values Are Nominal)

Fiber Count	Nominal Cable Diameter mm (in.)	Maximum Pulling Tension Newtons (lbf)				Maximum Net Weight kg/km (lbs/1000 ft.)	
		Installation		Long Term			
	OFNR/OFNP	OFNR	OFNP	OFNR	OFNP	OFNR	OFNP
2	4.8 (0.19)	400 (90)	400 (90)	120 (27)	120 (27)	17 (12)	20 (13.1)
4	4.8 (0.19)	660 (148)	440 (99)	198 (45)	132 (30)	19 (13)	22 (15)
6	4.8 (0.19)	660 (148)	440 (99)	198 (45)	132 (30)	22 (15)	25 (16.5)
8	5.8 (0.23)	900 (202)	560 (126)	270 (61)	168 (38)	28 (19)	31 (21)
12	5.8 (0.23)	900 (202)	560 (126)	270 (61)	168 (38)	32 (22)	36 (24.4)
16	13.7 (0.54)	1320 (297)	660 (148)	396 (89)	198 (45)	139 (93)	209 (140)
24	8.8 (0.35)	1282 (288)	1282 (288)	641 (144)	641 (144)	78 (52.4)	78 (52.4)
36	16.5 (0.65)	1320 (297)	660 (148)	396 (89)	198 (45)	213 (143)	221 (148)
48	16.0 (0.63)	2700 (607)	1000 (225)	810 (182)	300 (67)	200 (134)	207 (139)
72	19.6 (0.77)	2700 (607)	1000 (225)	810 (182)	300 (67)	310 (208)	322 (216)

Fiber Count	Minimum Crush Resistance (N/mm)	Minimum Flex Resistance Cycles	Operating Temperature ° C (° F)	Installation Temperature ° C (° F)	Storage Temperature ° C (° F)	Minimum Bend Radius	
						Installation	Long Term
2-24	22	25/100	-20 to 50 (-4 to 122)	0 to 60 (+32 -140)	-40 to 60 (-40 to 140)	15 x DIA.	10 x DIA.
36-72	22	25/100	-20 to 50 (-4 to 122)	0 to 60 (+32 -140)	-40 to 60 (-40 to 140)	20 x DIA.	10 x DIA.

XGLO® & LightSystem® Interlocking Aluminum Armor Indoor Tight Buffer Fiber Cable (Global)

Siemon interlocking aluminum armor indoor tight buffer fiber cables are ideal for data centers, campus and building backbones as well as industrial applications. The interlocking armor cable is a robust aluminum armor design that provides higher compression crush strength, rodent resistance and increased security. Siemon interlocking armor fiber cables may be installed as an alternative to traditional fiber cables in plenum inner duct or conduit, providing a less expensive single-pull solution with estimated savings of 25-50% in materials and estimated labor savings up to 60%. Siemon fiber optic cables are offered in LightSystem and XGLO configurations supporting high-speed applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

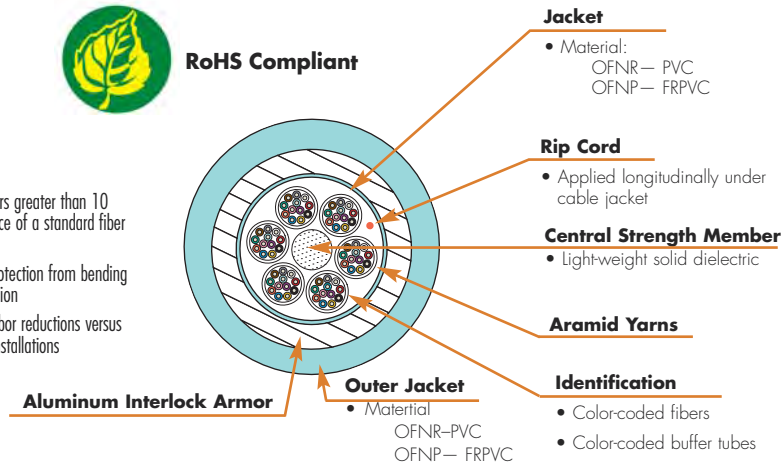
Ordering Information

LightSystem Multimode 62.5/125 OM1, 50/125 OM2 (Orange Jacket), XGLO Multimode Laser Optimized 50/125 OM3, OM4 (Aqua Jacket), Singlemode OS1/OS2 (Yellow Jacket)

Part #	Fiber Count	Construction
9BC(X)(X)006D-(XXXX)A	6	1 tube of 6 fibers
9BC(X)(X)012G-(XXXX)A	12	1 tube of 12 fibers
9BC(X)(X)024L-(XXXX)A	24	1 tube of 24 fibers
9BC(X)(X)036G-(XXXX)A	36	3 tubes of 12 fibers
9BC(X)(X)048G-(XXXX)A	48	4 tubes of 12 fibers
9BC(X)(X)072G-(XXXX)A	72	6 tubes of 12 fibers
9BC(X)(X)096G-(XXXX)A	96	8 tubes of 12 fibers
9BC(X)(X)144G-(XXXX)A	144	12 tubes of 12 fibers

Use 1st (X) to specify fiber type: 6 = 62.5/125µm, 5 = 50/125µm, 8 = Singlemode
Use 2nd (X) to specify cable rating: R = OFCR, P = OFCP
Use (XXXX) to specify class performance: G109 = OM1 62.5µm, T109 = OM2 50µm,T312 = OM3 50µm Laser Optimized, T512 = OM4 50µm Laser Optimized, E205 = OS1/OS2 Singlemode
Note: Contact Siemon Customer Service for cables available in fixed reel lengths. (unit of measure) F=feet

RoHS Compliant



HIGHLIGHTS

- 900 µm tight buffer
- OFCR: Communications Type OFCR Engineering Testing Laboratories (ETL) or Underwriters Laboratories (UL) Type OFCR (Conductive Optical Fiber Riser Cable) and c(ETL or UL) OFC-FT6 75C.
- OFCP: Communications Type OFCP Engineering Testing Laboratories (ETL) or Underwriters Laboratories (UL) Type OFCP (Conductive Optical Fiber Plenum Cable) and c(ETL or UL) OFC-FT6 75C.
- Aluminum interlock offers greater than 10 times the crush resistance of a standard fiber cable
- Provides installation protection from bending and excessive pull tension
- Significant time and labor reductions versus conduit or inner duct installations

LIGHTSYSTEM Multimode 62.5/125, OM1 50/125, OM2

STANDARDS COMPLIANCE

- ISO/IEC 11801:2002 OM1 (62.5/125)
- ISO/IEC 11801:2002 OM2 (50/125)
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492AAAB
- Telcordia GR-409-CORE
- OFNR: Communications Type OFNR (UL) and CSA FT4 c(UL
- OFNP: Communications Type OFNP (UL) and CSA FT6 c(UL)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-SX (850 nm)	N/A
50/125µm	82
62.5/125µm	26
1000BASE-SX (850 nm)	N/A
50/125µm	550
62.5/125µm	275
1000BASE-LX (1300 nm)	550
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO 300 Multimode 50/125, OM3

STANDARDS COMPLIANCE

- ISO/IEC 11801:2002 OM3
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492AAAC
- Telcordia GR-409-CORE
- OFNR: Communications Type OFNR (UL) and CSA FT4 c(UL
- OFNP: Communications Type OFNP (UL) and CSA FT6 c(UL)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-SX (850 nm)	300
10GBASE-LX4 (1300 nm)	300
1000BASE-SX (850 nm)	1000
1000BASE-LX (1300 nm)	600
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO 550 Multimode, 50/125, OM4

STANDARDS COMPLIANCE

- ISO/IEC 11801:2002 OM3
- ISO/IEC 11801:2002 Ammendment 2 OM4
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAD
- IEC 60793-2-10 Fiber Type A1a.3
- Telcordia GR-409-CORE
- OFNR: Communications Type OFNR (UL) and CSA FT4 c(UL)
- OFNP: Communications Type OFNP (UL) and CSA FT6 c(UL)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-SX (850 nm)	550
10GBASE-LX4 (1300 nm)	300
1000BASE-SX (850 nm)	1100
1000BASE-LX (1300 nm)	600
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO Singlemode, OS1/OS2

STANDARDS COMPLIANCE

- ISO/IEC 11801:Ed 2.0 Amendment:1:2008
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- Telcordia GR-409-CORE
- ITU-T G.652.C/D
- OFNR: Communications Type OFNR (UL) and CSA FT4 c(UL
- OFNP: Communications Type OFNP (UL) and CSA FT6 c(UL)

APPLICATIONS SUPPORT

APPLICATION (m)	DISTANCE
10GBASE-L (1310 nm)	8,000
10GBASE-E (1550 nm)	30,000
10G Fibre Channel (Serial-1310 nm)	10,000
10G Fibre Channel (WDM-1310 nm)	10,000
1000BASE-LX (1300 nm)	5,000
Fibre Channel 266/1062 (1300 nm)	10,000
ATM 52/155/622 (1300 nm)	15,000

LightSystem® Gigabit Ethernet Fiber Optic Distribution Cable (Global)

Minimum Performance Parameters for LightSystem 50/125µm & 62.5/125µm Multimode Fiber

Fiber Type	Wavelength nm	Maximum Attenuation (dB/km)	Minimum Modal Bandwidth (MHz • km)	Guaranteed Gigabit Transmission Distance (Meters)	Index of Refraction
62.5/125µm (OM1)	850	3.5	200	275	1.495
	1300	1.0	500	550	1.490
50/125µm (OM2)	850	3.5	500	550	1.483
	1300	1.0	500	550	1.479

**The protocol pertinent to the transmission distance as noted is Gigabit Ethernet per IEEE 802.3:2005.*

XGLO® 10 Gigabit Ethernet Fiber Optic Cable (Global)

Minimum Performance Parameters for XGLO 50/125µm Multimode Fiber

Fiber Type	Guaranteed Gigabit Transmission Distance (m)		Guaranteed 10 Gigabit Transmission Distance (m)		Minimum Bandwidth (MHz • km)		Maximum Attenuation (dB/km)		Group Index of Refraction	
	850 nm	1300 nm	850 nm†	1300 nm††	850 nm	1300 nm	850 nm	1300 nm	850 nm	1300 nm
50/125 (OM3)	1000	600	300	300	RML - 2000 OFL - 1500	OFL - 500	3.0	1.0	1.483	1.479
50/125 (OM4)	1100	600	550	300	RML - 4700 OFL - 3500	OFL - 500	3.0	1.0	1.483	1.479

† 10GBASE-S †† 10GBASE-LX4

Minimum Performance Parameters for XGLO Singlemode Fiber

Fiber Type	Wavelength (nm)	Maximum Attenuation (dB/km)	Zero Dispersion Wavelength (nm)	Zero Dispersion Slope (nm^2-km)	Index of Refraction
Singlemode (0S1/0S2)	1310	0.50	1312 ± 10	≤0.093	1.468
	1550	0.50	1312 ± 10	≤0.093	1.468
	1300-1324	<0.40	1312 ± 10	≤0.093	1.468

XGLO and LightSystem Physical Specifications (Global)

PHYSICAL SPECIFICATIONS (All Values Are Nominal)

Fiber Count	Nominal Cable Diameter mm (in.)		Maximum Pulling Tension Newtons (lbf.)		Maximum = Net Weight kg/km (lb/1000 ft.)	
	OFCR	OFCP	Installation	Long Term	OFCR	OFCP
6	15.8 (0.624)	13.1 (0.517)	1335 (300)	400 (90)	179 (120)	117 (79)
8	15.8 (0.624)	13.3 (0.523)	1335 (300)	400 (90)	188 (126)	129 (87)
12	18.8 (0.740)	14.8 (0.584)	1780 (400)	534 (120)	248 (166)	176 (119)
24	24.4 (0.961)	20.9 (0.821)	2640 (600)	800 (180)	412 (277)	347 (233)
48	24.4 (0.961)	23.4 (0.921)	2640 (600)	800 (180)	448 (301)	408 (274)
72	32.1 (1.265)	24.7 (0.974)	2640 (600)	800 (180)	643 (432)	537 (361)
96	32.1 (1.265)	31.1 (1.230)	2640 (600)	800 (180)	775 (521)	749 (503)
144	32.1 (1.265)	31.1 (1.230)	4445 (1000)	1335 (300)	802 (539)	756 (508)

Fiber Type	Minimum Crush Resistance (N/cm)	Minimum Flex Resistance Cycles	Operating Temperature °C (°F)		Storage Temperature °C (°F)		Minimum Bend Radius	
			OFCR	OFCP	OFCR	OFCP	Installation	Long Term
6 - 144	440 N/cm	100 Cycles	-40 to 75 (-40 to 167)	-20 to 75 (-4 to 167)	-40 to 85 (-40 to 185)	-20 to 75 (-4 to 167)	15 x DIA.	10 x DIA.

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information.

XGLO® & LightSystem® Indoor/Outdoor Tight Buffer (International)

Siemon LSOH (IEC 60332-3) indoor/outdoor tight buffer cables are ideal for data centers, campus and building backbones. Siemon fiber optic cables are offered in XGLO and LightSystem configurations supporting high-speed applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

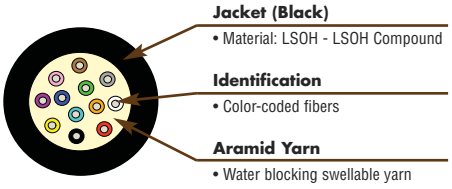
Ordering Information

LightSystem Multimode 62.5/125 OM1, Multimode 50/125 OM2, XGLO Multimode 50/125 OM3 and OM4, Singlemode OS1/OS2

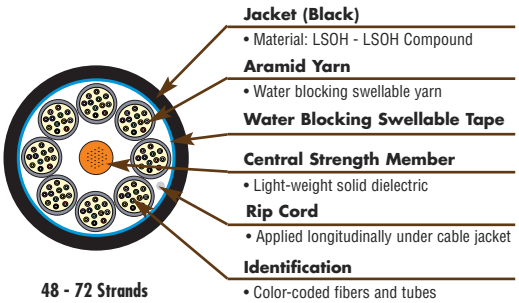
Part #	Fiber Count	Construction
9GD(X)H004C-(XXXX)M	4	1 tube of 4 fibers
9GD(X)H006D-(XXXX)M	6	1 tube of 6 fibers
9GD(X)H008E-(XXXX)M	8	1 tube of 8 fibers
9GD(X)H012G-(XXXX)M	12	1 tube of 12 fibers

Part #	Fiber Count	Construction
9GD(X)H016K-(XXXX)M	16	1 tube of 16 fibers
9GD(X)H024L-(XXXX)M	24	1 tube of 24 fibers
9GD(X)H048G-(XXXX)M	48	4 tubes of 12 fibers
9GD(X)H072G-(XXXX)M	72	6 tubes of 12 fibers

Use 1st (X) to specify fiber type: 6 = 62.5/125µm, 5 = 50/125µm, 8 = Singlemode
Use (XXXX) to specify class performance: G101 = OM1 62.5µm, T101 = OM2 50µm,T301 = OM3 50µm Laser Optimized,T501 = OM4 50µm Laser Optimized, E201 = OS1/OS2 Singlemode
M= meters
Note: Contact Siemon Customer Service for cables available in fixed reel lengths.



4 - 24 Strands



48 - 72 Strands

LIGHTSYSTEM Multimode 62.5/125, OM1 50/125, OM2

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM1 (62.5/125)
- ISO/IEC 11801:2002 OM2 (50/125)
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAB
- Telcordia GR-409-CORE
- IEC 60332-3
  - IEC 60332-1-2 (Single strand)
  - IEC 60754-2 (Acid gas)
  - IEC 61034-2 (Smoke density)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	N/A
50/125µm	82
62.5/125µm	26
1000BASE-S (850 nm)	N/A
50/125µm	550
62.5/125µm	275
1000BASE-LX (1300 nm)	550
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO 300 Multimode 50/125, OM3

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM3
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAC
- Telcordia GR-409-CORE
- IEC 60332-3
  - IEC 60332-1-2 (Single strand)
  - IEC 60754-2 (Acid gas)
  - IEC 61034-2 (Smoke density)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	300
10GBASE-LX4 (1300 nm)	300
1000BASE-S (850 nm)	1000
1000BASE-LX (1300 nm)	600
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO 550 Multimode 50/125, OM4

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM3
- ISO/IEC 11801:2002 Ammendment 2 OM4
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAD
- IEC 60793-2-10 Fibre Type A1a.3
- Telcordia GR-409-CORE
- IEC 60332-3
  - IEC 60332-1-2 (Single strand)
  - IEC 60754-2 (Acid gas)
  - IEC 61034-2 (Smoke density)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	550
10GBASE-LX4 (1300 nm)	300
1000BASE-S (850 nm)	1100
1000BASE-LX (1300 nm)	600
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO Singlemode, OS1/OS2

STANDARDS COMPLIANCE
- ISO/IEC 11801:Ed 2.0 Amendment:1:2008
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- Telcordia GR-409-CORE
- ITU-T G.652 C/D
- LSOH IEC 60332-3
- IEC 60332-3
  - IEC 60332-1-2 (Single strand)
  - IEC 60754-2 (Acid gas)
  - IEC 61034-2 (Smoke density)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-L (1310 nm)	8,000
10GBASE-E (1550 nm)	30,000
10G Fibre Channel (Serial-1310 nm)	10,000
10G Fibre Channel (WDM-1310 nm)	10,000
1000BASE-LX (1300 nm)	5,000
Fibre Channel 266/1062 (1300 nm)	10,000
ATM 52/155/622 (1300 nm)	15,000

XGLO® & LightSystem® Indoor/Outdoor Tight Buffer (International)

LightSystem® Gigabit Ethernet Fiber Optic Cable

Minimum Performance Parameters for LightSystem 62.5/125µm & 50/125µm Multimode Fiber

Fiber Type	Wavelength nm	Maximum Attenuation (dB/km)	Minimum Modal Bandwidth (MHz•km)	Guaranteed Gigabit Transmission Distance (Meters)	Index of Refraction
62.5/125 (OM1)	850	3.5	200	275	1.495
	1300	1.0	500	550	1.490
50/125 (OM2)	850	3.5	500	550	1.483
	1300	1.0	500	550	1.479

**The protocol pertinent to the transmission distance as noted is Gigabit Ethernet per IEEE 802.3:2005.*

Minimum Performance Parameters for XGLO 50/125µm Multimode Fiber

Fiber Type	Guaranteed Gigabit Transmission Distance (m)		Guaranteed 10 Gigabit Transmission Distance (m)		Minimum Bandwidth (MHz•km)		Maximum Attenuation (dB/km)		Group Index of Refraction	
	850 nm	1300 nm	850 nm†	1300 nm††	850 nm	1300 nm	850 nm	1300 nm	850 nm	1300 nm
50/125 (OM3)	1000	600	300	300	RML - 2000 OFL - 1500	OFL - 500	3.0	1.0	1.483	1.479
50/125 (OM4)	1100	600	550	300	RML - 4700 OFL - 3500	OFL - 500	3.0	1.0	1.483	1.479

† 10GBASE-S †† 10GBASE-LX4

Minimum Performance Parameters for XGLO Singlemode Fiber

Fiber Type	Wavelength (nm)	Maximum Attenuation (dB/km)	Zero Dispersion Wavelength (nm)	Zero Dispersion Slope (nm^2-km)	Index of Refraction
Singlemode (OS1/OS2)	1310	0.40	1312 ± 10	≤0.089	1.468
	1550	0.30	1312 ± 10	≤0.089	1.468
	1310 - 1625	<0.40	1312 ± 10	≤0.089	1.468

XGLO and LightSystem Indoor/Outdoor Tight Buffer (International) Physical Specifications

PHYSICAL SPECIFICATIONS (All Values Are Nominal)

Fiber Count	Nominal Cable Diameter mm	Maximum Pulling Tension Newtons		Nominal Net Weight kg/km
		Installation	Long Term	
4	5.3	1500	495	23
6	5.3	1500	495	25
8	5.8	1500	495	30
12	6.2	1500	495	35
16	7.8	1500	495	49
24	8.8	1500	495	61
48	18.3	4200	1400	255
72	21.9	5400	1800	384

Fiber Count	Maximum Crush Resistance (N/mm)	Operating Temperature °C	Storage Temperature °C	Minimum Bend Radius	
				Installation	Long Term
4-12	5	-40 to 70	-40 to 70	20 x DIA.	10 x DIA.
16-72	10	-20 to 70	-20 to 70	20 x DIA.	10 x DIA.

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information.
XGLO® and LightSystem® are trademarks of Siemon

XGLO® & LightSystem® Indoor/Outdoor LooseTube (International)

Siemon LSOH (IEC 60332-3) indoor/outdoor loose tube cables are ideal for campus and building backbones. Siemon fiber optic cables are offered in XGLO and LightSystem configurations supporting high-speed, applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

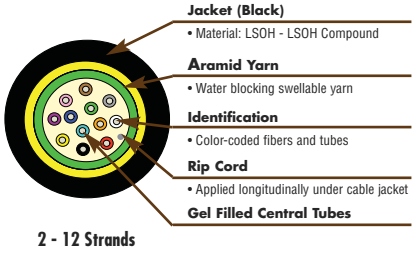
Ordering Information

LightSystem Multimode 62.5/125 OM1, Multimode 50/125 OM2, XGLO Multimode 50/125 OM3 and OM4, Singlemode OS1/OS2

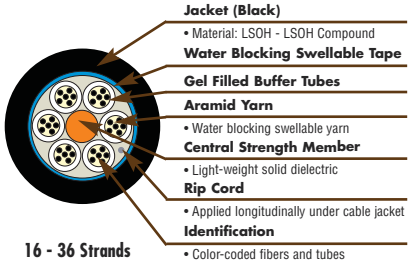
Part #	Fiber Count	Construction
9GG(X)H002B-(XXXX)M	2	1 tube of 2 fibers
9GG(X)H004C-(XXXX)M	4	1 tube of 4 fibers
9GG(X)H006D-(XXXX)M	6	1 tube of 6 fibers
9GG(X)H008E-(XXXX)M	8	1 tube of 8 fibers
9GG(X)H012G-(XXXX)M	12	1 tube of 12 fibers
9GG(X)H016D-(XXXX)M	16	2 tubes of 6 fibers 1 tube of 4 fibers

Part #	Fiber Count	Construction
9GG(X)H024D-(XXXX)M	24	4 tubes of 6 fibers
9GG(X)H036G-(XXXX)M	36	6 tubes of 6 fibers
9GG(X)H048G-(XXXX)M	48	4 tubes of 12 fibers
9GG(X)H072G-(XXXX)M	72	6 tubes of 12 fibers
9GG(X)H096G-(XXXX)M	96	8 tubes of 12 fibers
9GG(X)H144G-(XXXX)M	144	12 tubes of 12 fibers

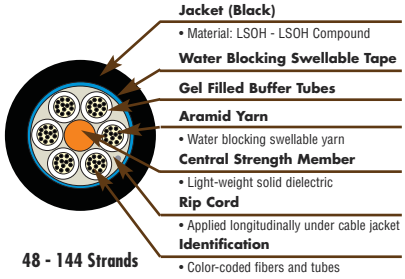
Use 1st (X) to specify fiber type: 6 = 62.5/125µm, 5 = 50/125µm, 8 = Singlemode
Use (XXXX) to specify class performance: G101 = OM1 62.5µm, T101 = OM2 50µm,T301 = OM3 50µm Laser Optimized,T501 = OM4 50µm Laser Optimized, E201 = OS1/OS2 Singlemode
M= meters
Note: Contact Siemon Customer Service for cables available in fixed reel lengths.



2 - 12 Strands



16 - 36 Strands



48 - 144 Strands

Note: The 2-12 strand rodent resistant cables feature a glass yarn design with a high tensile strength and degree of rodent protection which is effective in many cases. The function of glass yarns differs from the other rodent protection materials such as a 100% metallic armor protection. The glass yarns provide a degree of protection because it is disagreeable and unpleasant for most rodents to gnaw the glass yarns.

LIGHTSYSTEM Multimode 62.5/125, OM1 50/125, OM2

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM1 (62.5/125)
- ISO/IEC 11801:2002 OM2 (50/125)
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAB
- Telcordia GR-409-CORE
- IEC 60332-3
  - IEC 60332-1-2 (Single strand)
  - IEC 60754-2 (Acid gas)
  - IEC 61034-2 (Smoke density)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	N/A
50/125µm	82
62.5/125µm	26
1000BASE-S (850 nm)	N/A
50/125µm	550
62.5/125µm	275
1000BASE-LX (1300 nm)	550
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO 300 Multimode 50/125, OM3

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM3
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAC
- Telcordia GR-409-CORE
- IEC 60332-3
  - IEC 60332-1-2 (Single strand)
  - IEC 60754-2 (Acid gas)
  - IEC 61034-2 (Smoke density)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	300
10GBASE-LX4 (1300 nm)	300
1000BASE-S (850 nm)	1000
1000BASE-LX (1300 nm)	600
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO 550 Multimode 50/125, OM4

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM3
- ISO/IEC 11801:2002 Ammendment 2 OM4
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAD
- IEC 60793-2-10 Fibre Type A1a.3
- Telcordia GR-409-CORE
- IEC 60332-3
  - IEC 60332-1-2 (Single strand)
  - IEC 60754-2 (Acid gas)
  - IEC 61034-2 (Smoke density)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	550
10GBASE-LX4 (1300 nm)	300
1000BASE-S (850 nm)	1100
1000BASE-LX (1300 nm)	600
Fibre Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO Singlemode, OS1/OS2

STANDARDS COMPLIANCE
- ISO/IEC 11801:Ed 2.0 Amendment:1:2008
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- Telcordia GR-409-CORE
- ITU-T G.652 C/D
- IEC 60332-3
  - IEC 60332-1-2 (Single strand)
  - IEC 60754-2 (Acid gas)
  - IEC 61034-2 (Smoke density)

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-L (1310 nm)	8,000
10GBASE-E (1550 nm)	30,000
10G Fibre Channel (Serial-1310 nm)	10,000
10G Fibre Channel (WDM-1310 nm)	10,000
1000BASE-LX (1300 nm)	5,000
Fibre Channel 266/1062 (1300 nm)	10,000
ATM 52/155/622 (1300 nm)	15,000

XGLO® & LightSystem® Indoor/Outdoor LooseTube (International)

LightSystem® Gigabit Ethernet Fiber Optic Cable

Minimum Performance Parameters for LightSystem 62.5/125µm & 50/125µm Multimode Fiber

Fiber Type	Wavelength nm	Maximum Attenuation (dB/km)	Minimum Modal Bandwidth (MHz•km)	Guaranteed Gigabit Transmission Distance (Meters)	Index of Refraction
62.5/125 (OM1)	850	3.5	200	275	1.495
	1300	1.0	500	550	1.490
50/125 (OM2)	850	3.5	500	550	1.483
	1300	1.0	500	550	1.479

**The protocol pertinent to the transmission distance as noted is Gigabit Ethernet per IEEE 802.3:2005.*

Minimum Performance Parameters for XGLO 50/125µm Multimode Fiber

Fiber Type	Guaranteed Gigabit Transmission Distance (m)		Guaranteed 10 Gigabit Transmission Distance (m)		Minimum Bandwidth (MHz•km)		Maximum Attenuation (dB/km)		Group Index of Refraction	
	850 nm	1300 nm	850 nm†	1300 nm††	850 nm	1300 nm	850 nm	1300 nm	850 nm	1300 nm
50/125 (OM3)	1000	600	300	300	RML - 2000 OFL - 1500	OFL - 500	3.0	1.0	1.483	1.479
50/125 (OM4)	1100	600	550	300	RML - 4700 OFL - 3500	OFL - 500	3.0	1.0	1.483	1.479

† 10GBASE-S †† 10GBASE-LX4

Minimum Performance Parameters for XGLO Singlemode Fiber

Fiber Type	Wavelength (nm)	Maximum Attenuation (dB/km)	Zero Dispersion Wavelength (nm)	Zero Dispersion Slope (nm_2-km)	Index of Refraction
Singlemode (OS1/OS2)	1310	0.40	1312 ± 10	≤0.089	1.468
	1550	0.30	1312 ± 10	≤0.089	1.468
	1310 - 1625	<0.40	1312 ± 10	≤0.089	1.468

XGLO and LightSystem Indoor/Outdoor LooseTube Physical Specifications

PHYSICAL SPECIFICATIONS (All Values Are Nominal)

Fiber Count	Nominal Cable Diameter mm	Maximum Pulling Tension Newtons		Nominal Net Weight kg/k
		Installation	Long Term	
2	7.7	1000	500	67
4	7.7	1000	500	67
6	7.7	1000	500	67
8	7.7	1000	500	67
12	7.7	1000	500	67
16	10.1	1800	1200	103
24	10.1	1800	1200	103
36	10.1	1800	1200	103
48	10.8	1800	1200	115
72	10.8	1800	1200	115
96	12.0	1800	1200	139
144	12.0	1800	1200	139

Fiber Count	Maximum Crush Resistance (N/mm)	Operating Temperature °C	Storage Temperature °C	Minimum Bend Radius	
				Installation	Long Term
2-12	10	-40 to 60	-40 to 60	20 x DIA.	10 x DIA.
16-144	22	-40 to 60	-40 to 60	20 x DIA.	10 x DIA.

Custom lengths and jacket colors are available upon request. Contact our Customer Service Department for more information.

XGLO® & LightSystem® Outside Plant Loose Tube (International)

Siemon outside plant (OSP) fiber optic cables are ideal for campus, building-to-building interconnections, lashed aerial, duct or underground conduits. These cables are designed to tolerate the installation and stresses in cables exposed to the external environment. Siemon fiber optic cables are offered in XGLO and LightSystem configurations supporting high-speed, applications such as Gigabit Ethernet, 10 Gigabit Ethernet, Gigabit ATM and Fibre Channel.

Ordering Information

LightSystem: Multimode 62.5/125 OM1, Multimode 50/125 OM2, XGLO OM3 and OM4 Multimode 50/125, Singlemode OS1/OS2

Part #	Fiber Count	Construction
9F(XX)(X)4-2F(XXXX)	2	1 tube of 2 fibers
9F(XX)(X)4-4A(XXXX)	4	1 tube of 4 fibers
9F(XX)(X)4-6B(XXXX)	6	1 tube of 6 fibers
9F(XX)(X)4-8C(XXXX)	8	1 tube of 8 fibers
9F(XX)(X)4-12D(XXXX)	12	1 tube of 12 fibers
9F(XX)(X)4-16A(XXXX)	16	2 tubes of 6 fibers 1 tube of 4 fibers

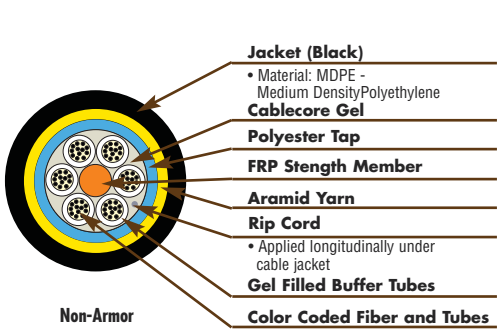
Part #	Fiber Count	Construction
9F(XX)(X)4-24B(XXXX)	24	4 tubes of 6 fibers
9F(XX)(X)4-36D(XXXX)	36	6 tubes of 6 fibers
9F(XX)(X)4-48D(XXXX)	48	4 tubes of 12 fibers
9F(XX)(X)4-72D(XXXX)	72	6 tubes of 12 fibers
9F(XX)(X)4-96D(XXXX)	96	8 tubes of 12 fibers
9F(XX)(X)4-144D(XXXX)	144	12 tubes of 12 fibers

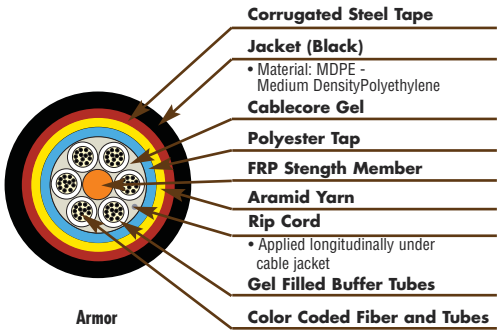
Use 1st (XX) to specify fiber type: 6 = OM1 62.5.125µm, 5 = OM2 50/125µm Laser Optimized, 8L = OS2 Singlemode
Use (X) to specify Non Armor or Armor: D = Non Armor, E = Armor
Use (XXXX) to specify length in kilometer. Use 4 characters including decimal point.

Example p/n: 9F5LD4-12D1.50: (1.5 kilometres [1500 metres] of 50/125µm laser optimised 12-strand)
For orders of less than 1km, the first "X" must be zero (0).
Example: 9F5LD4-12D0.55 (.550 kilometres [550 metres] of 50/125µm laser optimised 12-strand)

CONSTRUCTION/FEATURES

- Outer jacket is a UV resistant black MDPE (Medium Density Polyethylene)
- Water blocking, gel-filled loose tubes ·
- Non-Armor and Armor versions
- Armor version utilizes a robust corrugated steel armor
- No central strength member for 2-12 strands
- Central strength member for 16-144 strands





These cables provide a degree of rodent protection effective in many cases. The non-armor cable has a PE sheath which has a hard surface and provides a degree of rodent protection because it is disagreeable and unpleasant for most rodents to gnaw on. The armor cable has a PE sheath and corrugated steel tape which provides 100% rodent protection.

LIGHTSYSTEM OM1 Multimode 62.5/125 OM2 Multimode 50/125

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM1 (62.5/125)
- ISO/IEC 11801:2002 OM2 (50/125)
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAB
- Telcordia GR-409-CORE

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	N/A
50/125µm	82
62.5/125µm	26
1000BASE-S (850 nm)	N/A
50/125µm	550
62.5/125µm	275
1000BASE-LX (1300 nm)	550
Fiber Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO 300 OM3 Multimode 50/125

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM3
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAC
- Telcordia GR-409-CORE

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	300
10GBASE-LX4 (1300 nm)	300
1000BASE-S (850 nm)	1000
1000BASE-LX (1300 nm)	600
Fiber Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO 550 OM4 Multimode 50/125

STANDARDS COMPLIANCE
- ISO/IEC 11801:2002 OM3
- ISO/IEC 11801:2002 Ammendment 2 OM4
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- ANSI/TIA-492 AAAD
- IEC 60793-2-10 Fiber Type A1a.3
- Telcordia GR-409-CORE

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-S (850 nm)	550
10GBASE-LX4 (1300 nm)	300
1000BASE-S (850 nm)	1100
1000BASE-LX (1300 nm)	600
Fiber Channel 266 (1300 nm)	1,500
ATM 622 (1300 nm)	500
ATM 155 (1300 nm)	2,000
ATM 52 (1300 nm)	3,000
FDDI (Original-1300 nm)	2,000
100BASE-FX (1300 nm)	2,000

XGLO OS1/OS2 Singlemode

STANDARDS COMPLIANCE
- ISO/IEC 11801:Ed 2.0 Amendment:1:2008
- ANSI/TIA/EIA-568-C.3
- ANSI/TIA-598-C
- Telcordia GR-409-CORE
- ITU-T G.652 C/D

APPLICATIONS SUPPORT

APPLICATION	DISTANCE (m)
10GBASE-L (1310 nm)	8,000
10GBASE-E (1550 nm)	30,000
10G Fiber Channel (Serial-1310 nm)	10,000
10G Fiber Channel (WDM-1310 nm)	10,000
1000BASE-LX (1300 nm)	5,000
Fiber Channel 266/1062 (1300 nm)	10,000
ATM 52/155/622 (1300 nm)	15,000

XGLO® & LightSystem® Outside Plant Loose Tube (International)

LightSystem® Gigabit Ethernet Fiber Optic Cable

Minimum Performance Parameters for LightSystem 62.5/125µm & 50/125µm Multimode Fiber

Fiber Type	Wavelength nm	Maximum Attenuation (dB/km)	Minimum Modal Bandwidth (MHz•km)	Guaranteed Gigabit Transmission Distance (Meters)	Index of Refraction
62.5/125 (OM1)	850	3.5	200	275	1.495
	1300	1.0	500	550	1.490
50/125 (OM2)	850	3.5	500	550	1.483
	1300	1.0	500	550	1.479

**The protocol pertinent to the transmission distance as noted is Gigabit Ethernet per IEEE 802.3:2005.*

Minimum Performance Parameters for XGLO 50/125µm Multimode Fiber

Fiber Type	Guaranteed Gigabit Transmission Distance (m)		Guaranteed 10 Gigabit Transmission Distance (m)		Minimum Bandwidth (MHz•km)		Maximum Attenuation (dB/km)		Group Index of Refraction	
	850 nm	1300 nm	850 nm†	1300 nm††	850 nm	1300 nm	850 nm	1300 nm	850 nm	1300 nm
50/125 (OM3)	1000	600	300	300	RML - 2000 OFL - 1500	OFL - 500	3.0	1.0	1.483	1.479
50/125 (OM4)	1100	600	550	300	RML - 4700 OFL - 3500	OFL - 500	3.0	1.0	1.483	1.479

† 10GBASE-S †† 10GBASE-LX4

Minimum Performance Parameters for XGLO Singlemode Fiber

Fiber Type	Wavelength (nm)	Maximum Attenuation (dB/km)	Zero Dispersion Wavelength (nm)	Zero Dispersion Slope (nm_2-km)	Index of Refraction
Singlemode (OS1/OS2)	1310	0.40	1312 ± 10	≤0.089	1.468
	1550	0.30	1312 ± 10	≤0.089	1.468
	1310 - 1625	<0.40	1312 ± 10	≤0.089	1.468

XGLO and LightSystem Outside Plant-Loose Tube Physical Specifications

PHYSICAL SPECIFICATIONS (All Values Are Nominal)

Fiber Count	Nominal Cable Diameter mm		Maximum Pulling Tension Newtons				Maximum Net Weight kg/km	
			Installation		Long Term			
	Non Armor	Armor	Non Armor	Armor	Non Armor	Armor	Non Armor	Armor
2	8.5	10.7	1500	2700	450	810	55	109
4	8.5	10.7	1500	2700	450	810	55	109
6	8.5	10.7	1500	2700	450	810	55	109
8	8.5	10.7	1500	2700	450	810	55	109
12	8.5	10.7	1500	2700	450	810	55	109
16	11.0	10.8	1500	2700	450	810	99	118
24	11.0	11.4	1500	2700	450	810	97	131
36	11.2	12.3	1500	2700	450	810	100	152
48	11.2	12.3	1500	2700	450	810	100	152
72	11.2	12.3	1500	2700	450	810	100	152
96	12.7	13.8	1500	2700	450	810	126	186
144	15.7	16.8	1500	2700	450	810	189	263

Fiber Type	Minimum Crush Resistance		Operating Temperature °C	Storage Temperature °C	Minimum Bend Radius	
	Non Armor	Armor			Installation	Long Term
2 - 144	1000	1100	-30 to 60	-40 to 70	20 x DIA.	10 x DIA.

Custom lengths are available upon request. Contact our Customer Service Department for more information.

MapIT® G2 Infrastructure Management

Take your network management to the next level. The MapIT G2 system integrates a powerful combination of innovative Smart Patch Panels, user-friendly Master Control Panels and Siemon's EagleEye™ Connect software to provide real-time tracking and reporting of network-wide physical layer activity. The system continuously monitors your network — 24/7, by increasing physical layer security by tracking changes in device connectivity, detecting potential security threats such as unauthorized connections and devices, providing instant alerts and reducing downtime. All such activity is automatically updated in the system database, ensuring 100% accuracy of your infrastructure documentation. With these advantages in documentation, security, uptime and asset management, most customers see ROI in less than 2 years.

Available in:

- **Flat and Angled Copper Smart Patch Panels (SPP) Options — Angled panels eliminate the need for horizontal cable managers, greatly improving patching density**
- **MapIT G2 Category 7A TERA system integrates automated infrastructure management with the highest performing and most secure twisted pair cabling system**
- **Standard Fiber and MTP Plug and Play Smart Enclosures — Providing a standard and angled panel option. Angled panels eliminate the need for horizontal cable managers, greatly improving patching density**
- **Siemon's Innovative MapIT G2 Interconnect Module — Enables direct monitoring of patching to network switches**

Section Contents

MapIT® G2
Master and Distribution Control Panels

The MapIT G2 Master Control Panel (MCP) collects all network infrastructure data provided by the Smart Patch Panels and Fiber Enclosures, monitoring up to 2880 ports in just 1 rack mount space (1U). The MCP and DCP features an integrated LCD display and keypad, which provide technicians access to critical network architecture and diagnostic information. By providing this interactive interface locally within the patching zone, the MapIT G2 system virtually eliminates the need for technicians to carry PDAs or directly access the software server. This user interface allows full end-to-end graphic circuit traces for any channel in the system and can perform diagnostic tasks on any component or port.

Superior Density —
Low profile 1U design increases density and reduces usage of costly rack and cabinet space in data centers and telecommunication rooms

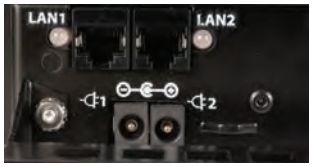
Reduced Power Consumption —
78% lower power consumption compared to traditional intelligent patching systems for monitoring equipment. This power savings decreases operating expenses and provides a more environmentally friendly solution

Excellent Thermal Efficiency —
The MCP and DCP's combination of ultra low heat generation and a low profile design helps to maximise cooling efficiency in data center environments

Simple, Multi-Functional User Interface —
Large graphic LCD and keypad enables technicians to view circuit traces, patch cord traces, perform work orders, diagnostics and more, improving efficiency in maintenance and MAC work

Ease of Implementation —
Simple design and straightforward implementation and setup reduces the time and technician skill required to design and install the system

MCP Graphic LCD



Redundant power and Ethernet

Field-terminated control connections
(RJ45 Front or S310 Rear)

MapIT® G2
Master and Distribution Control Panels

Ordering Information:

M-MCP. . . . . MapIT Master Control Panel, 1U, black*
M-DCP. . . . . MapIT Distribution Control Panel, 1U, black*

**Includes mounting hardware (1) probe pen, (1) power supply with adapters for various regions, rear cable manager, cable ties, S310 stuffer caps and ground lug*
Note: 1U = 44.5mm

Optional Accessories

Second Power Supply

M-PS.....6.0V, 3.0A power supply for MCP or DCP

Replacement Probe Pen

M-PEN .....MapIT pen probe, 7.62m (25 ft.) cord

Category 5e Shielded Cable for Control Connections

9A5M4-E2.....PVC (CM, IEC 60332-1), Gray Jacket, 305m (1000 ft.) Reel-in-Box
9A5L4-E2.....LS0H (IEC 60332-1), Violet Jacket, 305m (1000 ft.) Reel-in-Box

PS-8-8 Shielded RJ45 Plugs

PS-8-8.....8-position shielded modular plug with 8 contacts

S110® Patch Plugs

S110P4.....4-pair, field-terminated S110 patch plug (colored icons not included)
LL-05.....LockIT™ Outlet Lock, bag of 10, includes 1 LockIT Universal Key
LKEY-05.....LockIT Universal Key, bag of 10
LL-LC-05.....LockIT LC Adapter Lock, bag of 10, includes 1 LockIT Universal Key

EagleEye™ Connect Software

EagleEye™ Connect

Siemon's EagleEye Connect software manages, monitors and documents your network infrastructure through Siemon's MapIT G2 connectivity. For more information on EagleEye Connect software, including features, capabilities and system requirements, please visit **www.siemon.com/eagleeye**.

MapIT® G2 Interconnect Solution

The MapIT G2 interconnect solution enables tracking of direct MapIT G2 connectivity between a switch and a single Smart Patch Panel (SPP) — without the need for an additional SPP required in a cross-connect configuration. The interconnect topology (see diagram below) can increase rack density, cut installation costs and reduce installation time. Compatible with existing Siemon MapIT G2 copper connectivity, simply use the Interconnect Module (M-ICM) to unlock the design flexibility of an interconnect topology.

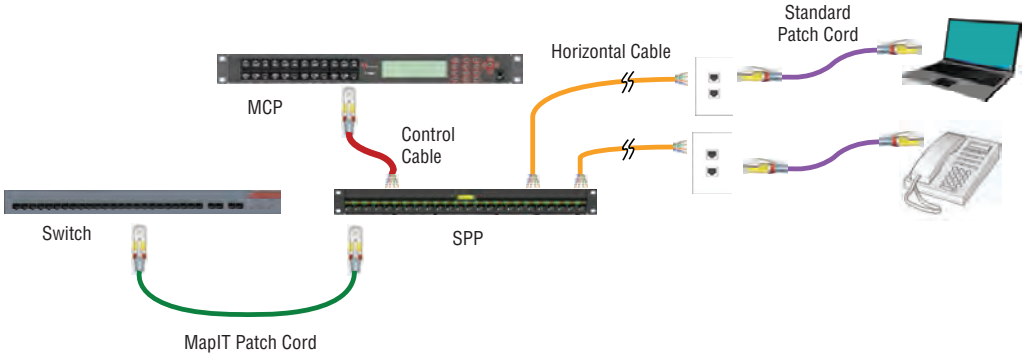
Deployment is simple - just plug a MapIT G2 patch cord into the switch and plug the other end into the Interconnect Module, which discovers the switch port and relays the information to the MapIT G2 system. Then, remove the cord from the module, plug it into the SPP and the link is detected.

Reduced Costs —
The interconnect solution requires half the number of patch panels versus an intelligent cross connect installation, cutting both material and installation labor costs

Faster Deployment —
By reducing the number of patch panels and associated connectivity, installation and testing time is dramatically reduced

Increased Density —
As the interconnect topology uses half the number of patch panels versus cross-connect, cabinet/rack density is greatly improved. For even greater density, use the angled version of Siemon's SPP

User-Friendly Module —
Simple, single-button functionality combined with on-board LCD display that provides technicians with clear instructions and status information allows intelligent links to be deployed in seconds



MapIT G2 Interconnect Module

The MapIT G2 Interconnect Module is used to create a link between the switch and Smart Patch Panel port connections during initial installation or during moves, adds and changes.

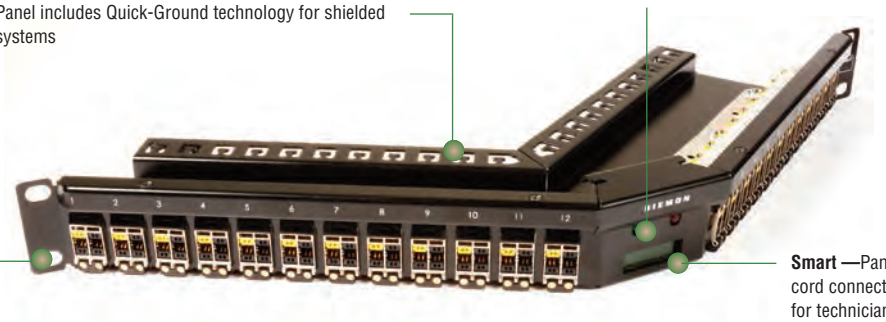
M-ICM.....MapIT G2 Interconnect Module

MapIT® G2 Category 7A TERA® System

The MapIT G2 TERA system combines two best-in-class systems into one. The MapIT G2 Automated Infrastructure Management (AIM) system is now available in a fully shielded TERA solution. TERA, already the highest performing and most secure twisted pair cabling system, now features MapIT G2 technology built into the category 7_A/classF_A patch panels and cords. This combination of intelligent TERA hardware and Siemon EagleEye™ Connect software delivers real-time tracking and management of network-wide physical layer activity and IT assets. This benchmark AIM solution offers users a truly unparalleled level of performance, security and control.

Robust — Lightweight, high strength steel with black finish integrates outlet retention and cable management. Panel includes Quick-Ground technology for shielded systems

Green — MapIT G2 uses 78% less power than competing systems

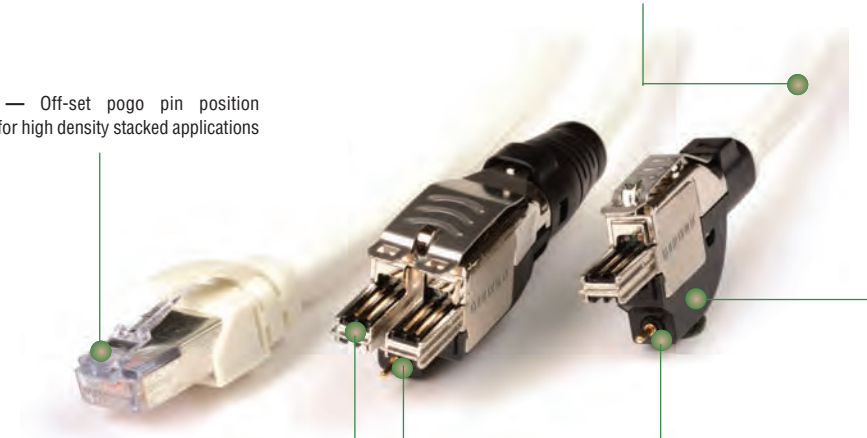


Smart —Panel intelligence tracks patch cord connections and drives LCD/LEDs for technician guidance

Installation Friendly —Individual outlets snap into panel from the front or rear. Angled panel design allows patch cords to be routed directly to vertical cable managers

Fully Shielded — S/FTP construction provides 1000 MHz bandwidth per pair

Compact — Off-set pogo pin position optimized for high density stacked applications



Mapping — Sensor pin is accessible at the rear of the boot for test and mapping purposes

Quality — Plug contacts and sensor pins feature 50 microns of gold plating for long-term reliability and resistance to corrosion

Flexible — A variety of TERA 4-pair and 2-pair to RJ45 patch cords allow easy connection to any RJ45 equipped active electronics

Trace and display patch cord connections on the patch panel LCD

A complete circuit trace can be viewed on-screen at the MCP or DCP

TERA supports cable sharing allowing multiple 2-pair applications to run over one 4-pair cable and outlet, saving significant material and pathway space

Ordering Information:

MapIT® G2 TERA® Patch Panel

M-SPPA-T24K . . . . . MapIT G2 TERA Panel, 24 Ports, Angled Black, 1RMS, Sold with TERA Outlets

M-SPPA-T24-01K. . . . . MapIT G2 Ready TERA Panel, 24 Ports, Angled Black, 1RMS, Sold with TERA Outlets

MapIT G2 TERA Patch Cords - 4 Pair

M-T4-(XX)M-B(XX)L . . . . . .TERA-TERA Cable Assembly, Ivory Jacket, Colored Boot, LSOH

Boot Color
01= Black
02 = White
03 = Red
04 = Gray
06 = Blue

Cord Length
01 = 1m (3 ft.)
02 = 2m (6 ft.)
03 = 3m (9 ft.)
05 = 5m (16 ft.)

MapIT G2 TERA Patch Cords - 2 Pair

M-T2E2-(XX)M-B(XX)L . . . . . .TERA to 5e Screened RJ45 Cable Assembly, Ivory Jacket, Colored Boot, LSOH

Boot Color
01= Black
02 = White
03 = Red
04 = Gray
06 = Blue

Cord Length
01 = 1m (3 ft.)
02 = 2m (6 ft.)
03 = 3m (9 ft.)
05 = 5m (16 ft.)

M-T4(X)-S(XX)M-B(XX)L . . . .TERA - RJ45 Cable Assembly, Ivory Jacket, Colored Boot, LSOH

Boot Color
01= Black
02 = White
03 = Red
04 = Gray
06 = Blue

Cord Length
01 = 1m (3 ft.)
02 = 2m (6 ft.)
03 = 3m (9 ft.)
05 = 5m (16 ft.)

Plug Type
A = TERA to 6A RJ45 T568B wired
T = TERA to 6A RJ45 T568A wired

Optional Accessories

Category 5e Shielded Cable for Bus (Control Cable) Connections

9A5R4-E1-(XX)-R1A . . . . . Riser, 305 m (1000 ft), Reel (North America)
9A5R4-E2 . . . . . Riser, Blue, 305m (1000 ft), Reel-in-box

Modular Plug for Bus Connections

PS-8-8 . . . . . 8-position shielded modular plug with 8 contacts

Ready Panel Upgrade to MapIT G2

M-SPPAT-PCBA-24 . . . . . MapIT G2 TERA panel upgrade kit, PCB

For more information on MapIT G2, TERA and EagleEye™, please visit their respective product pages at **www.siemon.com**

MapIT® G2 Category 6A and Category 6 Systems

Smart Patch Panel

The MapIT G2 Smart Patch Panel (SPP) is an industry first in automated infrastructure management. The panel features on-board intelligence and a combination of LEDs and a backlit LCD to guide technicians. The LCD can be used to display patch cord trace and connectivity diagnostic information. It can also be used to troubleshoot network issues, which can drastically reduce downtime and increase productivity. Also, since it is actively connected to your database, the LCD could be used as a virtual label, dynamically displaying panel and port information directly from Siemon EagleEye™ Connect software.

Smart — on panel intelligence tracks patch cord connections and drives LCD/LEDs for technician guidance

High Density — 24 ports in a compact design, angled version also available

Green — MapIT G2 uses up to 78% less power than competing systems

Robust — Single piece construction integrates outlet retention and cable management. Panel includes Quick-Ground technology for shielded systems

Reliable — Panels have been tested to 20-years MTBF. All active components are field serviceable

Simple — Control connections to the MCP or DCP are made on the back of the patch panel with Category 5e solid shielded cable

MapIT G2 Patch Cords

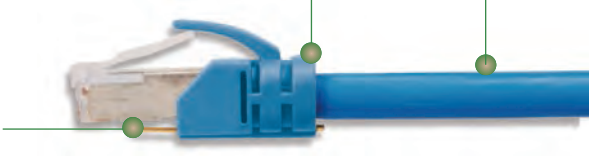
These advanced cords also feature a 9th wire and sensor pin contained in a robust over-molded boot. This embedded sensor technology enables tracking of connections between Smart Patch Panel ports.

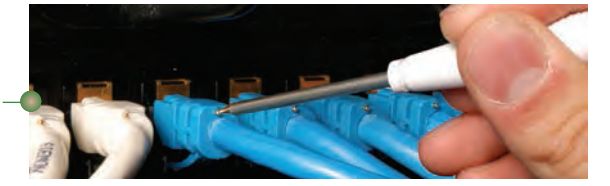
Supports Siemon's High-Performance Systems — Category 6_A shielded, Category 6_A UTP and Category 6 UTP

Robust Strain Relief — Over-molded boots provide plug to cable strain relief and retention of sensor pin. 100% transmission testing ensures component and channel performance

Reliable Integrated Sensor Connections — Sensor pins feature 50 microinches gold plating for long-term contact reliability and resistance to corrosion

Simple Testing Features — Sensor pin is accessible at the rear of the boot for test and mapping purposes





Trace patch cord connections

With a touch of the probe pen a complete end-to-end circuit trace is shown on-screen at the MCP or DCP

Custom system cables are a thing of the past. Now, Category 5e solid shielded cable can be terminated in the field for all Control connections

Ordering Information:

MapIT® G2 Smart Patch Panel

M-SPP(X)-K24ENS .....MapIT G2 24-port modular Smart Patch Panel, accepts Siemon shielded and unshielded Z-MAX® Keystone outlets or unshielded MAX® keystone outlets (sold separately)
Includes mounting hardware, labels, (24) cable ties and panel ground lug

MapIT G2-Ready Patch Panel

M-SPP(X)-K24E-001 .....MapIT G2-Ready 24-port modular Patch Panel, accepts Siemon shielded and unshielded Z-MAX Keystone outlets or unshielded MAX keystone outlets (sold separately)
Includes mounting hardware, labels, (24) cable ties and panel ground lug

M-SPP(X)-PCBA-24 .....MapIT G2 Upgrade Kit for MapIT G2 Ready Patch Panels. (Upgrade kit includes PCB with built-in sensor pads, LED's and LCD display, new front panel cover, additional mounting hardware & components with instructions), Siemon EagleEye™ Connect software sold separately

Use (X) to specify panel type: Blank = Flat, A = Angled

Optional Accessories

Siemon Keystone Outlets

Z6A-SK(XX).....Keystone shielded Z-MAX 6A outlet
Z6A-K(XX).....Keystone unshielded Z-MAX 6A outlet
Z6-K(XX).....Keystone unshielded Z-MAX 6 outlet
MX6-K01.....Keystone unshielded MAX 6 outlet, black

Use (XX) to specify color:
01 = black, 02 = white, 03 = red, 04 = gray, 05 = yellow, 06 = blue, 07 = green, 09 = orange, 20 = ivory, 25 = bright white, 80 = light ivory

Shielded Keystone Z-MAX

Unshielded Keystone Z-MAX

Unshielded Keystone MAX 6

Ordering Information:

MapIT® G2 Patch Cords

M-10GMCS-(XX)M(XX)L . . . . . MapIT G2 Category 6_A shielded, double-ended, stranded modular cord, color-matching boot, T568A/B, LS0H

Jacket Color
02 = White
04 = Gray
06 = Blue

Length
01 = 1m (3 ft)
02 = 2m (6 ft)
03 = 3m (15 ft)
05 = 5m (20 ft)

M-10GMC-(XX)-(XX) . . . . . MapIT G2 Category 6_A UTP, double-ended, stranded modular cord, color-matching boot, T568A/B, CMG

Jacket Color
02 = White
04 = Gray
06 = Blue

Length
03 = 0.91m (3 ft)
05 = 1.52m (5 ft)
07 = 2.13m (7 ft)
10 = 3.05m (10 ft)
15 = 4.57m (15 ft)
20 = 6.10m (20 ft)

M-MC6-(XX)-(XX) . . . . . MapIT G2 Category 6 UTP, double-ended, stranded modular cord, color-matching boot, T568A/B, CMG

Jacket Color
02 = White
04 = Gray
06 = Blue

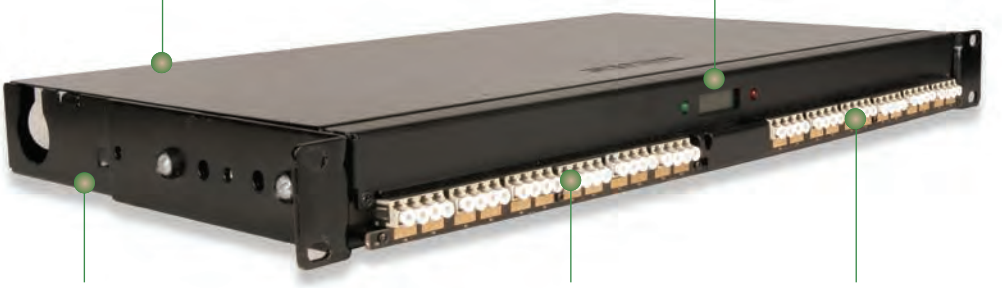
Length
03 = 0.91m (3 ft)
05 = 1.52m (5 ft)
07 = 2.13m (7 ft)
10 = 3.05m (10 ft)
15 = 4.57m (15 ft)
20 = 6.10m (20 ft)

MapIT® G2 Smart Fiber Systems

The MapIT G2 Smart Fiber Enclosures are an industry first in automated infrastructure management. Available in both MTP-to-LC Plug and Play and LC-to-LC field terminated versions, the enclosures feature on panel intelligence and a combination of LEDs and a backlit LCD to guide technicians. The LCD can be used to display patch cord trace and connectivity diagnostic information. It can also be used to troubleshoot network issues, which can drastically reduce downtime and increase productivity. Also, since it is actively connected to your database, you could even use it as a virtual label, dynamically displaying panel and port information directly from the Siemon's EagleEye™ Connect software.

High Performance — Available in OM4 and OS1/OS2 MTP Plug and Play versions as well as Multimode and Singlemode LC field-terminated connectivity

Smart — on panel intelligence tracks fiber jumper connections and drives LCD/LEDs for tech guidance



Green — MapIT G2 uses up to 78% less power than competing systems and run cool for reduced heat generation

High Density — Up to 48 fibers in a single 1U space

Scalable — MapIT G2 Smart Enclosures can support systems ranging from small, two enclosure remote sites to large 1000 + panel data centers

Plug and Play — Multi-fiber MTP connectivity provides ultra-fast deployment in mission-critical data centers

High Accessibility — MTP Plug and Play versions feature sliding drawer for easy access to connectivity

Fiber Management — MTP Plug and Play versions feature integrated fiber managers for secure jumper routing

MapIT® G2 Smart Fiber Enclosures

MTP-to-LC Plug and Play Fiber Enclosure - SMTP

M-SMTP-LC5V48NS .....MapIT G2 LC 48-fiber MTP-to-LC Smart Fiber Enclosure, black, multimode, OM4
Includes 2 MTP adapters, 24 duplex MM, LC aqua adapters, cable ties, panel ground lug, fiber management clips, front management bar, label holder and labels

M-SMTP-LCSM48NS .....MapIT G2 LC 48-fiber MTP-to-LC Smart Fiber Enclosure, black, singlemode, OS1/OS2
Includes 2 MTP adapters, 24 duplex SM, LC blue adapters, cable ties, panel ground lug, fiber management clips, front management bar, label holder and labels

LC-to-LC Fiber Enclosure - SFE

M-SFE-LC48-01.....MapIT G2 LC 48-fiber Smart Fiber Enclosure, black, multimode OM3/OM4
Includes 24 duplex MM, LC aqua adapters, cable ties, panel ground lug, fiber management clips, label holder and labels

M-SFE-LC48-01C.....MapIT G2 LC 48-fiber Smart Fiber Enclosure, black. Singlemode
Includes 24 duplex SM, LC blue adapters, cable ties, panel ground lug, fiber management clips, label holder and labels

MapIT G2-Ready Fiber Enclosures

MTP-to-LC Plug and Play Fiber Enclosure

M-MTP-LC5V48-01.....MapIT G2-Ready MTP-to-LC Enclosure, black, multimode*, OM4
Includes 2 MTP adapters, 24 duplex MM/LC aqua adapters, cable ties, panel ground lug, fiber management clips, front management bar, label holder and labels

LC-to-LC Fiber Enclosure

M-FE-LC48-01*.....MapIT G2-Ready enclosure, black, multimode* OM3/OM4
Includes 24 duplex LC aqua adapters, cable ties, panel ground lug, fiber management clips, label holder and labels

Upgrade Kit for MapIT G2-Ready Fiber Enclosures

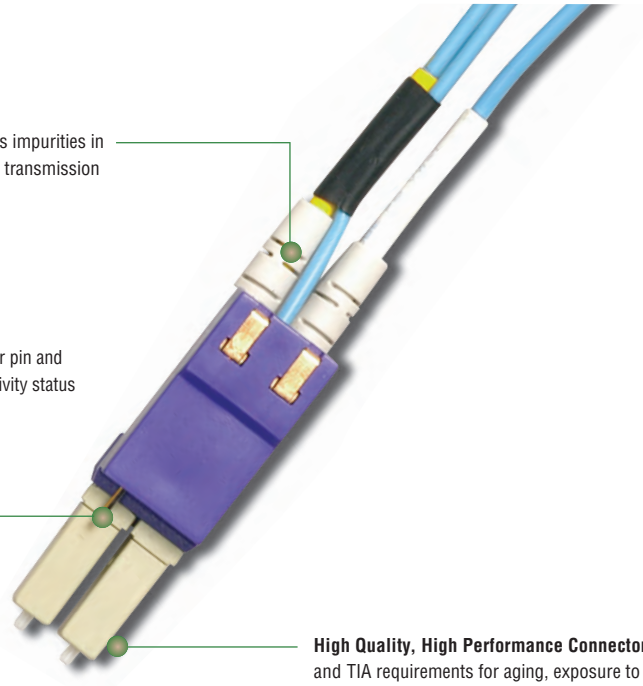
M-SFE-PCBA-24 .....MapIT G2 upgrade kit for MapIT G2-ready fiber enclosure
(Upgrade kit includes PCB with built-in sensor pads, LED's and LCD display, new front panel cover, additional mounting hardware and components with instructions), Siemon EagleEye™ Connect software sold separately

**Singlemode available, contact Customer Service for more information*

MapIT® G2 Fiber Systems

MapIT G2 XGLO® Jumpers

MapIT G2 XGLO jumpers are built to be the best. These assemblies are constructed with premium fiber that meets IEEE, IEC and TIA specifications for 10 Gigabit Ethernet serial transmission. These advanced cords feature patented MapIT sensor technology — gold-plated sensor pins retained in robust molded connector clips. These jumpers enable tracking of port connections between MapIT G2 fiber enclosures and LAN equipment.



XGLO Laser Bandwidth Optimized Cable — Reduces impurities in the core of fiber, ensuring robust 10 Gigabit Ethernet transmission

Reliable Integrated Sensor Connections — 1 sensor pin and copper wire per each duplex connector tracks connectivity status

High Quality, High Performance Connectors — Jumpers exceed ISO/IEC and TIA requirements for aging, exposure to humidity, temperature extremes, impact, vibration, coupling strength, and cable resistance to stress and strain

Ordering Information

MapIT G2 XGLO Multimode Duplex Jumpers:

M-J2-LCLC(XX)-(XX) . . . . . LC-LC duplex jumper, MapIT G2 XGLO 50/125 laser optimized Multimode fiber, aqua jacket

Fiber Type
5L = OM3
5V = OM4

Length
01 = 1m (3 ft)
03 = 3m (10 ft)
05 = 5m (16 ft)

MapIT G2 XGLO Singlemode Duplex Jumpers:

M-J2-LCULCUL-(XX) . . . . . LC-LC duplex jumper, MapIT G2 XGLO OS1/OS2 Singlemode fiber, yellow jacket

Length
01 = 1m (3 ft)
03 = 3m (10 ft)
05 = 5m (16 ft)

Faceplates, Mounting Boxes and Accessories

Siemon's line of faceplates and mounting accessories provide cabling professionals with an extensive list of unique, problem solving options for deploying network connectivity exactly where it is needed.

In addition to the many MAX® and CT® faceplate options, surface-mount boxes, modular furniture adapters and more, please be certain to check out this comprehensive range of flexible options.

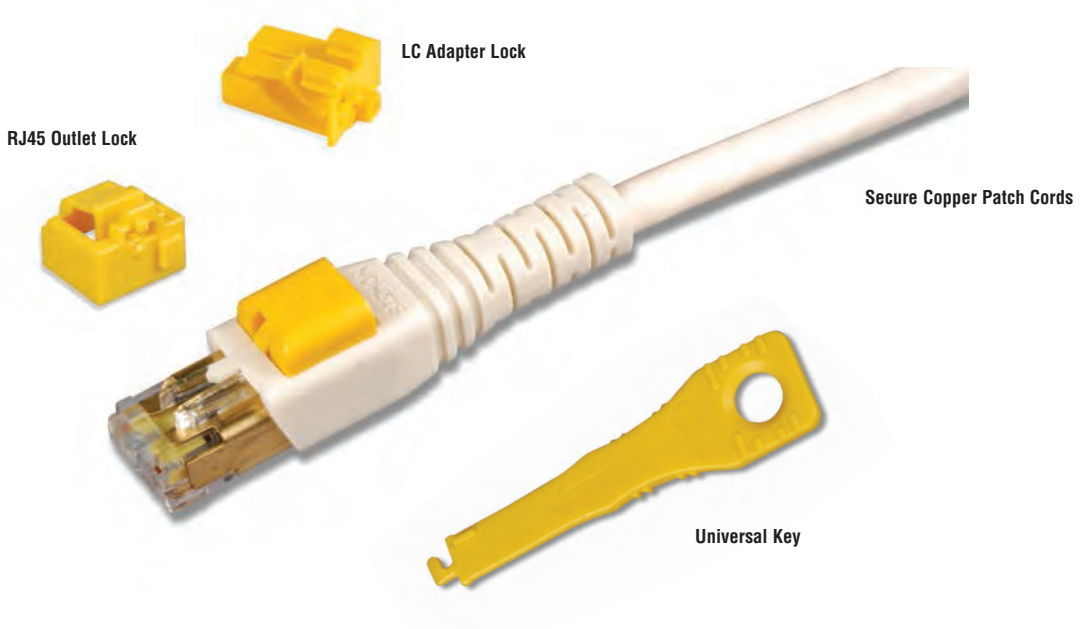
- **Universal Modular Furniture Adapter —** Adapts to securely mount network connectivity in nearly any modular furniture system, eliminating the need for separate, furniture-specific adapters.
- **5-SQUARE® Telecom Box —** Offers 50% more cable management space than traditional boxes to support larger-diamter, high-performance cabling.

Section Contents

LockIT™ Secure Connectivity System

The LockIT solution is comprised of two primary elements: the RJ45 Outlet/LC Adapter Lock and the Secure Patch Cord. The Lock protects a RJ45 copper outlet or LC fiber adapter from the insertion of cords or foreign objects. The Secure RJ45 Patch Cord deters unintended or unauthorized disconnection of the cord. Each of these components requires the LockIT universal key for removal, but may be freely inserted into an outlet to secure the connection. All LockIT components are brightly colored in yellow to easily identify secured connectivity.

The LockIT products are compatible with any standards compliant RJ45 outlet, or LC fiber port. This versatile system can be used in a variety of applications. This flexibility makes LockIT a perfect choice for use in public areas such as schools, retail stores, banks, airports and waiting areas. LockIT is also an ideal solution to protect mission-critical networks such as data centers, health care environments and government systems.



LockIT can protect copper and fiber work area outlets in public areas from tampering or unwanted access

Patch panel and fiber ports may be protected in the work area, wiring closets and data centers

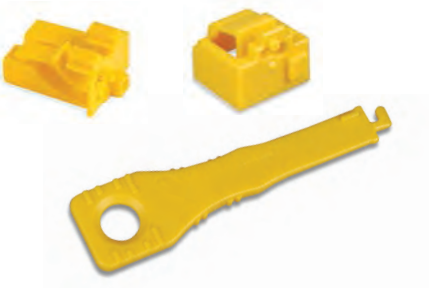
LockIT is ideal to secure active equipment ports against unintended or unauthorized connections or disconnections

Outlet/ Module Locks

LockIT Outlet Lock:
LL-05 .....LockIT Outlet Lock, bag of 10, includes 1 LockIT Universal Key

LockIT LC Module Lock:
LL-LC-05 .....LockIT LC Adapter Lock, bag of 10, includes 1 LockIT Universal Key

LockIT Universal Key:
LKEY-05.....LockIT Universal Key, bag of 10



Secure Category 6A Shielded Patchcords

Shielded Category 6, double ended, 4-pair, stranded LockIT secure patchcord, T568A/B, color matching jacket/boot, LSOH/CM

LP6A-S(XX)M-(XX)L

Cord Length
- **01** = 1m (3 ft.)
- **1.5** =1.5m (4.5 ft.)
- **02** = 2m (6 ft.)
- **03** = 3m (9 ft.)
- **04** = 4m (12 ft.)
- **05** = 5m (15 ft.)

Cord Color
- **01** = Black
- **02** = White
- **03** = Red
- **04** = Gray
- **05** = Yellow
- **06** = Blue
- **07** = Green

Secure Category 6A UTP Patchcords

UTP Category 6A, double ended, 4-pair, stranded LockIT secure patchcord, T568A/B, color matching jacket/boot, CMG

LP6A-(XX)-(XX)

Cord Length
- **03** = 0.9m (3 ft.)
- **05** = 1.5m (5 ft.)
- **07** = 2.1m (7 ft.)
- **10** = 3.1m (10 ft.)
- **15** = 4.6m (15 ft.)
- **20** = 6.1m (20 ft.)

Cord Color
- **01** = Black
- **02** = White
- **03** = Red
- **04** = Gray
- **05** = Yellow
- **06** = Blue
- **07** = Green

Secure Category 6 Patchcords

UTP Category 6A, double ended, 4-pair, stranded LockIT secure patchcord, T568A/B, color matching jacket/boot, LSOH/CM

LP6-(XX)-(XX)

Cord Length
- **03** = 0.9m (3 ft.)
- **05** = 1.5m (5 ft.)
- **07** = 2.1m (7 ft.)
- **10** = 3.1m (10 ft.)
- **15** = 4.6m (15 ft.)
- **20** = 6.1m (20 ft.)

Cord Color
- **01** = Black
- **02** = White
- **03** = Red
- **04** = Gray
- **05** = Yellow
- **06** = Blue
- **07** = Green

MAX® Faceplates

The MAX faceplates combine high density with aesthetics providing a fresh look to match today's office decor. The faceplates are designed to be used with angled or flat MAX modules, hybrid Z-MAX® outlets or TERA® outlets.

Quick Identification — Color-coded icons allow users to instantly identify different types of devices or applications

Variety — Faceplates available in black, white, gray, ivory, light ivory, and stainless steel

Labels — Sheets of designation labels can be ordered for use with standard printers

Installation Flexibility
MAX or Z-MAX modules can be installed from front or rear of faceplate.

Superior Density
Fits up to 6 outlets in a single gang or 12 in a double gang faceplate.

Labeling
Faceplates include pressure-release designation label covers for quick, tool-less removal.

10G MAX Faceplates

10G MAX Faceplates are required for Z-MAX 6A UTP installations. Isolated port spacing ensures proper Alien Crosstalk performance. Faceplates include designation labels, clear label covers, and mounting screws.

10GMX-FP(XXX)-(XX)

No. of MAX Modules	Faceplate Color
S02 = Two (Single Gang)	**01** = Black
S04 = Four (Single Gang)	**02** = White
D06 = Six (Double Gang)	**20** = Ivory
D08 = Eight (Double Gang)	**80** = Light ivory

Ⓑ *Add "B" to end of part number for bulk project pack of 100 faceplates.*

MAX® Faceplates

Faceplates include designation labels, clear label covers, and mounting screws.

MX-FP-S-(XX)-(XX)..... Single Gang

Ports
- **01** = 1 Port
- **02** = 2 Port
- **03** = 3 Port
- **04** = 4 Port
- **06** = 6 Port

Faceplate Color
- **01** = Black
- **02** = White
- **04** = Gray
- **20** = Ivory
- **80** = Light ivory

MX-FP-D-(XX)-(XX)..... Double Gang

Ports
- **06** = 6 Port
- **08** = 8 Port
- **12** = 12 Port

Faceplate Color
- **01** = Black
- **02** = White
- **04** = Gray
- **20** = Ivory
- **80** = Light ivory

Ⓑ *Add "B" to end of part number for bulk project pack of 100 faceplates.**

**Black and gray color options and bulk project packs available for single gang faceplates only.*

MAX Stainless Steel Faceplates

Single and double gang stainless steel MAX faceplates for use with flat and angled MAX modules. Brushed finish on plates mask minor scratches and scuffs that mayoccur during day-to-day usage.

MX-FP-S-(XX)-SS-(X)..... Single Gang

Ports
- **01** = 1 Port
- **02** = 2 Port
- **03** = 3 Port
- **04** = 4 Port
- **06** = 6 Port

Label Options
- **L** = Label Holder
- **Blank** = No Labels or Holder

MX-FP-D-(XX)-SS-(X)..... Double Gang

Ports
- **06** = 6 Port
- **08** = 8 Port
- **12** = 12 Port

Label Options
- **L** = Label Holder
- **Blank** = No Labels or Holder

10G MAX® Horizontal Faceplates

Siemon's 10G single gang horizontal faceplate for Z-MAX®, TERA or MAX modules

10GMX-HFP-(XX)(XX)

Ports
02 = 2 Port
03 = 3 Port
04 = 4 Port

Color
02 = White
20 = Ivory
80 = Light Ivory

Add "B" to end of part number for bulk project pack of 100 faceplates.

MAX Horizontal Faceplates

Siemon's single gang horizontal faceplate for Z-MAX, TERA or MAX modules

MX-HFP-(XX)(XX)

Ports
01 = 1 Port
02 = 2 Port
03 = 3 Port
04 = 4 Port

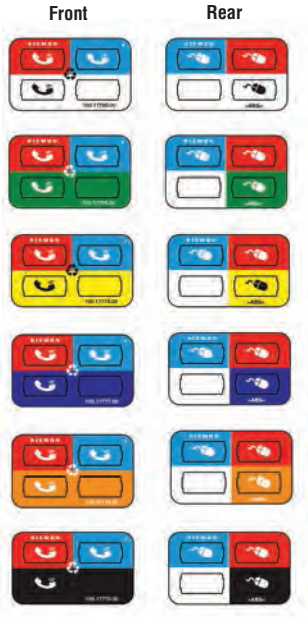
Color
02 = White
20 = Ivory
80 = Light Ivory

Note: Screws, designation label and clear label cover included.

Z-MAX Icon Cards

All Cards include:

- Red and blue icons with voice and data symbols
- Supplemental/color-matched icon with voice, data, and blank designation
- 1 white blank icon for field designation
- Fully recyclable material



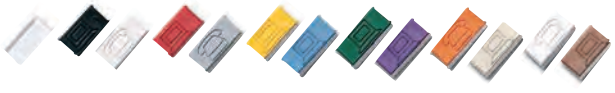
Z-ICON-(XX)B. . . . . Z-MAX Icon Card, bag of 100

Primary Color

01 = Black	**03** = Red	**05** = Yellow	**07** = Green	**20** = Ivory
02 = White	**04** = Gray	**06** = Blue	**09** = Orange	**80** = Light Ivory

MAX and CT Icons

CT-ICON-(XX) . . . . . 25 colored icon tabs (phone on one side, computer on reverse)



CT-ICON

MAX® Duplex and Designer® Faceplates

The MAX Duplex and Designer faceplates are designed for use with Siemon's MAX series mounting frames. They are ideal for today's small office, home office, or residential environment. Faceplates include designation labels and color-matching label covers for circuit identification.

DP-S-(XX) . . . . . .
Single gang,
Duplex faceplate

DR-S-(XX) . . . . . .
Single gang,
Designer faceplate

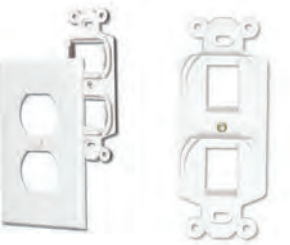
DRE-D-(XX) . . . . . .
Double gang
Designer/Duplex faceplate

DR-D-(XX) . . . . . .
Double gang
Designer faceplate

Use (XX) to specify color: 02 = white, 20 = ivory, 25 = bright white, 80 = light ivory

MAX Mounting Frames

Siemon's MAX mounting frames provide a solution for installing MAX or Z-MAX® outlets in an environment where electrical Duplex or Designer style faceplates are desired. They are compatible with any Duplex or Designer style faceplate. The mounting ears can also be detached and used as spacers between the frames and mounting boxes.



Duplex Mounting Frames

MX-E2F-(XX) . . . . . .
Duplex mounting frame, accepts two flat MAX or Z-MAX outlets

MX-E2A-(XX) . . . . . .
Duplex mounting frame, accepts two angled MAX or Z-MAX outlets

MX-E4F-(XX) . . . . . .
Duplex mounting frame, accepts four flat MAX or Z-MAX outlets

MX-E4A-(XX) . . . . . .
Duplex mounting frame, accepts four angled MAX outlets

MX-D4F-15-(XX) . . . . . .
4-port MAX mounting frame with HD15 female-female adapter installed

MX-D4F-15E-(XX) . . . . . .
4-port MAX mounting frame, HD15 cut-out, empty

Designer Mounting Frames

MX-D1Z-(XX) . . . . . .
Designer mounting frame, accepts one MAX or Z-MAX outlets

MX-D2Z-(XX) . . . . . .
Designer mounting frame, accepts two MAX or Z-MAX outlets

MX-D4Z-(XX) . . . . . .
Designer mounting frame, accepts four MAX or Z-MAX outlets

MX-D6F-(XX) . . . . . .
Designer mounting frame, accepts six flat MAX or Z-MAX outlets

Use (XX) to specify color: 02 = white, 04 = gray, 20 = ivory, 25 = bright white, 80 = light ivory

Wall Phone Faceplates

WPJP. . . . . .
Plastic Wall Phone Faceplate with 2-pair, 6-position USOC jack

MX-WP-(XX)-SS . . . . . .
MAX Series Stainless Steel Wall Phone Faceplate with keystone MAX module included

Use (XX) to specify wiring option:
Z6 = category 6 UTP, T568A/B; Z-MAX outlet
Z6A = category 6A UTP, T568A/B; Z-MAX outlet
Z6AS = category 6A Shielded, T568A/B; Z-MAX outlet
K6 = category 6 UTP, T568A/B; MAX outlet
K5 = category 5e UTP, T568A/B; MAX outlet
U3 = 3-pair, 6-position UTP USOC; MAX outlet
U4 = 4-pair, 8-position UTP USOC; MAX outlet

Siemon Universal Modular Furniture Adapter

Siemon's extended depth, universal modular furniture adapter was specifically designed as a single product solution for securely mounting work area network connectivity in all of today's most common modular furniture systems. The adapter's universal mounting frame is adaptable to fit a wide range of available opening sizes, providing simple, snap-in attachment of the plates. This combination of mounting frame and plate facilitates the deployment of today's larger diameter, high performance cabling in congested modular furniture pathways without exceeding performance-critical bend radius limits.

Available in MAX® and CT® versions, this product platform provides a universal mounting solution for all Siemon connectivity lines including CT, MAX, Z-MAX® and TERA®.

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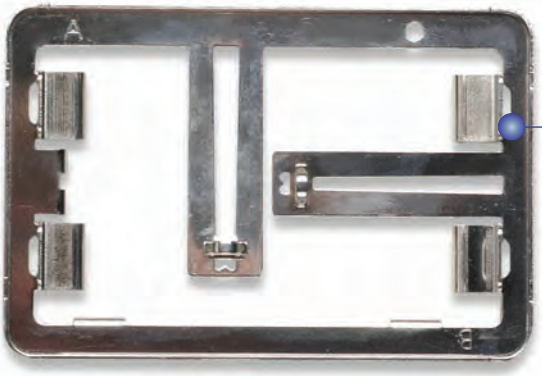
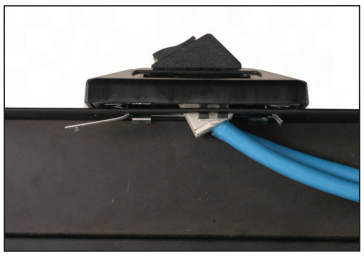
Snap-in Faceplate Mounts —
Robust latching features ensure secure engagement onto mounting frame – even with congested raceways – while providing quick and easy installation

Flexible Mounting —
4-port MAX-style and single coupler CT-style plates are available to support a wide range of connectivity options

Impact Resistant —
Low-profile, angled surface plates protect outlets while eliminating catch points to reduce potential damage due to incidental contact – a common concern in modular furniture environments



Universal Mounting —
Mounting frame adapts to fit nearly any furniture opening and panel thickness, eliminating the need for furniture-specific mounting products while providing a positive fit uncommon to fixed depth latch designs



Manage Bend Radius —
Extended plate design and optional angled adapters provide additional space to help maintain performance-critical bend radius

Improved Labeling Visibility —
Angled, top-mount label window provides better label visibility in low-light, confined locations common to modular furniture applications

Universal Modular Furniture Adapter

CT-UMA-(XX) . . . . . .

CT® Universal Modular Furniture Adapter, Accepts (1) CT Coupler. Includes faceplate, mounting frame, label and clear label holder

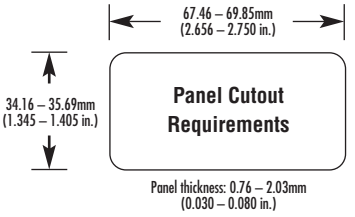
MX-UMA-(XX) . . . . . .

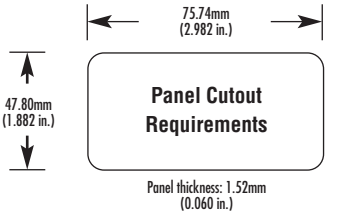
MAX Universal Modular Furniture Adapter, Accepts (4) MAX®, Z-MAX® or TERA® outlets. Includes faceplate, mounting frame, label and clear label holder

Use (XX) To specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light Ivory

MAX® Modular Furniture Adapters

The MAX modular furniture adapters will accept four Z-MAX hybrid outlets, MAX angled or flat modules and snaps directly into communication outlet openings* in most major modular furniture systems, including Steelcase, Haworth and Herman Miller. Adapters include designation label and clear label cover to allow for circuit identification.





MX-MFP-(XX) . . . . . .

Modular furniture adapter for standard openings including Steelcase

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory

MX-MFP-HMA-(XX) . . . . . .

Modular furniture adapter for Herman Miller Action Office Series 2 and Ethospace base openings

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory

MAX Modular Furniture adapters mount into modular furniture openings, combining superior density with proper circuit designation.

**Furniture outlet openings, panel thickness, and raceway clearance may vary. Please consult furniture manufacturer for actual dimensions to determine compatibility.*

MAX Labeling and Accessories

Part #	Description
CT-FP-LBL-104*	10 sheets of labels for faceplates that will fit any standard 8.5 x 11 printer, 104 labels/sheet
MX-FP-CVR-00	Bag of 100 clear label covers for MAX faceplates

**Visit our web site or contact our Technical Support Department for labeling software.*

Ⓑ *Add "B" for bulk pack of 100 icons or tabs.*

MAX Outlet Blanks

Blank inserts for unused ports and future growth.

MX-BL-(XX). . . . . .

Blank module, bag of 10

Use (XX) to specify color: 00 = clear (MX-AD-XX only), 01 = black, 02 = white, 04 = gray, 20 = ivory, 25 = bright white, 80 = light ivory*

MAX® Tamper-Proof Faceplate

Siemon's tamper-proof MAX faceplates provide a secure, low profile solution for mounting our complete line of MAX modules. The design features a one-piece base which accepts up to six angled MAX modules and is secured by a solid cover and a choice of tamper-proof star or standard slotted head screw. The base mounts to any standard North American single gang box.

Part #	Description
MX-TFP-S-06-(XX)	6-port single gang, tamper-proof faceplate for angled MAX modules

Use (XX) to specify color: 02 = white, 80 = light ivory
Faceplates include tamper-proof and standard #6-32x1 mounting screws and color-matching screw cover.
Note: Tamperproof faceplate is not compatible with Z-MAX® or TERA® outlets.

Surface Mounting Boxes for MAX and CT® Faceplates

These boxes offer a surface mounting option for MAX or CT single and double gang faceplates. These boxes are perfect for installations where the work area outlet cannot be recessed into a wall or floor box. The boxes are also compatible with our stand-off rings if extra depth is required behind the faceplate. Mounting hardware not included.

CT4-BOX-(XX) .....
Surface mount box for single gang MAX or CT faceplate
height: 119.3mm (4.70 in.),
width: 74.8mm (2.95 in.),
depth: 40.6mm (1.60 in.)

CT8-BOX-(XX) .....
Surface mount box for double gang MAX or CT faceplate
height: 119.3mm (4.70 in.),
width: 120.8mm (4.76 in.),
depth: 40.6mm (1.60 in.)

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory

AB .....
Adhesive backing
(package of 10)

MB .....
Magnetic backing
(package of 10)

Note: Two magnetic or adhesive backings required for double gang boxes.

Stand-Off Rings for MAX and CT Faceplates

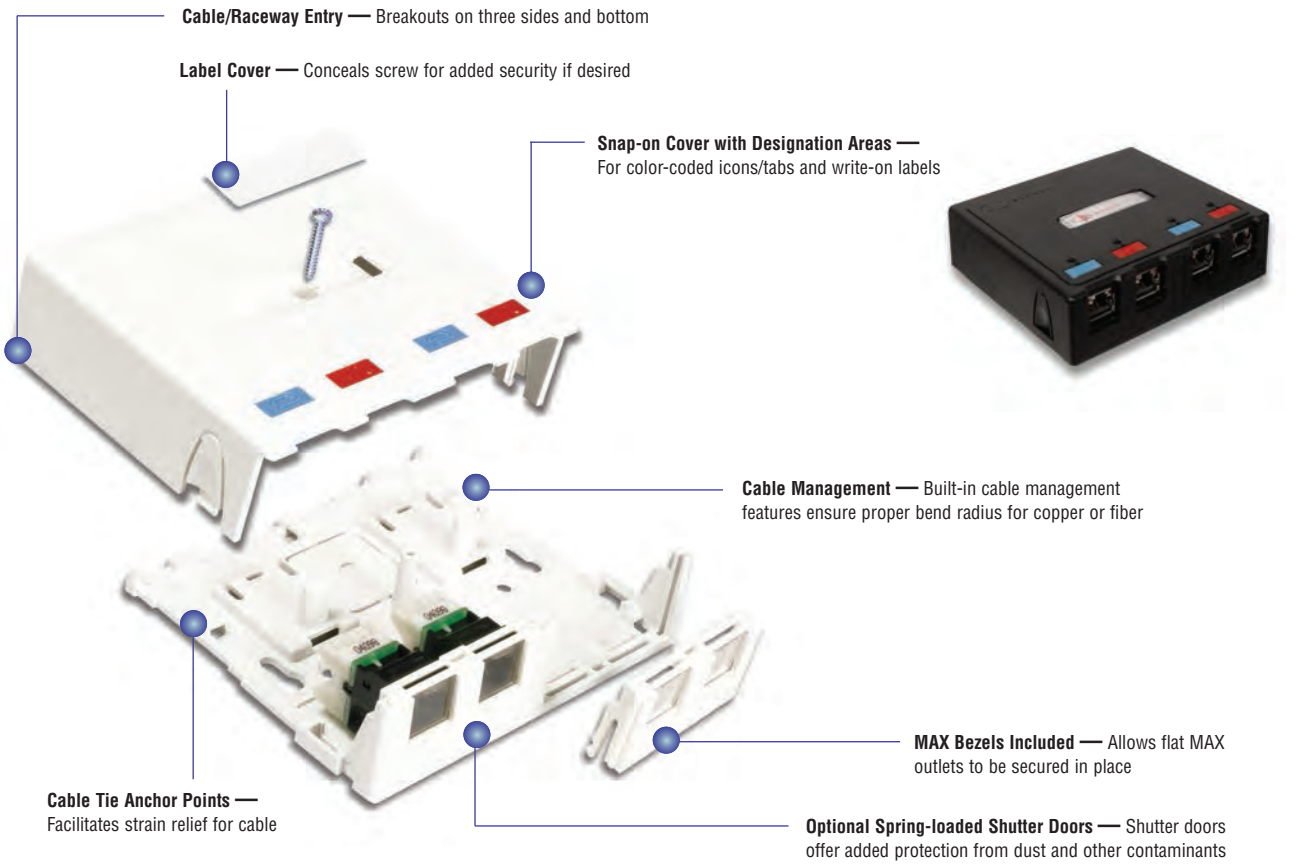
Stand-off rings are a mounting option for installations that need extra depth behind the faceplate. They are compatible with both MAX and CT faceplates. The 25.4mm (1.00 in.) ring is especially useful to ensure the proper bend radius for optical fiber or other multimedia applications (faceplate not included).

Part #	Description
CT4-RING-050-(XX)	12.7mm (0.50 in.) stand-off ring for single gang MAX or CT faceplate
CT4-RING-100-(XX)	25.4mm (1.0 in.) stand-off ring for single gang MAX or CT faceplate
CT8-RING-050-(XX)	12.7mm (0.50 in.) stand-off ring for double gang MAX or CT faceplate
CT8-RING-100-(XX)	25.4mm (1.0 in.) stand-off ring for double gang MAX or CT faceplate

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory

Surface Mount Boxes

Surface mount boxes feature a sleek compact, easy-to-install design. UTP, shielded, fiber, video, and coax MAX,® Z-MAX® or TERA® outlets can be quickly installed into the base. Multiple cable management features provide a high performance and well organized installation.



Z-MAX Surface Mount Boxes

MX-SMZ(X)-(XX)-(X) . . . . . Z-MAX Surface mount box with cover base, 2 port multimedia bezel, cable ties, adhesive tape and mounting screws

Ports
1 = 1 port
2 = 2 port*
4 = 4 port*
6 = 6 port*

Color
01 = Black
02 = White
20 = Ivory
80 = Light Ivory

Options
(Blank) = n/a
M = magnets

** Includes designation labels and label covers*

Also for use with single-port flat and duplex LC adapter modules and TERA outlets.

SIEMON

MX-SM Surface Mount Boxes

Field-assembled surface mount boxes with MAX® bezels. Accepts flat single port MAX outlets ordered separately.

MX-SM1-(XX) . . . . . .
1-port box with cover, base, one single port MAX bezel, cable ties, adhesive tape and mounting screws

MX-SM2-(XX) . . . . . .
2-port box with cover, base, one (2-port) MAX bezel, cable ties, adhesive tape, mounting screws, and designation labels

MX-SM4-(XX) . . . . . .
4-port box with cover, base, two (2-port) MAX bezels, cable ties, adhesive tape, mounting screws, designation labels and label covers

MX-SM6-(XX) . . . . . .
6-port box with cover, base, three (2-port) MAX bezels, cable ties, adhesive tape, mounting screws, designation labels and label covers

Use (XX) to specify color: 01 = black, 02 = white, 20 = ivory, 80 = light ivory
Add "-D" for optional spring shutter doors.
Add "-M" for optional magnets.
Add "-MD" for optional doors and magnets.

MAX bezels are compatible with all single port, flat MAX outlets. For LC, SC duplex fiber adapters, Z-MAX® and TERA® options, see MX-SM multimedia bezels below.

MX-SM Multimedia, SC Bezels and Blanks

MX-SMB-MM-(XX) . . . . .
2-port multimedia bezel

MX-SMB-SC-(XX) . . . . . .
2-port bezel with one duplex SC adapter*

MX-SM-BLNK-(XX) . . . . .
1-port blank insert for MAX bezels

Use (XX) to specify color: 01 = black, 02 = white, 20 = ivory, 80 = light ivory.
**SC adapters are "universal" to support both multimode and singlemode.*

Note: Multimedia bezel accommodates Z-MAX®, TERA® outlets and flat MAX duplex LC adapters.
They are also compatible with all other single port flat MAX modules, but require the use of icons to secure modules into bezel.

6-Port SP5 Surface Pack Module

This 6-port SP5 Surface Pack is designed to provide high performance modular connectivity and category 5e transmission performance for mobile, surface mount applications. The module fits through 57.15mm (2.25 in.) diameter openings for easy relocation and can be mounted using either mounting screws (not provided) or optional internal mounting magnets. Cable tie strain relief points and tapered entrance secures and protects cables.

Part #	Description
SP5-C5	6-port, surface pack module, T568A/B. Includes icon label holder, label, and cable tie

Add "-M" for optional mounting magnets.

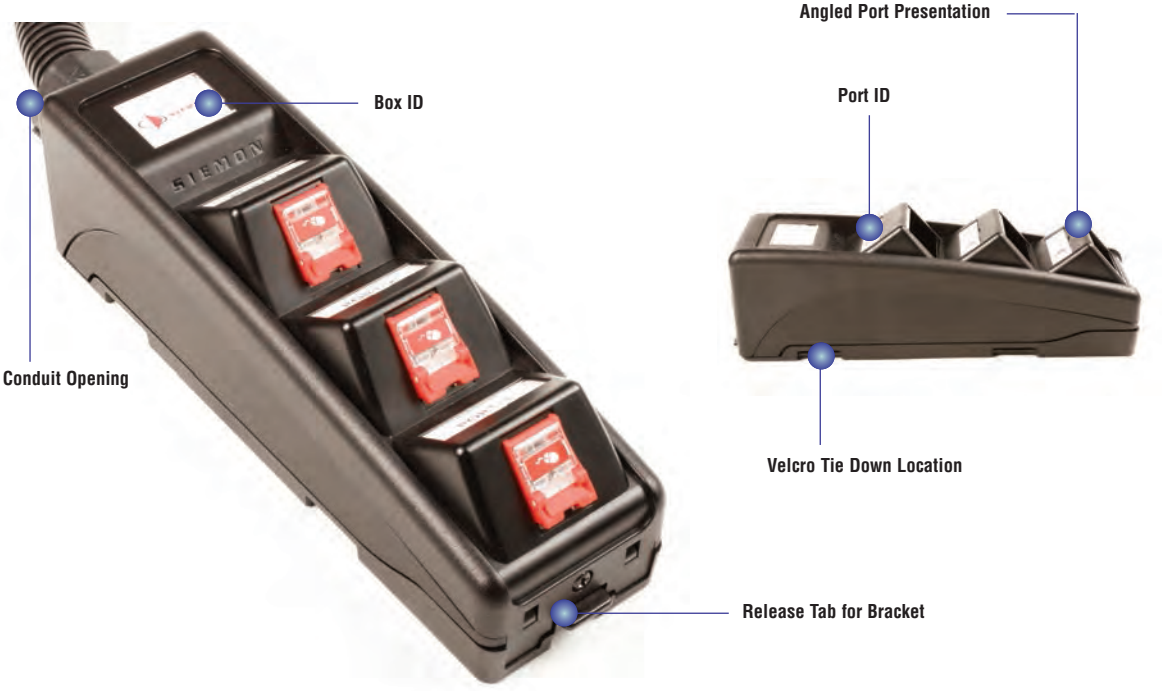
Surface Pack™ Box

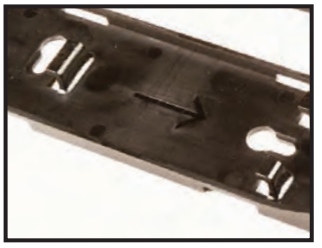
Siemon's Surface Pack Box is best described as a compact, lightweight box often utilized in high density work area environments that require rapid deployment of cabling systems. Typically deployed in buildings with a raised floor system, environments range from from call centers to trading floors.

The box supports rapid deployment by allowing connectivity to be pre-terminated and stored away while construction is finalized. Cables can be routed within flexible conduit (not supplied), secured to the box and terminated to outlets. The small overall footprint allows the box and connectivity to be stored under a raised floor and then passed through standard size floor grommets for efficient deployment to the work station.

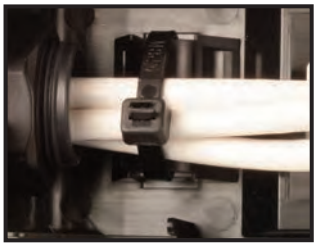
Surface Pack Boxes are available in 3 port and 6 port versions. Both boxes are the same size and compatible with MAX®, Z-MAX® and TERA® outlets allowing customers to support Category 5e, 6, 6A and 7A installations. The outlets are presented at an angle to allow patch cords to dress less prominently off the face of the box. Blanks may be used to accommodate port count variants and allow for expansion in the future. Ample labeling is provided for both the box and ports.

Two mounting options are available. One method features a mounting bracket that can be secured to a fixed location and allows the box to be clipped into the bracket via a one touch latch. For additional security, the box can be mounted without the use of the bracket by securing the base directly to the work area surface.

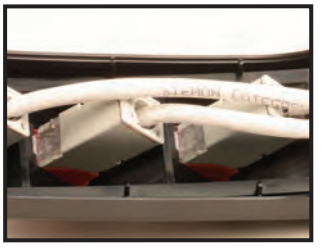




Pre-mountable Bracket — Allows box to be quickly installed at the work area location



Cable Tie Down Point — Within box secures cables for proper strain relief



Easy Access — All terminations and cables are contained within the box cover allowing easy access to terminations

Product Information

PERFORMANCE SPECIFICATIONS

Mechanical Properties		
	3 Port	6 Port
Part Number	SP-3-01	SP-6-01
Conduit Opening	26 mm (1 in.)	32 mm (1.25 in.)
Dimensions		
Length	192 mm (7.5 in.)	
Width	54 mm (2 in.)	
Height	61 mm (2.4 in.)	
Weight	181 grams (6.3 oz.)	
Material	Polycarb / ABS	
Flammability Rating	UL 94 V-0	
Operating Temperature	-10° C to +60° C (14° F to 140° F)	
Relative Humidity	Up to 95%, non-condensing	
Storage Temperature	-40° C to +70° C (14° F to 158° F)	
Outlet Compatibility	TERA®, Z-MAX® Hybrid UTP or Shielded, MAX® Flat UTP Outlets, MAX Blanks	
Color	Black	

Ordering Information

Part #	Description
SP-3-01	3 Port Surface Pack™ Box, Black
SP-6-01	6 Port Surface Pack Box, Black

SP-3-01

SP-6-01

Box Includes:

3 - Port identification labels and covers

1- Box label and cover

1 - (203mm) Tie-wrap

1 - Screw for securing cover to the base of the box

Siemon 5 SQUARE® Telecommunications Outlet Box

Siemon's 5 SQUARE telecommunications outlet box was specifically designed to support today's high-performance copper and fiber optic cabling systems, providing 50% more useable space than traditional 4 square boxes. This additional space simplifies installation and cable management and helps maintain the strict bend-radius requirements of high-performance systems such as category 6A and category 7_A copper while leaving room for future upgrades and expansions.

50% More Space — Siemon's 5 SQUARE box provides 64 cubic inches of useable space versus just 30-42 cubic inches for standard boxes

Integrated Cable Management — 5 SQUARE is the only telecommunications outlet box with an integrated cable management system

Support Larger-Diameter Cables — Provides additional space for management of larger diameter cables, such as category 6A UTP

Manage Bend Radius — Supports bend-radius requirements of high-performance cabling to ensure proper consistent performance

Flexible Mounting
Standard and bracket-mounted versions feature multiple conduit knockout options.

Installation Options
Available with single and double-gang extension rings with depths up to 1 ¼ in.

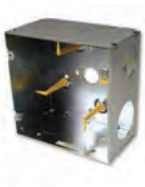
Faceplate/Box Compatibility
Plaster/Reducer rings provide compatibility with all US style Siemon and 3rd party single and double gang faceplates, as well as Siemon MX-SM Surface-Mount Boxes, Fiber Outlet Boxes and MuTOA's.

Siemon 5 SQUARE® Telecom Outlet Box

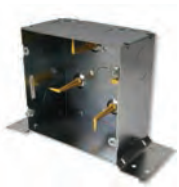
Part #	Description
BB55-01	5 SQUARE Telecom Box w/Cable Mgmt, (1) 1/2, (1) 3/4 in. and (1) 1 in. knockouts on each side
BB55-02	5 SQUARE Telecom Box w/Cable Mgmt, (2) 1 in. knockouts on each side
BB55-03	5 SQUARE Telecom Box w/Cable Mgmt, (1) 1 in. and (1) 1-1/4 in. knockouts on each side
BB55B-01	5 SQUARE Telecom Bracket Box w/Cable Mgmt, (1) 1/2, (1) 3/4 in. and (1) 1 in. knockouts on 3 sides only
BB55B-02	5 SQUARE Telecom Bracket Box w/Cable Mgmt, (2) 1 in. knockouts on 3 sides only
BB55B-03	5 SQUARE Telecom Bracket Box w/Cable Mgmt, (1) 1 in. & (1) 1-1/4 in. knockouts on 3 sides only
BE55-1A	5 SQUARE Single Gang Plaster Ring, Flat
BE55-1B	5 SQUARE Single Gang Plaster Ring, 1/2 in. Raise
BE55-1C	5 SQUARE Single Gang Plaster Ring, 5/8 in. Raise
BE55-1D	5 SQUARE Single Gang Plaster Ring, 3/4 in. Raise
BE55-1E	5 SQUARE Single Gang Plaster Ring, 1 in. Raise
BE55-1F	5 SQUARE Single Gang Plaster Ring, 1-1/4 in. Raise
BE55-2A	5 SQUARE Double Gang Plaster Ring, Flat
BE55-2B	5 SQUARE Double Gang Plaster Ring, 1/2 in. Raise
BE55-2C	5 SQUARE Double Gang Plaster Ring, 5/8 in. Raise
BE55-2D	5 SQUARE Double Gang Plaster Ring, 3/4 in. Raise
BE55-2E	5 SQUARE Double Gang Plaster Ring, 1 in. Raise
BE55-2F	5 SQUARE Double Gang Plaster Ring, 1-1/4 in. Raise


BB55-01


BB55-02


BB55-03


BB55B-01


BB55B-02


BB55B-03


BE55-1A


BE55-1B


BE55-1C


BE55-1D


BE55-1E


BE55-1F


BE55-2A


BE55-2B


BE55-2C

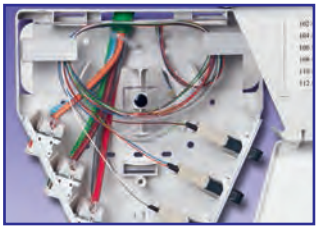

BE55-2D


BE55-2E


BE55-2F

Multi-User Telecommunications Outlet Assembly (MUTOA)

This low-profile multi-user/multimedia surface mount box is unsurpassed in features and flexibility, and is ideal for use as a Multi-user Telecommunications Outlet Assembly (MUTOA) as specified in TIA-568-C.1. It provides storage area for up to 12m (39 ft.) of buffered optical fiber cable using our optional fiber management tray and at least 2m (6.5 ft.) of 4-pair twisted pair cable in the base, while maintaining a minimum bend radius of 30mm (1.2 in.).

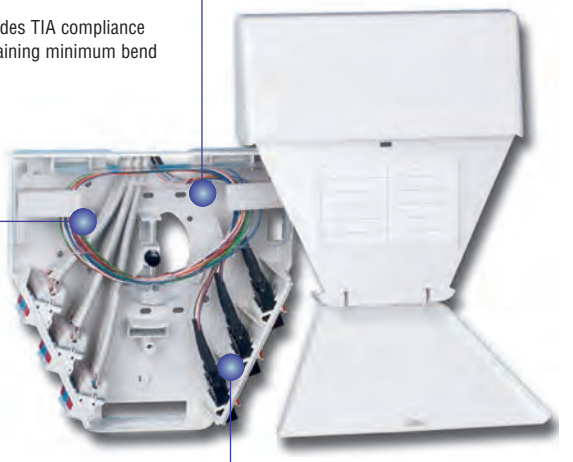


Fiber Management
Optional fiber management trays enable isolation and proper routing of optical fiber cabling.

Innovative Labeling
Hideaway labeling system flips down to reveal a designation area that utilizes standard size faceplate designation labels.

US and European Compatible — Compatible with any standard single or double gang electrical box including European standards

Storage Capacity — Provides TIA compliance for cable slack while maintaining minimum bend radius requirements



Versatility — MAX® MUTOA accommodates any combination of up to 18 ports of mixed media or up to 36 fiber ports
CT® MUTOA accommodates any combination up to 6 CT couplers

MUTOA Ordering Information

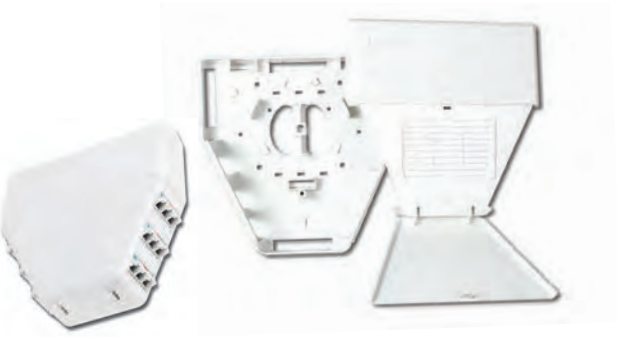
Part # (XX)-MMO-(XX)

Type
MX = for use with MAX outlets
CT = for use with CT couplers

Color
02 = White
20 = Ivory
80 = Light Ivory

Description
Multi-user/telecommunications outlet box with cable ties, mounting screws and adhesive tape
height: 200.2mm (7.88 in.)
width: 200.2mm (7.88 in.)
depth: 57.0mm (2.25 in.)

Optional fiber management tray sold separately (see below).



Use (XX) to specify color: 02 = white, 20 = ivory, 80 = light ivory

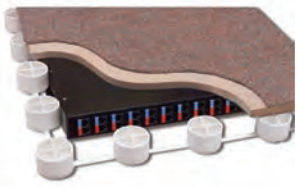
Accessories

Part #	Description
CT-MMO-MAG	Set of 3 magnets for mounting MUTOA
FMT	Clear fiber management tray for MUTOA

MAX® Zone Unit Enclosure

The MAX zone unit enclosure is an economical, high-density solution designed for use with low-profile sub-floor applications including Flexspace Cablefloor® and Haworth Nexus™. Enclosures are available to accommodate up to 48 ports of media using flat MAX, Z-MAX® and TERA® series modules and feature a 44.5 x 101.6mm (1.8 x 4.08 in.) opening for cable entry. Cable tie anchor points (hook and loop cable managers included) and fiber managers are conveniently located within the enclosure for proper routing and securing of cabling.

The enclosures are constructed of durable 16 gauge steel and feature a simple two piece design with a base and cover secured by four #6-32 screws. There are four mounting holes in the base for securing the enclosure to a mounting surface. The 48-port version includes internal support posts to provide additional structural support.



Part #	Description
ZU-MX-48	48-port MAX zone unit enclosure *height: 44.5mm (1.8 in.),* *width: 254.0mm (10 in.),* *depth: 377.8mm (14.9 in.)*
ZU-MX-24-0515*	24-port MAX zone unit enclosure *height: 44.5mm (1.8 in.),* *width: 114.3mm (4.5 in.),* *depth: 377.8mm (14.9 in.)*

**0515 denotes approximate width and depth in inches.*

MAX Fiber Adapter Modules

Siemon MAX fiber adapter modules are compatible with all MAX series faceplates, modular furniture adapters, surface mount boxes and patch panels. All fiber adapters are "universal" to support either multimode or singlemode fiber connections.

MX-F-SA-(XX)* . . . . . .
Flat module
with 1 simplex ST
adapter (1 fiber)

MX-SA-(XX) . . . . . .
Angled module
with 1 simplex ST
adapter (1 fiber)

MX-F1-LC(X)-(XX)C . . .
Flat outlet
with 1 duplex LC
adapter (2 fibers)

Use (X) to specify LC adapter color:
blank = beige, U = blue, Q = aqua

MX-F-S2(X)-(XX) . . . . .
Flat outlet
with 1 duplex ST
adapter (2 fibers)

MX-S2(X)-(XX) . . . . . .
Angled outlet
with 1 duplex ST
adapter (2 fibers)

Use (X) to specify ST or SC adapter color: blank = black, Q = aqua

MX-F-SC(X)-(XX) . . . . .
Flat outlet
with 1 duplex SC
adapter (2 fibers)

MX-SC(X)-(XX) . . . . . .
Angled outlet
with 1 duplex SC
adapter (2 fibers)

Use (X) to specify LC adapter color: blank = beige, U = blue, Q = aqua

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 25 = bright white, 80 = light ivory

Modules include dust caps, one color-matching, one red, and one blue icon per port.

**Compatible with SM® boxes.*

Coax MAX Modules

For terminating coaxial cables at the work area or telecommunications room, Siemon's coax MAX modules are available with both BNC and F-type adapters. The F-type is available in both flat and angled while the BNC is available in flat only. They each include a space for using color coded icons to identify type of service.

MX-FA-(XX). . . . . .
Angled module with 1 F-type adapter, 75 ohms, 2 GHz

MX-F-FA-(XX)* . . . . . .
Flat module with 1 F-type adapter, 75 ohms, 2 GHz

MX-F-BA-(XX)* . . . . . .
Flat module with 1 BNC adapter, 75 ohms

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory
Modules include one color-matching, one red, and one blue icon.
**Compatible with SM® boxes.*

MAX Audio/Video Modules

Siemon audio/video MAX modules provide connectivity for a wide range of applications. Available media types include RCA, SVHS and HD15.

MX-F-RC-(XX)* . . . . . .
Flat module with 1 RCA connector with solder tail

MX-RC-(XX). . . . . .
Angled module with 1 RCA connector with solder tail

Use (XX) to specify color: 01 = black, 02 = white,
04 = gray, 20 = ivory, 80 = light ivory
RCA Modules include one color-matching, one red, and one blue icon.
**Compatible with SM boxes.*

Fiber Outlet Box (FOB2)

Siemon's low-profile Fiber Outlet Box (FOB2) is the optimal solution for bringing fiber to the desk. The FOB2 offers a well-defined method for managing fiber cabling at the work area by providing a connection point for up to 12 fibers connectors utilizing slide-in bezels.

FOB2-(XX) . . . . . Includes base, cover, designation labels, clear label covers, mounting hardware, cable ties, icons, and three blank bezels

FOB2-GRD-(XX) . . . . . Includes base, extended cover, designation labels, clear label covers, mounting hardware, cable ties, icons, and three blank bezels

Use (XX) to specify color: 01 = black, 02 = white, 80 = light ivory

Fiber Bezels

FOB-BZL-LC(X)1-01. . . . . .
1 Duplex LC adapter,
(2 fibers)

FOB-BZL-LC(X)-01. . . . . .
2 Duplex LC adapters,
(4 fibers)

FOB-BZL-SC(X)-01. . . . . .
1 Duplex SC adapter,
(2 fibers)

FOB-BZL-SA-01 . . . . . .
1 Duplex ST adapter,
(2 fibers)

FOB-BZL-BL-01 . . . . . .
Blank bezel

Use (X) to specify adapter color: blank = beige, U = blue, Q = aqua

Note: Fiber adapters are "universal" to support both multimode and singlemode.

CT® Faceplates

CT2-FP-(XX) . . . . . .
1-port single gang plastic faceplate for a CT adapter

CT4-FP-(XX) . . . . . .
2-port single gang plastic faceplate for CT adapters

CT8-FP-(XX) . . . . . .
4-port double gang plastic faceplate for CT adapters

CT2-HFPA-(XX)* . . . . . .
1-port single gang plastic horizontal faceplate for a CT adapter, with color matching screw caps

Use (XX) to specify color: 02 = white, 20 = ivory, 80 = light ivory

Faceplates include designation label(s), label cover(s) and #6-32x1 screws.

Ⓑ *Add "B" to end of part number for bulk project pack, (includes 100 CT2 or CT4 faceplates or 50 CT8 faceplates, screws, designation labels, and label covers).*

**Not available in bulk project pack.*

Stainless Steel CT Faceplates

CT4-FP-SS-L . . . . . .
Single gang stainless steel faceplate for two couplers with labels and label holders

CT4-FP-SS . . . . . .
Single gang stainless steel faceplate for two couplers

CT8-FP-SS-L . . . . . .
Double gang stainless steel faceplate for four couplers with labels and label holders

CT8-FP-SS . . . . . .
Double gang stainless steel faceplate for four couplers

CT12-FP-SS . . . . . .
Triple gang stainless steel faceplate for six couplers

TERA®-MAX® Adapters for CT® Faceplates

Designed for use in standard CT faceplates or adapters, adapters feature angled bezel orientation to reduce mounting depth requirements for Z-MAX®, TERA and flat MAX outlets and facilitates gravity feed installation design.

CTE-MXA-01-02 . . . . . .
Angled CT adapter for one MAX, Z-MAX or TERA outlet, white

CTE-MXA-02-02 . . . . . .
Angled CT adapter for two MAX, Z-MAX or TERA outlets, white

CTE-HZA-02-(XX) .....
Horizontal CT adapter for two Z-MAX, MAX or TERA outlets

Use (XX) to specify color: 01 = black, 02 = white

See page 8.8 for Universal Modular Furniture Adapters for CT adapters.

CT Modular Furniture Adapters

CT-MFP-(XX) . . . . . .
Adapter for standard openings including Steelcase (accepts one CT coupler)
Use (XX) to specify color:
01 = black, 02 = white, 04 = gray,
20 = ivory, 80 = light ivory

CT-MFP-HMA-(XX). . . . . .
Adapter for Herman Miller Action Office Series 2 and Ethospace base openings (accepts two CT couplers)
Use (XX) to specify color:
01 = black, 02 = white

Faceplate Accessories

Part #	Description
CT-FP-LBL-104*	10 sheets of labels for faceplates that will fit any standard 8.5 x 11 printer, 104 labels per sheet
CT-FP-CVR	Bag of 100 clear label covers for CT faceplates

*Visit our web site or contact our Technical Support Department for labeling software.

Flat CT® 3 Couplers

Flat CT 3 couplers provide a full range of voice wiring configurations. They are available with single or double modular jacks.

Double Couplers

CT-(XX)-(XX)-(XX). . . . . .
Flat, double coupler

Use 1st (XX) to specify jack A (see below)
Use 2nd (XX) to specify jack B (see below)
Use 3rd (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory

Single Couplers

CT-(XX)-(XX). . . . . .
Flat, single coupler

Use 1st (XX) to specify jack option (see below)
Use 2nd (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory

Jack Options: *U3 = 3-pair, 6-position jack, USOC; U4 = 4-pair jack, USOC*

Ⓑ *Add "B" to end of part number for bulk project pack of 100 couplers.*
(Bulk option includes couplers and icons only — termination caps and cable ties are available separately, see page 1.21).
Couplers include one color-matching icon (clear for black, 2 termination caps, and one cable tie per port, plus one red and one blue icon.

Coax CT Couplers

CT-BA-(XX)
Flat coupler with 1 BNC adapter

CT-A-BA-(XX)
Angled coupler with 1 BNC adapter

CT-FA-(XX)
Flat coupler with 1 F-type adapter

CT-A-FA-(XX)
Angled coupler with 1 F-type adapter

CT-BA-BA-(XX)
Flat coupler with 2 BNC adapters

CT-A-BA-BA-(XX)
Angled coupler with 2 BNC adapters

CT-FA-FA-(XX)
Flat coupler with 2 F-type adapters

Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory
Couplers include one color-matching icon (clear for black); one red and one blue icon.

Fiber Adapter CT Couplers

The CT fiber coupler line consists of LC, SC, ST and SC/ST hybrid adapters available in 2 and 4 fiber versions. Angled versions are available with our patented gravity-feed design for controlling the bend radius of fiber cables at the work area. All fiber adapters are "universal" to support either multimode or singlemode fiber connections.

CT-LC(X)-(XX)
Flat coupler with 1 duplex LC adapter (2 fibers)

CT-LC(X)-LC(X)-(XX)
Flat coupler with 2 duplex LC adapters (4 fibers)

CT-A-LC(X)-(XX)
Angled coupler with 1 duplex LC adapter (2 fibers)

CT-A-LC(X)-LC(X)-(XX)
Angled coupler with 2 duplex LC adapters (4 fibers)

CT-SC(X)-SC(X)-(XX)
Flat coupler with 1 duplex SC adapter (2 fibers)

CT-SC(X)-4-(XX)
Flat coupler with 2 duplex SC adapters (4 fibers)

CT-A-SC(X)-SC(X)-(XX)
Angled coupler with 1 duplex SC adapter (2 fibers)

CT-SA-SA-(XX)
Flat coupler with 1 duplex ST adapter (2 fibers)

CT-SA-4-(XX)
Flat coupler with 2 duplex ST adapters (4 fibers)

CT-A-SA-SA-(XX)
Angled coupler with 1 duplex ST adapter (2 fibers)

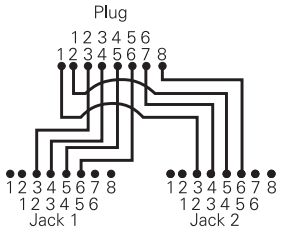
Use (X) to specify LC and SC adapter color: blank = beige, U = blue, Q = aqua
Use (XX) to specify color: 01 = black, 02 = white, 04 = gray, 20 = ivory, 80 = light ivory
Couplers include one color-matching icon (clear for black); plus one red and one blue icon.

Modular Y-Adapters

Y-Adapters are available as "splitters" which convert one 4-pair jack into two jacks. The Y-Adapters utilize Siemon's patented UP-2468 plug which allows adapters to be used in 6- or 8-position jacks. The adapter body can be rotated 180° to view either the colored icons or the Y-Adapter pinouts, which are printed on the opposite side.

YU4-U2-U2 . . . . . .

Splits a 4-pair USOC jack for Token Ring or voice applications at either jack

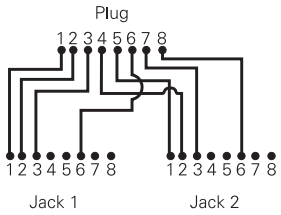


YA4-U2-U2 . . . . . .

Splits a 4-pair T568B jack for Token Ring or voice applications at either jack

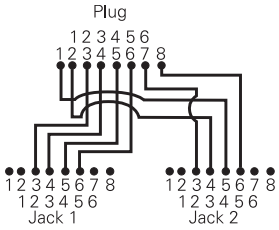
YT4-E2-E2 . . . . . .

Splits a 4-pair T568A/B jack for 10BASE-T applications at either jack



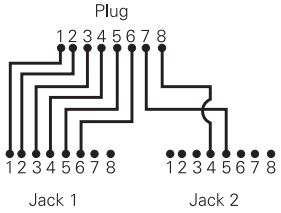
YT4-U2-U2 . . . . . .

Splits a 4-pair T568A jack for Token Ring or voice applications at either jack



YA4-A3-U1 . . . . . .

Splits a 4-pair T568B jack for 1-, 2- or 3-pair voice and 1-pair voice/modem

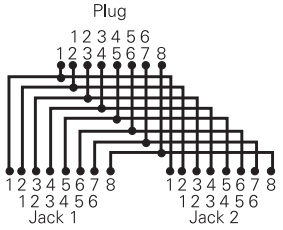


YT4-E2-U2 . . . . . .

Splits a 4-pair T568A/B jack for 10BASE-T and Token Ring or voice applications

Y-BRIDGE . . . . . .

Bridges all jack pairs. Compatible with any jack wiring. Provides an additional 4-pair jack with the same wiring.

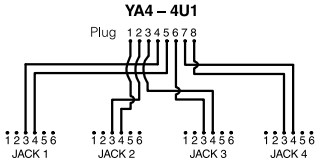


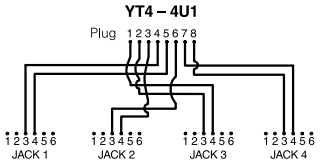
Modular 4-Way Splitter

Siemon's modular 4-way splitter provides access to each individual pair of a 4-pair modular outlet. The splitter converts a single 4 pair outlet to 4 individual 1-pair, 6-position outlets to enable four unique modular connections. The universal plug design enables compatibility with both 6- and 8-position outlets.

YA4-4U1. . . . . Modular 4-way splitter, T568B

YT4-4U1 . . . . . Modular 4-way splitter, T568A





Note: These modular adapters meet category 3 transmission specifications.

Universal Modular Plug

Our patented "universal" modular plug eliminates the need to stock more than one size modular plug. The UP-2468 permits field-termination of modular cords in 2-, 3-, or 4-pair increments and terminates twisted pair cable with 26 – 22 AWG (0.40mm – 0.64mm) solid or 7-strand conductors with insulated conductor diameter of 0.86 – 0.99mm (0.034 – 0.039 in.). Plug contacts have 50 microinches minimum of gold plating over nickel and meet TIA-968-A and IEC 60603-7 specifications. Universal modular plugs are compatible with Siemon PT-908 crimp tool.

Part #	Description
UP-2468	"Universal" modular plug fits 6 or 8-position RJ outlets

Modular Plugs

We offer modular plugs in standard configurations to terminate modular cords for patching or work area applications. Modular plugs can be terminated to the exact cable length needed in order to maintain a neater, more organized installation. The plugs terminate twisted-pair cable with 26 – 22 AWG (0.40mm – 0.64mm) solid or 7-strand conductors with an insulated conductor diameter of 0.86 – 0.99mm (0.034 – 0.039 in.). All plug contacts have 50 microinches minimum of gold plating over nickel and meet TIA-968-A and IEC 60603-7 specifications. All plugs are compatible with Siemon PT-908 crimp tool.

P-8-8 . . . . . .
8-position modular plug
with 8 contacts

P-6-6 . . . . . .
6-position modular plug
with 6 contacts*

P-8-8SS . . . . . .
8-position modular plug
with 8 contacts

P-6-4 . . . . . .
6-position modular plug
with 4 contacts*

PS-8-8 . . . . . .
8-position shielded modular plug
with 8 contacts

Technical Tip!
Factory terminated and tested modular cords are required to achieve consistent channel performance. Field termination is not recommended.

**Siemon 6-position plugs provide empty slots in the outer positions to prevent deformation of jack pins 1 & 8 when inserted into an 8-position modular jack.*

Category 5e and 3 25-Pair Cable Assemblies

Our 25-pair cable assemblies are factory-tested for opens, shorts, and continuity. They feature TIA-1096-A compliant gold plated contacts for extended reliability over time. Category 3 connector ends are available in single-ended male or female, double-ended male or female, or one male/one female configurations. All 25-pair cable assemblies are made with TIA/EIA-568-B.2 category 5e or 3 compliant cable.

Category 5e

Category 5e Cable Assemblies

QP25M-AA-(XX) . . . . . 25-pair, double ended 110°-to-110°, cable assembly with male connectors

Category 3 Cable Assemblies

A25B-DE-(XX) . . . . . 25-pair, double-ended, cable assembly with female connectors

A25B-SE-(XX) . . . . . 25-pair, single-ended, cable assembly with one female connector

B25A-(XX) . . . . . 25-pair, double-ended, cable assembly with one male and one female connector

B25B-DE-(XX) . . . . . 25-pair, double-ended, cable assembly with male connectors

B25B-SE-(XX) . . . . . 25-pair, single-ended, cable assembly with one male connector

Category 3

Use (XX) to specify length: 05 = 1.52m (5 ft.), 10 = 3.05m (10 ft.), 15 = 4.57m (15 ft.), 25 = 7.62m (25 ft.)

RG6 F-Type Coax Connector

Siemon's compression style RG6 F-type connector uses industry leading 360° compression technology for superior RF shielding performance to quickly terminate series 6 tri-shield and quad shield coaxial cables.

Part #	Description
RG6C	RG6 F-type compression connector

Racks and Cable Management

Siemon's line of open racks and cable management solutions covers nearly any network infrastructure need: 4-post and 2-post racks, exclusive rack-mount vertical cable managers, 19 inch horizontal managers, cable tray and much more.

Section Contents

VersaPOD® 4-Post Rack

Siemon's adjustable-depth, VersaPOD 4-Post Rack provides a stable platform for mounting extended depth/size active equipment. It is ideal for use in both Telecommunications Rooms and central patching areas within Data Center environments.

In addition to providing compatibility with Siemon's stand alone vertical cable managers, the 4-post rack is fully compatible with the 45U Zero-U panels used in Siemon's VersaPOD cabinets. This compatibility allows for mounting of patch panels or cable management between bayed racks or at end of rows.

The headers, vertical rails and depth adjustment brackets all feature symmetrical designs to eliminate orientation errors during assembly. They also work in conjunction to self-square the rack during assembly saving valuable installation time. The result is a rack that can be field assembled in less than 20 minutes.

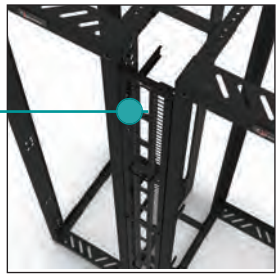
Field Adjustable Depth — Rack depth can be field adjusted in 25mm (1 in.) increments to accommodate a range of equipment depths

Stamped U Space Indications — Provide ready visual indication of proper panel alignment

Slotted Mounting Holes — Provide a flexible securing point for ladder or wire basket trays mounted perpendicular or parallel to rack

In-Facing Headers and Footers — Maximize floor space while maintaining full load capabilities

In addition to Siemon's stand alone vertical cable managers, the VersaPOD 4-Post Rack is compatible with Siemon's Zero-U patching and cable management panels



Eight (8) ground post locations (4 on top, 4 on bottom) provide ready accessible ground attachment points

VersaPOD® 4-Post Rack

Ordering Information:

Part #	Description
RSQ1-07-S	VersaPOD 4-post rack, 560-915mm (23 - 36 in.), Steel, Black, 45U, #12-24
RSQ1-07C-S	VersaPOD 4-post rack, 560-915mm (23 - 36 in.), Steel, Black, 45U, Cage nuts*
RSQ-BAY-VPP	VersaPOD 4-post rack baying bracket for Zero-U Panels, set of 4

Zero-U baying brackets are required to ensure proper operation of Zero-U panels.

**Includes bag of 50 M6 cage nuts.*

External Dimensions:
height: 2.13m (7 ft.)
width: 560mm (22 in.)
depth: 558 -915mm (23 - 36 in.)

1U = 44.5mm (1.75 in.)

VersaPOD 4-POST RACK SPECIFICATIONS:

U Space	45
Colour	Black
Packaging	Ships unassembled in a single carton
Standard Compliance	EIA/ECA-310-E, UL 60950, RoHS
Compatibility	RS-CNL, RS-CNL3, VPCA-6, VPCA-12, Zero-U VersaPOD Panels
Weight	48 kgs, (105 lbs.) Full weight with packaging
Load Rating	907 kgs (2000 lbs.) Static load, evenly distributed

Cable Managers

The VersaPOD 4-Post Rack is compatible with the following Siemon cable management products:

- RouteIT™ vertical managers and accessories
- Vertical cable management channels
- RouteIT horizontal cable managers, HCM-(X)-(X)U
- WM series horizontal cable managers
- RWM series horizontal cable managers
- S110 horizontal magagers
- Vertical patching channels

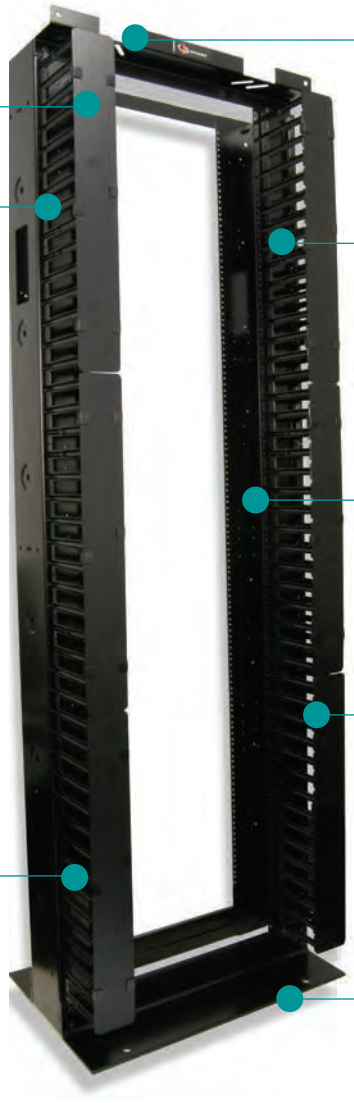
RS3 Cable Management Rack System

Siemon's RS3 series cable management rack system provides integral, high capacity cable management for routing of both horizontal/backbone cabling and patch cords. Vertical channels with hinged cable manager covers conceal and route patch cables for a clean, professional installation.

High Capacity — 76mm x 152mm (3 x 6 in.) front vertical managers provide capacity for approximately 190 Category 6 patch cords

Cable Tray Compatibility — Header bars incorporate unique slotted holes for securing cable trays routed perpendicular or parallel to RS3 racks

Deeper Channels — 116.8mm x 152.4mm (5 x 6 in.)vertical side rails provide higher cable capacity over standard rack designs



Side Stackable — RS3 design allows racks to be side-stacked without interference between adjacent racks

Flexible Management — Side rails compatible with Siemon's quarter-turn hook and loop cable managers for proper management of cable bundles

Cable Access Holes — Access holes on side rails allow cables to be routed between adjacent racks

Power Strip Compatibility — Mounting holes on rear of RS3 accommodate Siemon's vertical power strip (p/n RS-P04) and intelligent PDUs (see Section 11) to provide power to active equipment mounted in rack

Anchoring — Mounting holes provided for anchoring racks to floor

Hinged Front Covers

Front covers fully conceal all vertical patch cord routing through an easy to use, modular design. Each section can be individually hinged in either direction to facilitate quick and easy changes. Covers include positive securing snap latches for trouble-free fastening.

Rounded Managers

The individual managers on the vertical channels are rounded to allow patch cords to seamlessly enter and exit the managers without risk of cable deformation.

Matching Horizontal Managers

Siemon's RS3 series horizontal cable managers provide a fully integrated appearance and same hinging design for comprehensive management of patch cords.

RS3 Cable Management Rack System

Part #	Description
RS3-07	Aluminum enhanced cable management rack system, 45U. Includes rack assembly hardware, vertical cable management channels with hinged covers, and ground lug

height: 2.1m (7 ft.)
width: 685.0mm (27 in.)
depth: 457.2mm (18 in.)

Add "S" for steel.

Note: Aluminum racks (RS3-07) are available and intended for use with connecting hardware and cable managers only. For mounting of active equipment, steel racks are recommended.

Note: 1U = 44.5mm (1.75 in.)

See Cable Management Capacity Table in the Cable Management Section of our E-Catalog on our Website

Cable Managers

The RS3 Cable Management Rack is compatible with the following Siemon rack-mounted cable management products:

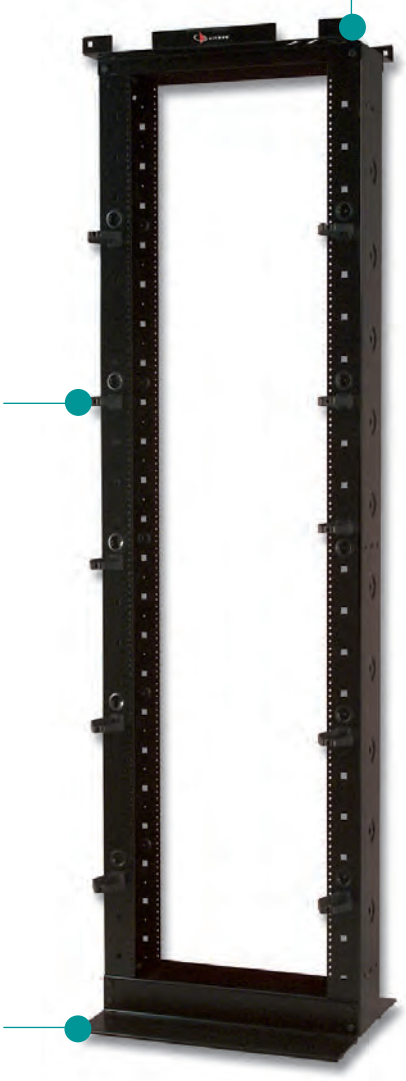
- RouteIT™ horizontal cable managers, HCM-(X)-(X)U
- WM series horizontal cable managers
- RWM series horizontal cable managers
- S110 horizontal cable magagers
- Vertical patching channels

RS Rack System

Siemon's RS series cable management rack system combines a 7 ft. black rack with cable management accessories to provide a complete cable management solution. Ideal for all size installations, the rack features fully usable 45U capacity.

Cable Tray Compatibility — Header bars incorporate unique slotted holes for securing cable trays routed perpendicular to or parallel with RS racks

Twist-Lock Cable Managers — High capacity twist-lock cable managers lock into place quickly without use of screws or mounting tools and can be easily located in many positions on the front, side, back, and within channel to provide customized cable management



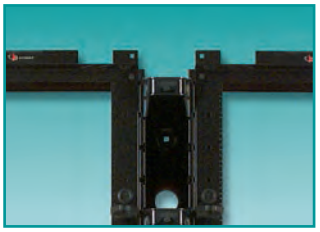
Anchoring — Mounting holes provided for anchoring rack to floor

High Capacity Side Rails

76 x 152mm (3 x 6 in.) vertical side rail channels on rack provide large area for routing high volumes of horizontal or backbone cables.

Complete Management System

Comprehensive cable management can be created using Siemon's RouteIT™ Vertical Cable Managers (VCM-(XX) and VCM-(XX)D), Vertical Patching Channels (VPCA-(X) and RS Series Horizontal Cable Managers.



Optional Vertical Cable Channels

Optional vertical cable management channels (RS-CNL and RS-CNL3) and Vertical Patching Channels (VPCA-(X) allow a high volume of patch cords to be routed between two racks or within a single rack.

RS Rack System

Part #	Description
RS-07-S	Steel cable management rack system, 45U. Includes: rack assembly hardware, 10 high-capacity cable managers, 10 hook and loop cable managers, grommets, and ground lug *height: 2.1m (7 ft.)* *width: 603mm (23.75 in.)* *depth: 457mm (18 in.)*

Note: Aluminum racks are available (P/N: RS-07) and intended for use with connecting hardware and cable managers only. For mounting of active equipment, steel racks are recommended.

See Cable Management Capacity Table in the Cable Management Section of our E-Catalog on our Website

Extended Depth RS Rack System

Siemon has developed a rack for managing extra large volumes of horizontal cables. The extended depth rack features vertical channels which are 0.37m (1.2 ft.) deep. These channels include multiple mounting holes allowing the user to configure Siemon's twist-lock hook and loop cable managers for properly managing large individual bundles of cables. The footers have also been designed to retain the 0.61m (2 ft.) overall footprint.

Part #	Description
RS-07E	2.1 x 0.48m (7 x 1.6 ft.) aluminum extra-deep cable management rack system, 45U. Includes rack assembly hardware, 10 high-capacity cable managers, 10 hook and loop managers, grommets and ground lug *height: 2.1m (7 ft.)* *width: 609 mm (24 in.)* *depth: 609mm (24 in.)*

Note: Aluminum racks are intended for use with connecting hardware and cable managers only. For mounting of active equipment, steel racks such as RS-07-S are recommended.

See Cable Management Capacity Table in the Cable Management Section of our E-Catalog on our Website

Cable Managers

The RS Rack System is compatible with the following Siemon cable management products:

- RouteIT™ vertical managers and accessories
- Vertical cable management channels
- RouteIT horizontal cable managers with extended covers, HCME-(X)-(X)U
- WM series horizontal cable managers
- RWM series horizontal cable managers
- S110 horizontal cable magagers
- Vertical patching channels

Rack Accessories

Siemon offers a full range of accessories to allow further customisation of Siemon racking systems.

RS-VCM. . . . . .
Quarter-turn hook and loop cable managers includes roll of (10) 457mm (18 in.) hook and loop black cable managers and (10) quarter-turn mounting clips

RS-CH. . . . . .
Quarter-turn cable managers

SCREW-1224. . . . . .
#12-24 Slotted head screws with washers, black, bag of 100

RS-CNL-MGR . . . . . .
Channel retainers for use with RS-CNL and RS-CNL3

PH-3. . . . . .
3U panel access hinge includes integral 1U panel with 5 removable cable managers and accepts one 2U or two 1U patch panels

Note: 1U = 44.5mm (1.75 in.)

VP-SPL . . . . . .
Quarter-Turn Fiber Management Spool, bag of five (can be installed in VP-VPC and VP-VWM panels)

Technical Tip!
For information on Siemon's Power Distribution Units (PDUs) see Power and Cooling Section 11

Rack Hinge

Siemon rack hinges are designed to allow rack mounted patch panels to swing out (horizontally) from the rack. The hinges are available in 2 and 3U sizes which can be combined to mount 4 and 6U panels. The 2U hinge is capable of mounting one 2U or two 1U panels.

Part #	Description	U
RHNG-2	Rack hinge	2
RHNG-3	Rack hinge	3

Note: 1U = 44.5mm (1.75 in.)

Vertical Cable Management Channels

Siemon's single-sided vertical cable management channels provide an economic solution for managing large cable bundles between adjacent racks. They feature an open design with six easily configured dual-hinge managers (additional managers available separately) that enable customized management of patch cords. Cable access holes allow cords to be routed between the front and rear of the channel. Mounting holes within the channel accommodate Siemon's quarter-turn cable managers (p/n RS-CH) and quarter-turn hook and loop cable managers (p/n RS-VCM) for further customisation of cable routing. The channels are available in both 76mm (3 in.) and 152mm (6 in.) depths for use with standard 76mm (3 in.) racks or 152mm (6 in.) deep cable management racks such as Siemon's RS-07. Alternately, the 76mm (3 in.) deep channels can be stacked back to back with the deeper cable management racks such as Siemon's RS-07E to optimize management of cables on both sides of the channel.

RS-CNL . . . . . .
vertical cable management channel for mounting between 152mm (6 in.) deep racks (includes mounting hardware)

height: 2.1m (7 ft.)
width: 152mm (6 in.)
depth: 224mm (8.85 in.)

RS-CNL3 . . . . . .
vertical cable management channel for mounting between 76mm (3 in.) deep racks (includes mounting hardware)

height: 2.1m (7 ft.)
width: 152mm (6 in.)
depth: 148mm (5.85 in.)

Two RS-07's shown with three RS-CNL's

Vertical Patching Channel (VPC)

Siemon's enhanced Vertical Patching Channel (VPC) sets a new standard for cable management systems by improving appearance, accessibility and cable routing on both the front and rear of the rack. Designed as a stand-alone manager to be mounted between adjacent racks the VPC features a full length, hinged door on the front to conceal patch cord routing. The rear manager is open for ready routing of large bundles of horizontal/backbone cabling. With its easy access design, high capacity and professional appearance, the VPC is ideal for both installers and end users alike.

Cable Access Holes allow cables to route easily between the front and rear of the channel

Available in standard 152mm (6 in.) wide version or high capacity 304mm (12 in.) version

Field replaceable cable management fingers can be quickly replaced if damaged or broken

With an easy turn of a single knob, the full-length cover hinges in either direction to provide access to the entire vertical channel

Side mounting holes provide compatibility with common 76mm and 152mm (3 in. and 6 in.) industry racking systems including Siemon's RS-07 and XLBET frames as well as Siemon's extended depth RS rack system*

Optional quarter-turn cable managers can be mounted within vertical channels for additional management such as segregation of application specific cords

VPC-6

VPC-12

Rear channel retainers can be hinged in either direction and are removable enabling relocation to any position along the rear vertical channel

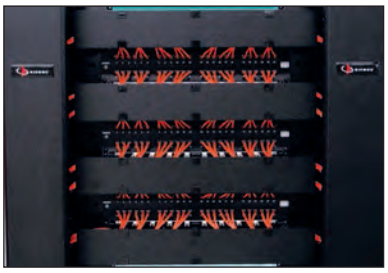
The VPC is fully side stackable for use in ultra high density environments. The doors can be individually opened 60° or adjacent doors can be removed for full access

All of the cable routing points on the vertical channels are rounded to allow patch cords to seamlessly enter and exit the managers without risk of cable deformation

**When used with extended depth rack, rear channel is used for mounting purposes only.*

152mm (6 in.) Enhanced Vertical Patching Channel

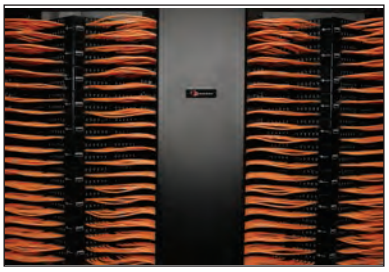
Part #	Description
VPCA-6	2.1m x 152mm (7 ft. x 6 in.) vertical patching channel. Includes front cover, 6 rear channel retainers and mounting hardware *height: 2.1m (7 ft.)* *width: 152.4mm (6 in.)* *depth: 304.8mm (12 in.)*



Comprehensive cable management can be created using Siemon's RS-07 and HCM Series horizontal cable managers

305mm (12 in.) Enhanced Vertical Patching Channel

Part #	Description
VPCA-12	2.1m x 305mm (7 ft. x 12 in.) vertical patching channel. Includes front cover, 12 rear channel retainers and mounting hardware *height: 2.1m (7 ft.)* *width: 304.8mm (12 in.)* *depth: 304.8mm (12 in.)*



VPCA-12 shown with two RS-07 racks and angled patch panels

CABLE MANAGER CAPACITY TABLE

Part Number	Cable Diameter											
	3.30	3.81	4.32	4.83	5.33	5.84	6.35	6.86	7.37	7.87	8.38	8.89
VPCA-6 (Front)	683	513	399	319	261	218	184	158	137	120	106	94
VPCA-6 (Rear)	1059	795	619	495	405	338	286	245	212	186	164	146
VPCA-12 (Front)	1464	1100	856	685	561	467	396	339	294	257	227	202
VPCA-12 (Rear)	2118	1591	1238	991	811	676	572	491	425	372	328	293

Cable capacities reflect a calculated fill rate of 40% which is intended to reflect 100% fill during actual use due to side cable entry

VPC Accessories

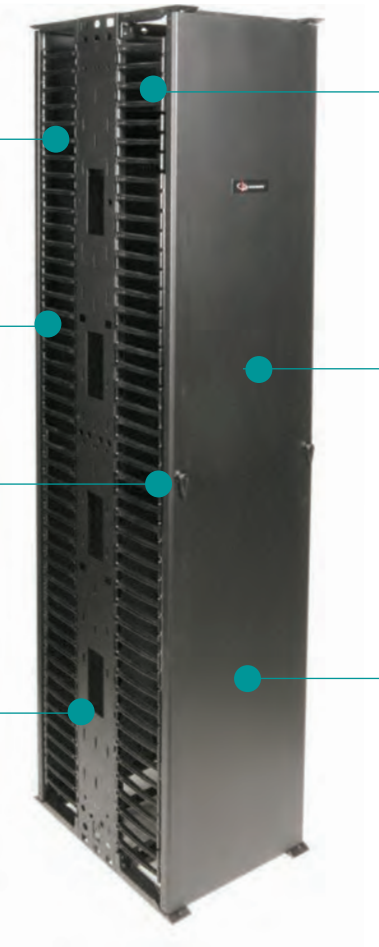
Part #	Description
VCM-FGR-6	152mm (6 in.) Vertical Cable Manager Replacement Fingers, 9U, Set of 2

Part #	Description
VCM-DR(XX)	Replacement Door *Use (XX) to specify width:* *6 = 152mm (6 in.)* *12 = 304mm (12 in.)*

RouteIT™ Cable Managers

Siemon's RouteIT vertical and horizontal cable managers are specifically designed to readily manage the challenges proposed by today's high volume, high density cabling systems. Available in multiple sizes, these versatile cable managers provide a system solution for ready routing and protection of both horizontal cables and patch cords.

Full length, dual hinge doors protect and conceal cabling providing a premium appearance capable of supporting today's high speed network cabling systems.



Field Replaceable Cable Management Fingers — Can be quickly replaced if damaged or broken without detaching the managers from adjacent racks – even while populated

Finger Radius — Prevents deformation of cable jackets for cables entering/exiting the vertical managers

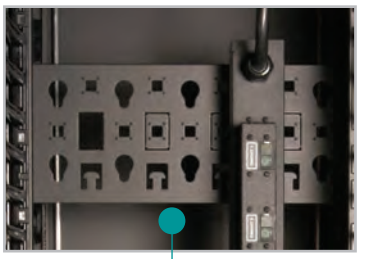
Single Finger Latch Door Operation — Allows for quick, readily accessible opening and closing of doors at a single point

152mm (6 in.) Central Frame Depth — Optimized to match rail depth of cabling purposed racks for maximum capacity

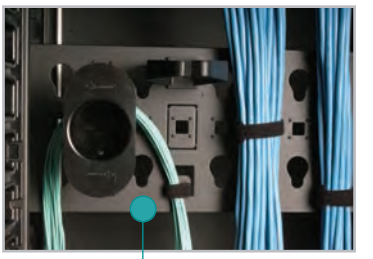
High Capacity Fingers — Accommodate over 48 Category 6A cables to match high density horizontal patch panels or switch blades

Dual Hinge Doors — Provide access from both sides or can be easily removed to provide open access during initial loading

Free Standing Design — Enables staging and positioning of managers prior to attachment to open racks



PDU Ready — Multiple attachment points available for optional tool-less button mounting of PDUs within double-sided managers or on rear of single-sided managers



Diverse Mounting Points — Allow for mounting of optional Siemon ¼-turn management accessories and cable ties

Vertical Managers – Ordering Information

VCM-(XX) . . . . . .

RouteIT™ Single-sided Vertical Cable Manager

Use (XX) to specify width:
6 = 152mm (6 in.),
10 = 254mm (10 in.),
12 = 305mm (12 in.),
16 = 406mm (16 in.)

VCM-(XX)D . . . . . .

RouteIT Double-sided Vertical Cable Manager

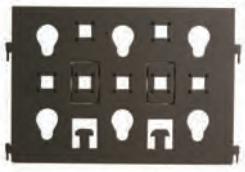
Use (XX) to specify width:
6 = 152mm (6 in.),
10 = 254mm (10 in.),
12 = 305mm (12 in.),
16 = 406mm (16 in.)

Vertical Managers – Accessories

VCM-S . . . . . .

2.13m x 457mm (7 ft. x 18 in.) Side Panel Kit for RouteIT Double-sided Vertical Cable Managers

Note: Side panel kit is a two piece design comprised of one top and one bottom piece and includes mounting hardware



VCM-(XX)D-RB . . . . . .

Vertical Dividers for RouteIT Double-sided / Vertical Cable Managers, Set of 3

Use (XX) to specify width:
6 = 152mm (6 in.),
10 = 254mm (10 in.),
12 = 305mm (12 in.),
16 = 406mm (16 in.)

VCM-FGR-6 . . . . . .

152mm Vertical Cable Manager Replacement Fingers, 9U, Set of 2

Horizontal Managers – Ordering Information

HCM-4-(X)U . . . . . .

RouteIT Horizontal Cable Manager w/ 102mm (4 in.) Fingers

HCME-4-(X)U . . . . . .

RouteIT Horizontal Cable Manager w/ 102mm (4 in.) Fingers and Extended Length Cover

HCM-6-(X)U . . . . . .

RouteIT Horizontal Cable Manager w/ 152mm (6 in.) Fingers

HCME-6-(X)U . . . . . .

RouteIT Horizontal Cable Manager w/ 152mm (6 in.) Fingers and Extended Length Cover

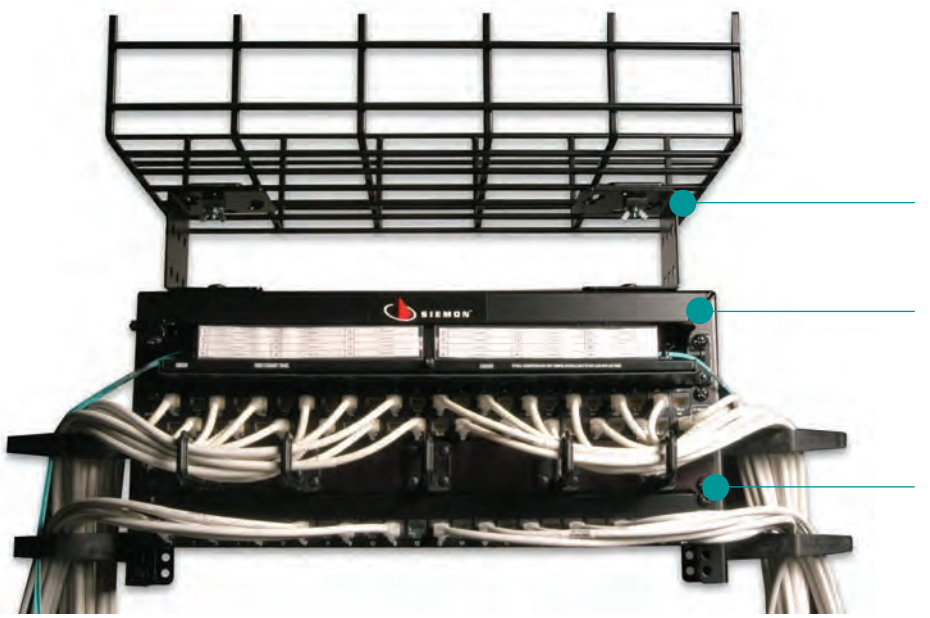
Use (X) to specify height: 1 = 1U, 2 = 2U, 4 = 4U
Add "-D" to end of part number for double-sided version (2U only)

HCM(E)-CVR-(X)U. . . . . .

RouteIT Horizontal Cable Manager Replacement Cover

Cable Tray Rack

Designed to mount directly to overhead ladder rack or cable tray, Siemon's Cable Tray Rack delivers 4U of easily installed and accessible 19 inch rack mount space above cabinets and racks without consuming additional floor space, making it ideal for use as a Zone Distribution Area (ZDA) or Equipment Distribution Area (EDA) in data centers. Used with copper patch panels or fiber enclosures, the cable tray rack can increase cabling density, improve cable routing, simplify moves, adds and changes and provide pre-cabled connectivity for rapid deployment of new cabinets, racks and equipment.



Improved Thermal Efficiency —
Helps improve airflow by managing patching fields and cabling above cabinets and racks, minimizing obstruction of equipment cooling features.

Rapid Data Center Deployment —
Can be used in conjunction with Siemon's pre-terminated copper and fiber solutions to reduce installation time.

Open Compatibility —
Rack mount solution attaches to all common overhead cable tray and ladder rack systems.

Flexible Mounting —
Unique design can be mounted below, flush or above cable tray in both parallel and perpendicular configurations.

Flexible Cable Routing —
High capacity ¼-turn twist-lock cable managers lock into place quickly without use of screws or mounting tools and can be easily located to provide customized cable management.

Floor Space Maximization —
Provides 4U of standard 19 inch rack mount space above cabinets and racks to maximize cabling density/ minimize data center floor space needs.

MAJOR PRODUCT FEATURES:

- 4U size
- EIA/ECA-310-E compliant mounting holes
- Robust 12 gauge steel construction
- Smooth black powder coat finish
- Mounting hardware and cable management included
- 267 N load rating (60 lbf.)

Ordering Information:

CTR-(XX)-01 . . . . . 0.48m (19 in.) Cable Tray Rack, Black, #12-24. Includes mounting hardware, 1/4 turn cable managers, ground lugs

Size
02 = 2U
04 = 4U
06 = 6U

**Add "C" to end of part number for cage nut version (includes 16 M6 cage nuts)*

CTR-LRK . . . . . Ladder Rack Mounting Kit for Cable Tray Rack

Mounting Examples:

Perpendicular to Tray (Below)

Parallel to Tray (Flush)

Parallel to Ladder Rack (Below)

Other sizes available. Contact Customer Service for more information.

WM Series Horizontal Cable Managers

The WM series cable managers provide increased strength and do not interfere with panels mounted above or below. They are a popular and economical solution for providing a clean and simple means of organising small-to-large bundles of cables and patch cords.

Part #	Description
WM-143-5	Horizontal cable manager with five S143 hangers, 1U
WM-144-5	Horizontal cable manager with five S144 hangers, 2U
WM-145-5	Horizontal cable manager with five S145 hangers, 2U

Note: 1U = 44.5mm (1.75 in.)


WM-143-5


WM-144-5


WM-145-5

Cable Hangers

The cable hanger design features structural integrity and sleek appearance. These cable hangers are ideal for routing small to very large quantities of cables. The durable plastic design ensures reliability for any application.

Part #	Height	Width	Depth
S143*	44mm (1.7 in.)	38mm (1.5 in.)	89mm (3.5 in.)
S144*	87mm (3.4 in.)	57mm (2.2 in.)	74mm (2.9 in.)
S145*	87mm (3.4 in.)	57mm (2.2 in.)	125mm (4.9 in.)
S146	151mm (5.9 in.)	63mm (2.5 in.)	130mm (5.1 in.)
S147	254mm (10 in.)	63mm (2.5 in.)	130mm (5.1 in.)

**Add "-A" for optional adhesive backing.*


S143


S146


S144


S145


S147

Reusable Hook and Loop Cable Managers

These cable managers are simple, yet extremely effective when used to bundle cables. To accommodate different sized bundles, they are available in 152mm (6 in.), 305mm (12 in.), or 457mm (18 in.) lengths. They can be easily loosened and removed to service cable and then tightened and reinstalled when the cables are rebundled. The handy dispenser rolls/spools are neat, convenient and quick. Adjustable tension prevents "over-cinched" conditions. A mounting hole in each hook and loop manager enables the manager to be mounted to a wall or rack.

Part#	Description
VCM-25-(XX)-01	Roll of 25 cable managers
VCM-250-(XX)-01	Spool of 250 cable managers

Use 1st (XX) to specify length:
06 = 152mm (6 in.), holds 51mm (2 in.) diameter cable bundle
12 = 305mm (12 in.), holds 102mm (4 in.) diameter cable bundle
18 = 457mm (18 in.), holds 153mm (6 in.) diameter cable bundle


Wrap-around cable managers offer a simplified approach to cable management. secure it to a single cable and then wrap it around the entire bundle.


Hook and Loop cable managers have a large head for added strength and a mounting hole is included for securing to a wall or rack.

Technical Tip!
Hook and loop cable managers are recommended as an alternate to plastic cable ties for the reduction of alien crosstalk in Category 6A UTP installations.

Stand-Off Brackets

Siemon hinged stand-off brackets can be mounted to a wall with the hinge on either side for convenient access to the back of the panel. The sides of the brackets will accept our S144 or S145 cable hangers for external cable management. The brackets accept any combination of Siemon patch panels and rack-mount cable management. Mounting hardware included.

Part #	Part #	Part #	Part #
SBH-2 . . . . . 2U	SBH-3 . . . . . 3U	SBH-4 . . . . . 4U	SBH-6* 6U

height: See U information, width: 483mm (19 in.), depth: 152mm (6 in.)

**Add -2 for (3) independent 2U hinges (instead of a single 6U hinge).*
Note: 1U = 44.5mm (1.75 in.)

Thermal Blanking Panels

Blank filler panels are ideal for installations where open or expansion rack space is to be covered. Aluminum panels are blank on one side and feature the Siemon logo on the other side.

Part #	Description
PNL-TBLNK010-1S	SnapFit™ Thermal blanking filler panel for 19 inch rack, 1U, square holes, black, plastic, package of 10
PNL-TBLNK100-1S	SnapFit™ Thermal blanking filler panel for 19 inch rack, 1U, square holes, black, plastic, box of 100
PNL-BLNK-(X).	Blank filler panel for 19 inch rack

Use (X) to specify rack mount space height of panel:
1 = 1U, 2 = 2U, 3 = 3U, 4 = 4U
Note: 1U = 44.5mm (1.75 in.)

19 Inch Equipment Shelf

Siemon's double-sided 19 inch equipment shelf is designed to support heavy equipment loads up to 68.1 kg (150 lb.). The shelf is designed for use with any 152mm (6 in.) deep rack and is secured to the front and rear of the rack channels. Shelf accommodates equipment up to 432mm (17 in.) wide.

Part #	Description
SH-D19-01	Double-sided equipment shelf for 152mm deep racks, solid, 3U *height: 133mm (5.2 in.)* *width: 483mm (19 in.)* *depth: 457mm (18 in.)*

SH-D19-01

Single sided solid and vented equipment shelves are ideal for mounting devices in standard 19 inch racks and cabinets. Supports equipment up to 22.7kg (50 lb.) in weight and 438mm(19 in.) in width.

SH-S19-01	Single Sided Equipment Shelf - Solid -3U
SH-S19V-01	Single Sided Equipment Shelf - Vented -3U *height: 133mm (5.2 in.)* *width: 483mm (19 in.)* *depth: 381mm (15 in.)*

SH-S19V-01

Note: 1U = 44.5mm (1.75 in.)

RWM Series Horizontal Cable Managers

The multi-access horizontal cable managers are designed to provide both front and rear cable management in a compact, 1U space. The managers feature high capacity slots for entering and exiting cables, removable covers to conceal patch cords, and an innovative cable retention design to prevent patch cords from falling out when the covers are removed. The rear of the RWM-1 features attachments for using Siemon's hook and loop cable managers.

RWM-1

RWM-1DS

Part #	Description
RWM-1	Single-sided horizontal cable manager with cover
RWM-1DS	Double-sided horizontal cable manager with covers

Note: 1U = 44.5mm (1.75 in.)

S110®/S210® Horizontal Cable Managers

The S110/S210 cable managers provide an economical, superior cable management solution in a compact space. 1U and 2U size and large capacity provide excellent cable management for 19 inch rack mount installations.

Part #	Description
S110-RWM-01	S110/S210 horizontal cable manager with covers, black, 1U
S110-RWM-02	S110/S210 horizontal cable manager with covers, white, 1U
S110-RWM2-01	S110/S210 horizontal cable manager with covers, black, 2U
S110-RWM2-02	S110/S210 horizontal cable manager with covers, white, 2U

Note: 1U = 44.5mm (1.75 in.)

Rear Cable Manager

Siemon rear cable manager can be mounted to the back side of a double-sided 19 inch rack, or can be mounted between a patch panel and the front face of the rack, using the same screws that hold the patch panel to the rack and the hex nuts provided. It provides strain relief anchor points and organisation of horizontal cables being routed to the back of the patch panel.

WM-BK	Rear cable manager with mounting screws and hex nuts

VersaPOD®, V600™ and V800™ Cabinets

Including both the innovative VersaPOD family of data center solutions, V800 (800mm) and V600 (600mm) cabinets, Siemon's comprehensive line of cabinets deliver the design flexibility and options to deploy the physical infrastructure you need.

In addition to the space saving, flexible VersaPOD and its Zero-U vertical cable management, patching and power distribution accessories, be sure to check out the additional innovations appearing in this section:

- **SidePOD™ and Baffle — Unique VersaPOD accessories designed to support thermally efficient airflow for side-venting equipment such as the Cisco Nexus 7018 Series switches**
- **Vertical Exhaust Ducts (Chimneys) — Compatible with VersaPOD (VP2), V800 (V82) and V600 (V62) cabinets, these chimneys bring VersaPOD's thermal capacity to 13kW**
- **42U Options — Full-featured VersaPOD cabinets are available in 42U and 45U sizes, and V800/V600 cabinets are available in 42U, 45U and 48U versions**

Section Contents

VersaPOD® Features and Benefits

Siemon's VersaPOD enables a completely new and efficient approach to your physical data center infrastructure. By leveraging the vertical space between bayed cabinets and at the end of row for patching, power distribution and cable management, the VersaPOD frees critical horizontal space for active equipment, providing improved air flow while optimising data center floor space.

The VersaPOD's innovative Zero-U vertical patch panels (VPP's) dramatically simplify even the most dense patching needs while its vertical patching channels (VPC) offer a clean, orderly and easy method of high-density cable routing.

All of the VersaPOD's unique features are integrated into a full-featured modular enclosure that is equally effective as a standalone cabinet or in a multi-unit bayed configuration, offering a simple, scalable expansion path in any data center.

Integration — In addition to patching, the VersaPOD's Zero-U vertical space can be leveraged with integrated cable management options and dual-hinged door to offer a high capacity and concealable pathway for cable routing and slack management

End of Row — End of row vertical panels offer additional cable management channels or up to 8U additional Zero-U mounting space (4U in front and 4U in back at each end)

Vertical Patching — Vertical copper and fiber patch panels provide up to 24U (12U at front and 12U at rear) of Zero-U vertical patching space between every two cabinets. These panels conveniently slide forward providing access to the connections at the rear of the panel

Cable Management — Vertical cable management fingers can be mounted alongside each VPP or VPC to facilitate routing of copper or fiber jumpers between patching fields as well as cabinet to cabinet connections

Dual Hinged Doors — Dual hinged front and quad hinged rear doors open from either the left or right and are easily removed. Rear split doors can be hinged open in either direction providing direct access to vertical spaces. For standalone cabinets or end units, side panels can be removed for full side access

VersaPOD® Cabinets

The VersaPOD cabinet is designed to integrate with Siemon's comprehensive assortment of Zero-U vertical and horizontal cable management accessories, Zero-U vertical patch panels and thermal management products, offering multiple top and bottom cable access points and mounting provisions for fans, brushguards and vertical exhaust ducts.† The VersaPOD cabinet is available in both 42U and 45U sized and in 1000mm (39.4 in.) and 1200mm (47.2 in.) depths and a wide array of door, side panel and lock options.

**Vertical exhaust ducts compatible with VP2 only.*

VP(X)A-(X)(X)(X)(X)(X)1-(XX)

Dimensions*
1 = 1000 x 762mm (39.4 in.)
2 = 1200 x 762mm (47.2 in.)

Side Panels
0 = No Side Panels
1 = 1 Side Panel
2 = 2 Side Panels

Front Door
0 = No Front Door
A = Full Vented/Dual Handle
B = Split Vented/Dual Handle
C = Split Solid/Dual Handle

Rear Door
0 = No Rear Door
A = Full Vented/Dual Handle
B = Split Vented/Dual Handle
C = Split Solid/Dual Handle

Lock
1 = Keyed Lock
2 = Tumbler Combination Lock

Castors
1 = None
2 = Castors

Color
1 = Black

Height
42 = 42U
45 = 45U

** Maximum usable depth (rail-to-rail)*
VP1A: 615mm (24 in.)
VP2A: 815mm (32 in.)

Includes: 4 leveling feet, 50 cage nuts and 4 stabilizing brackets

VersaPOD Cabinet Doors and Panels

Part #	Description
VPA-DRA-1-(XX)	Full vented door, dual handle with standard keyed lock
VPA-DRB-1-(XX)	Split vented door, dual handle with standard keyed lock, (Set of 2)
VPA-DRC-1-(XX)	Split solid door, dual handle with standard keyed lock, (Set of 2)
VP1A-S-1-(XX)	1000mm (39.4 in.) locking side panel kit
VP2A-S-1-(XX)	1200mm (47.2 in.) locking side panel kit

Use (XX) to specify height. 42 = 42U, 45 = 45U

Vertical Exhaust Duct (Chimney)

Part #	Description
VP-DUCT1	Vertical Exhaust Duct, 523 x 653 x 516 - 923mm, (20.5 x 25 x 20 - 36 in.) Black
VP-DUCT2	Vertical Exhaust Duct, 523 x 653 x 912 - 1320mm, (20.5 x 25 x 35 - 52 in.) Black

†Note: Chimney compatible with 1200mm VersaPOD (VP2), V800 (V82) and V600 (V62) cabinets only. Solid doors recommended for use with chimneys.

VersaPOD® Zero-U Sliding Patch Panels

42U Triplex Zero-U Sliding Vertical Patch Panels

VP-VP3U-1-42

VP-VPTM-1-42

VP-VPR-1-42

VP-VPTMR-1-42

Part#	Description
VP-VP3U-1-42	Vertical 19 inch Panel, 3U Mounts up to 3U of standard 19 inch panels or PDUs in vertical orientation
VP-VPTM-1-42	TERA®-MAX® Vertical Patch Panel 48 ports, supports all Category 5e and Category 6 MAX and Z-MAX®, Category 6A UTP and shielded Z-MAX, TERA outlets and MAX fiber adapters (port spacing compatible for Z-MAX 6A UTP)
VP-VPTMR-1-42	TERA-MAX-RIC Vertical Patch Panel 48 Ports, supports all Category 5e and Category 6 MAX and Z-MAX, Category 6_A shielded Z-MAX outlets TERA® outlets and MAX fiber adapters (port spacing not compatible for Z-MAX 6A UTP) - 4 fiber RIC adapter mounting spaces for mounting RIC adapter plates or fiber Plug and Play modules
VP-VPR-1-42	RIC Vertical Patch Panel 12 RIC adapter mounting spaces for mounting RIC fiber adapter plates or fiber Plug and Play modules

Note:
(3) VPP's/VPCs can be mounted vertically at the front and/or rear of 2 bayed cabinets or between a VersaPOD cabinet and SidePOD®
(3) VPPs/VPCs are required to fully populate 42U Zero-U space

45U Duplex Zero-U Sliding Vertical Patch Panels

VP-VPP-TMRIC

VP-VPP-6U

VP-VPP-TM

Part#	Description
VP-VPP-6U	Vertical 19 inch Panel, 6U Mounts up to 6U of standard 19 inch panels in Zero-U vertical orientation
VP-VPP-TM	TERA-MA Patch Panel 96 Ports, supports all Category 5e Category 6, Category 6A UTP MAX and Z-MAX outlets, Category 6A shielded Z-MAX, TERA outlets and MAX fiber adapters (Port spacing compatible with Z-MAX 6A UTP)
VP-VPP-TMRIC	TERA-MAX-RIC Vertical Patch Panel 96 Ports, supports all Category 5e and Category 6 UTP MAX and Z-MAX, Category 6A shielded Z-MAX outlets, TERA outlets an MAX fiber adapters. (Not for use w/Z-MAX 6A UTP) 6 fiber RIC adapter mounting spaces for mounting RIC adapter plates or fiber Plug and Play modules

Note:
(2) VPP's/VPCs can be mounted vertically at the front and/or rear of 2 bayed cabinets or between a VersaPOD cabinet and SidePOD
(2) VPP's/VPCs are required to fully populate 45U Zero-U space

VersaPOD® Zero-U Cable Management

42U Triplex Zero-U Vertical Cable Management

VP-VPC6-1-42

VP-CVR-1-42 VP-FGR6-1-42 VP(X)A-TRAY-1-42

Part #	Description
VP-VPC6-1-42	Vertical Patching Channel includes back plate, 152mm (6 in.) cable management fingers and cover
VP-FGR6-1-42	152mm (6 in.) Vertical Cable Management Fingers (set of 2) Can be mounted alongside each VPP and/or VPC to facilitate routing of copper and fiber jumpers between patching fields as well as cabinet to cabinet connections
VP-CVR-1-42	Vertical Cover Hinged cover used in conjunction with Vertical Cable Management fingers to conceal patching areas
VP1A-TRAY-1-42	Vertical Cable Management Tray for 42U VP1A Cabinets Manages/secures cable between cabinets, use 4 trays to isolate airflow between VP1A cabinets
VP2A-TRAY-1-42	Vertical Cable Management Tray for 42U VP2A Cabinets Manages/secures cable between cabinets, use 4 trays to isolate airflow between VP2A cabinets

Note:
(3) VPP's/VPCs can be mounted vertically at the front and/or rear of 2 bayed cabinets or between a VersaPOD cabinet and SidePOD
(3) VPPs/VPCs are required to fully populate 42U Zero-U space

45U Duplex Zero-U Vertical Cable Management

VP-CVR-1-45 VP-FGR6-1-45 VP(X)A-TRAY-1-45

Part #	Description
VP-VPC6-1-45	Vertical Patching Channel includes back plate, 152mm (6 in.) cable management fingers and cover
VP-FGR6-1-45	152mm (6 in.) Vertical Cable Management Fingers, (set of 2) Can be mounted alongside each VPP and/or VPC to facilitate routing of copper and fiber jumpers between patching fields as well as cabinet to cabinet connections
VP-CVR-1-45	Vertical Cover Hinged cover used in conjunction with Vertical Cable Management fingers to conceal patching areas
VP1A-TRAY-1-45	Vertical Cable Management Tray for 45U VP1A Cabinets Manages/secures cable between cabinets, use 4 trays to isolate airflow between VP1A cabinets
VP2A-TRAY-1-45	Vertical Cable Management Tray for 45U VP2A Cabinets Manages/secures cable between cabinets, use 4 trays to isolate airflow between VP2A cabinets

Note:
(2) VPP's/VPCs can be mounted vertically at the front and/or rear of 2 bayed cabinets or between a VersaPOD cabinet and SidePOD
(2) VPPs/VPCs are required to fully populate 45U Zero-U space

VersaPOD® End-of-Row Vertical Panels

42U Triplex End of Row Zero-U Panels

VP-VP1U-1-42

VP-VWM-1-42

VP-BLNK1-1-42

Part #	Description
VP-VP1U-1-42	Vertical 19 inch Panel, 1U Mounts 1U of standard 19 inch rack mount products
VP-VWM-1-42	Vertical Wire Manager Panel Includes cable management lances as well as features to allow use of Siemon's ¼-turn cable management accessories
VP-BLNK1-1-42	Vertical Blanking Panel Used to block off unused spaces to prevent re-circulation of air

3 Vertical Panels can be mounted vertically at the front and/or rear on each side of a single cabinet or at each end of multiple bayed cabinets.

45U Duplex End of Row Zero-U Panels

VP-VPP-2U

VP-VWM

VP-BLNK1

Part #	Description
VP-VPP-2U	Vertical 19 inch Panel, 3U Mounts up to 3U of standard 19 inch rack mount products
VP-VWM	Vertical Wire Manager Panel, end-of-row Includes cable management lances as well as features to allow use of Siemon's ¼-turn cable management accessories
VP-BLNK1	Vertical Blanking Panel, end-of-row Used to block off unused spaces to prevent re-circulation of air

2 Vertical Panels can be mounted vertically at the front and/or rear on each side of a single cabinet or at each end of multiple bayed cabinets.

VersaPOD® Zero-U Accessories

Full Height Zero-U PDU Mounting Brackets

VPA-PDU-F1-1

VPA-PDU-F2-1

VPA-PDU-S2-1

Part #	Description
VPA-PDU-F1-1	Front-facing, Single PDU Mounting Bracket Supports mounting of (1) front-facing PDU in full height Zero-U spaces for end of row applications
VPA-PDU-F2-1	Front-facing, Dual PDU Mounting Bracket Supports mounting of (2) front-facing PDU's in full height Zero-U spaces between bayed cabinets
VPA-PDU-S2-1	Side-facing, Dual PDU Mounting Bracket. Supports mounting of (2) side-facing PDU's. Can be used in either end of row or in full height Zero-U spaces between bayed cabinet

Note: Compatible with 42U and 45U VersaPODs.

Zero-U PDU Cable Trough

VPA-SPAN-1

Part #	Description
VPA-SPAN-1	Adjustable Depth Cable Trough Used to route cables between the front and rear of cabinets. Mounts between Vertical Patching channels mounted to front and rear of cabinets

Zero-U Blanking Panels

VP-BLNK-1-42

VP-BLNK

Part #	Description
VP-BLNK-1-42	Vertical Blanking Panel Used to isolate airflow in unused Zero-U spaces within 42U cabinets
VP-BLNK	Vertical Blanking Panel Used to isolate airflow in unused Zero-U spaces within 45U cabinets

Note:
(2) VPP's/VPCs can be mounted vertically at the front and/or rear of 2 bayed cabinets or between a VersaPOD cabinet and SidePOD
(2) VPP's/VPCs are required to fully populate 45U Zero-U space

VersaPOD® Cabinet Accessories

Accessories


VP-FAN


VP-T3


VP-GRD


RS-VCM


VP-SPL


VP-143


HCM-4-(X)U


HCM-6-(X)U


PNL-TBLNK010-1S


PNL-BRSH-1

Part #	Description
VPA-R-1-(XX)	VersaPOD Equipment Mounting Rails (set of 2), Black Use (XX) to specify height. 42 = 42U, 45 = 45U
VP-FAN	Top-Mount Cooling Fan Panel - 3 Fans x 110CFM, 120VAC w/ NEMA 5-15P plug
VP-FAN-220	Top-Mount Cooling Fan Panel - 3 Fans x 110CFM, 220VAC w/ C13 plug
VP-T3	Brush Guard, Large - For large center top panel cable openings
VP-BRUSH	Brush Guard, Small - For small perimeter top panel cable openings
VP-BAY2	VersaPOD Baying Kit - Secures (2) VersaPOD cabinets together
VA-VPA-BAY-1	VersaPOD-to-V600/V800 Baying Kit - Secures (1) VersaPOD cabinet to (1) V600 or V800 cabinet
VP-GRD	Grounding Kit - Includes ground bar, ground wire, mounting hardware and accessories (capacity to support all required grounding connections for a single cabinet)
RS-VCM	¼-turn Hook and Loop Cable Managers (box of 10) Can be installed in Vertical Cable Management Tray, Vertical Patching Channel and End of Row Vertical Wire Manager
VP-SPL	¼-Turn Fiber Management Spool (bag of 5) Can be installed in Vertical Patching Channel and End of Row Vertical Wire Manager
VP-143	¼-Turn D-Ring Cable Manager (box of 10), 88.9 x 44.5mm (3.5 x 1.75 in.) Can be installed in Vertical Cable Management Trays only
VP-145	¼-Turn D-Ring Cable Manager (box of 10), 127.0 x 88.9mm (5 x 1.75 in.) Can be installed in Vertical Management Trays only
HCM-4-(X)U	RouteIT™ 19 inch Horizontal Cable Manager with 102mm (4 in.) Fingers Use (X) to specify height: 1 = 1U, 2 = 2U, 4 = 4U
HCM-6-(X)U	RouteIT 19 inch Horizontal Cable Manager with 152mm (6 in.) Fingers Use (X) to specify height: 1 = 1U, 2 = 2U, 4 = 4U
PNL-TBLNK010-1S	19 inch SnapFit™ Thermal Blanking Panel, 1U (box of 10)
PNL-TBLNK100-1S	19 inch SnapFit Thermal Blanking Panel, 1U (box of 100)
PNL-BRSH-1	19 inch Brush Guard Panel, 1U

VersaPOD® (VP2A) SidePOD™ and Thermal Baffle

Siemon's SidePOD and Thermal Baffle solution are designed to support side-to-side ventilated active equipment such as the Cisco Nexus® 7018 Series Switches. The SidePOD is an optional add on to Siemon's 1200mm deep (47.2 in.) VersaPOD (VP2A) cabinets and creates the necessary clearance for proper airflow to the switch. Optional baffles may be mounted within the SidePOD to properly route cold air from the front of the cabinet to the input side of the switch as well as route exhaust from the output side of the switch to be vented into the hot aisle. The baffles can also be mounted in the Zero-U space between adjacent, bayed VP2A cabinets.

In addition to providing a cooling platform, the SidePOD allows full size Zero-U panels to be used in End of Row applications. This includes up to 12U of vertical patching and high capacity vertical cable management with hinged covers.

Shared Use of VP2A Side Panels — The SidePOD is compatible with VP2A side panels allowing VersaPOD panels to be transitioned to the SidePOD when added to end of row installations

Cable Access Openings — Multiple openings in the lid accept optional brush guards to provide cable access to the Zero-U space from overhead distribution systems

Single Finger Door Operation — The SidePOD door features a single, lockable slam latch that allows the door to be opened or closed with a single finger

End of Row Capacity Increases — When using the SidePOD, cable management and patching options are increased allowing full size Zero-U accessories

Reversible Baffle Design — Baffles can be installed in either orientation to properly route either cold air input or hot air exhaust

Split Baffle Design — Allows the baffles to be nested in the Zero-U space enabling placement of side venting equipment in adjacent cabinets

Zero-U Modularity — Even with a baffle installed, the balance of Zero-U space can be fully utilized for patching or cable management

Ordering Information:

SidePOD™

Part #	Description
VP2A-SPAA1-(XX)	VP2A SidePOD with 2 Vented Doors, Black Includes 2 leveling feet, 2 sets of baying brackets, 1 bonding conductor and assembly hardware (ships unassembled)
VP2A-SPAC1-(XX)	VP2A SidePOD with 1 Vented Door and 1 Solid Door, Black Includes 2 leveling feet, 2 sets of baying brackets, 1 bonding conductor and assembly hardware (ships unassembled)

Use (XX) to specify height. 42 = 42U, 45 = 45U

VP2A-SPAA1-(XX)

VP2A-BFL-S-1

Zero-U Baffle

Part #	Description
VP2A-BFL-S	Zero-U Baffle, Black Includes mounting hardware
VP2A-BFP-1-42	Zero-U Baffle Filler Panel, Black Blank panel used to fill gap between baffle and adjacent triplex Zero-U space on 42U cabinets

SidePOD Product Specifications

Height	42U: 2016mm (79 in.) 45U: 2150mm (85 in.)
Width	140mm (5.5 in.)
Depth	1200mm (47.2 in.)
Weight	26.2 kg (57.5 lbs.)
Base Type	Open
Color	Black (RAL 9005)
Front Doors	Perforated, keyed lock
Rear Doors	Perforated, keyed lock
% Door Perforation	71%
Material	CRS of varying thickness
Finish	Textured powder coat
Standard Compliance	UL 60950-1 Ed2.0, CSA C22.2 NO. 60950-1-07
Top Cable Access Openings	3 openings, 280 x 45mm (11 x 1.7 in.)

V800™ Cabinet

Siemon's V800 cabinets provide a robust, cost-effective enclosure solution that provides valuable Zero-U space on each side of the equipment rails for cable management, PDU mounting or connectivity on both the front and rear of the cabinet. The V800 cabinet is ideal for high-density data center environments, enabling increased cabling and equipment density while providing excellent accessibility and thermal efficiency. All of these features are integrated into a full-featured modular enclosure that is equally effective as a standalone network and server cabinet or in a multi-unit bayed configuration, offering a simple, scalable expansion path in any data center.

Lightweight Stability — Design provides an extremely stable, high-capacity cabinet without excessive weight

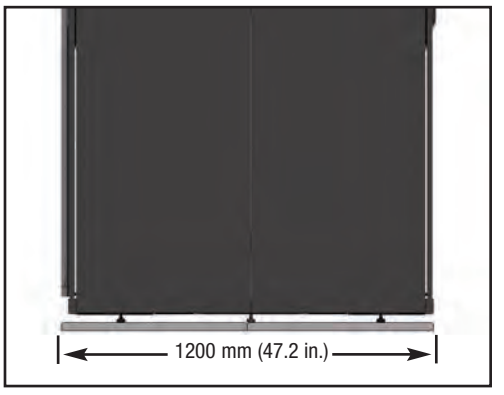
Zero-U Modularity — Half-height Zero-U panels can be mounted in any of the four quadrants (top left, bottom left, top right and bottom right) of both the front and rear of the cabinet

Full Accessibility Doors — Quick release, field reversible single piece front and split rear doors

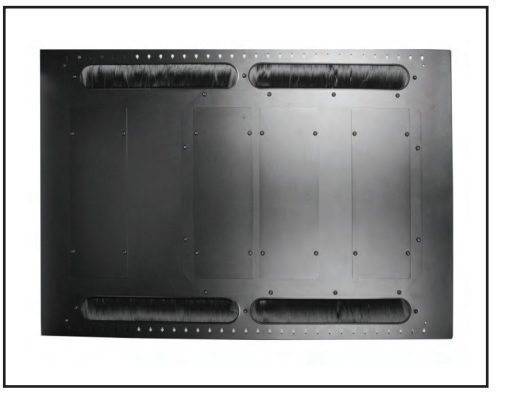
Integrated Side Panel Grounding — Spring loaded grounding clips eliminate need for dedicated grounding conductors

High-Flow Doors — Contoured high density perforated door provides up to 88% perforation exceeding major IT equipment air flow requirements

Fully Adjustable Equipment Rails — Can be readily configured to support any range of equipment depths



The V82A cabinet is exactly 1200mm (47.2 in.) deep, allowing for full access to adjacent tiles immediately in front or in back of placed cabinets and provides full 1.2m (4 ft) aisle spacing as specified within ISO/IEC 14763-2 and EN 50600-2-4



The cabinet lid includes four integrated brush guards for cables to enter the cabinet without compromising thermal integrity

Ordering Information:

V8(X)A-(X)(X)(X)(X)(X)1-(XX).....V800™ Cabinet, Black

Cabinet Depth
1 = 1000mm (39.4 in.)
2 = 1200mm (47.24 in.)

Side Panels
0 = No Side Panels
1 = 1 Side Panel
2 = Side Panels

Front Door
A = Full Vented
B = Split Vented
C = Split Solid

Lock Type
1 = Key Lock
2 = Tumbler Lock

Rear Door
A = Full Vented
B = Split Vented
C = Split Solid

Castor Option
1 = No Casters
2 = Casters

Cabinet Height
42 = 42U
45 = 45U
48 = 48U

Includes: 4 leveling feet, 50 M6 cage nuts and 2 stabilizing brackets

V800 Cabinet Product Specifications

Height*	42U: 2013mm (79.25 in.) 45U: 2146mm (84.5 in.) 48U: 2280mm (89.75 in.)
Width	800mm (31.5 in.)
Depth - External (Door-to-Door)	V81A: 1000mm (39.37 in.) V82A: 1200mm (47.2 in.)
Depth - Usable (Rail to Rail Max.)	V81A: 806mm (31.8 in.) V82A: 1006 mm (39.6 in.)
Weight**	42U V81A: 111kg/ V82A: 126kg (278 lbs.) 45U V81A: 116kg/ V82A: 131kg (288 lbs.) 48U V81A: 121kg/ V82A: 136kg (299 lbs.)
Load Rating	Static: 1361kg (3000 lbs.) Dynamic: 1021kg (2250 lbs.)
Base Type	Open
Color	Black (RAL 9011)
% Door Perforation	Full door: 88%, Split door: 85%
U Space Identification	Yes (bottom-to-top)
Lid Cable Access Openings	V81A: 3 large; (4) 63x406mm integrated brush guards (2.5 in. x 16 in.) V82A: 4 large; (4) 63x406mm integrated brush guards (2.5 in. x 16 in.)
Material	CRS of varying thickness
Finish	Textured Powder Coat
Standards Compliance	UL 60950-1 Ed2.0, EIA/ECA-310-E, IP20

** Nominal height with stabilizing brackets*

*** Does not include packaging*

V800™ Cabinet Zero-U Accessory Ordering Information

V8A-VPC4-1-(XX).....
Half-height Zero-U Vertical Patching Channel with 4 in. (102mm) Fingers and Cover

V8A-VPC6-1-(XX).....
Half-height Zero-U Vertical Patching Channel with 6 in. (152mm) Fingers and Cover

V8A-VPC145-1-(XX).....
Half-height Zero-U Vertical Patching Channel with D-Ring Managers

V8A-BRSH-1-(XX).....
Half-height Zero-U Vertical Brush Guard Panel

Use (XX) to specify cabinet height: 42 = 42U, 45 = 45U, 48 = 48U

V8A-VPP2U-1-(XX).....
Half-height Zero-U Vertical Patch Panel, 2U

Mounts 2U of standard 19 in. panels in vertical orientation

Includes (8) M6 cage nuts

V8A-PDU-F1-1-(XX).....
Full-height Zero-U Vertical PDU Panel

Full length brackets support tool-less mounting of one (1) vertical rack mount PDU with a maximum width of 86.4mm (3.4 in.) and 1.24m (48.8 in.) 1.56m (61.41 in.) or 1.65m (65 in.) O.C. mounting buttons

V8A-BLNK-1-(XX) .....
Half-height Zero-U Vertical Blanking Panel

Used to block unused Zero-U spaces to prevent re-circulation of air

Use (XX) to specify cabinet height: 42 = 42U, 45 = 45U, 48 = 48U

Cabinet Accessory Ordering Information

Part #	Description
VPA-SPAN-1	Adjustable Depth Cable Trough, Extends from 555mm (21.9 in.) to 911mm (35.9 in.), 81mm (3.2 in.) wide; 65mm (2.6 in.) high, Used to route cables between the front and rear of cabinets. Mounts between Vertical Patching Channels mounted to front and rear of cabinets
V8A-LD-1	V800 Lid Divider Panel, set of 2, 107mm (4.2 in.) high, Used to create cable pathways on top of bayed cabinets
V-PDU-1-(XX)	Vertical PDU/Cable Management Bracket, set of 2, Full height brackets support tool-less mounting of up to two (2) vertical rack mount PDUs with maximum widths of 55.9mm (2.2 in.) and 311mm (12.25 in.), 622mm (24.5 in.), 933mm (36.75 in.), 1.24m (49 in.) or 1.56m (61.25 in.) O.C. mounting buttons.

In contrast to the Zero-U PDU panels, these brackets mount to the sides of the cabinet in the space between the equipment rails and the cabinet frame posts

Use (XX) to specify cabinet height: 42 = 42U, 45 = 45U, 48 = 48U

VPA-SPAN-1

V8A-LD-1

V-PDU-1-(XX)

V8A-DRA-1-(XX)	V800 Full Vented Door, Black
V8A-DRB-1-(XX)	V800 Split Vented Doors, Black, set of 2
V8A-DRC-1-(XX)	V800 Split Solid Doors, Black, set of 2
V1A-S-1(XX)	V600/V800 1000mm Split Side Panels, Black, set of 2
V2A-S-1(XX)	V600/V800 1200mm Split Side Panels, Black, set of 2
V8A-R-1-(XX)	V800 Equipment Mounting Rail, Black, set of 2

Use (X) to specify cabinet height: 42 = 42U, 45 = 45U, 48 = 48U

V8A-DRA-1-(XX)

V8A-DRB-1-(XX)

V1A-S-1-(XX)

V8A-R-1-(XX)

V600™ Cabinet

The V600 cabinet provides a robust, cost-effective enclosure solution that is ideal for use in conjunction with VersaPOD® or V800™ data center cabinets. While not compatible with VersaPOD or V800 Zero-U vertical patching and cable management accessories, it shares a common appearance for standard cabinet applications and is ideal for use as a server cabinet.

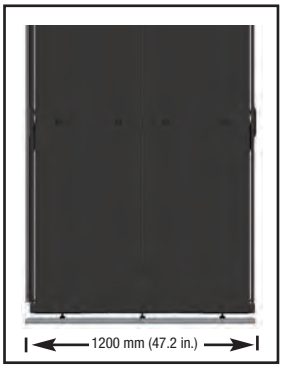
Lightweight Stability — Design provides an extremely stable, high-capacity cabinet without excessive weight

High-Flow Doors — Contoured high density perforated door provides up to 86% perforation exceeding major IT equipment air flow requirements

Enhanced Side Access — Split level side panels provide convenient access to installed equipment

Full Accessibility Doors — Quick release, field reversible single piece front and split rear doors

Flexible Mounting Options — Fully adjustable mounting rails can be readily configured to support any range of equipment depths



Consistent Aesthetics — The V62A cabinet is exactly 1200mm (47.2 in.) deep, allowing for full access to adjacent tiles immediately in front or in back of placed cabinets

Thermally Efficient — Compatible with VersaPOD thermal management options including exhaust fans and brush guards. V62A cabinet is compatible with VersaPOD Vertical Exhaust Ducts

V600 Cabinet Accessories

Ordering Information:

V6(X)A-(X)(X)(X)(X)(X)1-(XX) . . . . .V600 Cabinet, black

Depth
1 = 1000mm (39.4 in.)
2 = 1200mm (47.2. in.)

Side Panels
0 = No Panels
1 = 1 Panels
2 = 2 Panels

Front Door
A = Full Vented
B = Spllit Vented
C = Split Solid

Rear Door
A = Full Vented
B = Spllit Vented
C = Split Solid

Castors
1 = none
2 = Castors

Color
1 = none

Lock Type
1 = Key Lock
2 = Tumbler Combination Lock

Height
42 = 42U
45 = 45U
48 = 48U

Includes 4 leveling feet,
(50) M6 cage nuts,
(50) M6 cage screws
and 2 stabilizing brackets

V600 Cabinet Specifications

Height*	42U: 2016mm (79.4 in.) 45U: 2150mm (84.6 in.) 48U: 2280mm (89.7 in.)
Width	600mm (23.6 in.)
Depth - External (Door to Door)	V61A: 1000mm (39.4 in.) V62A: 1200mm (47.2 in.)
Depth - Usable (Rail-to-Rail Max.)	V61A: 806mm (31.8 in.) V62A: 1006mm (39.6 in.)
Weight ****	42U V61A : 97kg (214 lbs.) V62A: 112kg (247 lbs.) 45U V61A: 102kg (224 lbs.) V62A: 117kg (258 lbs.) 48U V61A: 107kg (236 lbs.) V62A: 122kg (269 lbs.)
Load Rating	Static: 1361kg (3000 lbs.) Dynamic: 1021kg (2250 lbs.)
Base Type	Open
Color	Black (RAL 9011)
% Door Perforation	Full door: 86%, Split door: 80%
U Space Identification	Yes
Lid Cable Access Openings	V61A: 4 (small); 1 (large) V62A: 3 (small); 3 (large)
Material	CRS of varying thicknesses
Finish	Textured power coat
Standards Compliance	UL 60950-1 Ed2.0, EIA/ECA-310-E, IP20

** Nominal height with adjustable leveling feet or castors*

*** Does not include packaging*

V600 Cabinet Accessories

VP-DUCT1* . . . . . .VersaPOD Vertical Exhaust Duct,
523mmx653mmx516-923mm (20.6x25.7x20-36 in.), Black

VP-DUCT2* . . . . . .VersaPOD Vertical Exhaust Duct,
523mmx653mmx912-1320mm (20.6x25.7x36-52 in.), Black

V-PDU-1-(XX) . . . . .V600 Vertical PDU/Cable Management Bracket, Black, (set of 2)
Supports tool-less mounting of up to (2) vertical rack mount PDU's

V6A-R-1-(XX) . . . . .V600 Mounting Rails (set of 2), Black

VP-FAN . . . . . .Top-Mount Cooling Fan Panel, 3 Fans x 110CFM, 120VAC w/NEMA 5-15P plug

VP-FAN-220 . . . . . .Top-Mount Cooling Fan Panel, 3 Fans x 110CFM, 220VAC w/C13 plug

VP-T3 . . . . . .Brush Guard, Large for large center top panel cable openings

VP-BRUSH . . . . . .Brush Guard, Small for small perimeter top panel cable openings

V-W . . . . . .V600 Casters (set of four)

VA-VPA-BAY-1 . . .VersaPOD-to-V600 Baying Kit secures (1) VersaPOD cabinet to (1) V600 cabinet

VP-GRD . . . . . .Grounding Kit- - Includes ground bar, ground wire, mounting hardware, and accessories (capacity to support all required grounding connections for a single cabinet)

V6A-DRA-1-(XX) . .V600 Full Vented Door, Black

V6A-DRB-1-(XX) . . .V600 Split Vented Doors (set of 2), Black

V6A-DRC-1-(XX) . . .V600 Split Solid Doors (set of 2), Black

V1A-S-1-(XX) . . . . .V600/V800 1000mm (39.4 in.) Split Side Panels (set of 2), Black

V2A-S-1-(XX) . . . . .V600/V800 1200mm (47.2 in.) Split Side Panels (set of 2), Black

Use (XX) to specify cabinet height: 42 = 42U, 45 = 45U, 48 = 48U

**Vertical exhaust ducts are compatible with V62A cabinets only. Solid doors should be specified for cabinets using exhaust ducts.*

Data Center Power Distribution

With power costs continuing to rise, the ability to maximize a data center's energy efficiency has rapidly become one of the most critical considerations for network infrastructure professionals. To meet this growing challenge, Siemon has developed intelligent power distribution solutions to improve energy efficency.

Section Contents

Intelligent Power Distribution Units

Siemon's line of intelligent PDUs provide valuable energy consumption data while reliably delivering power to critical IT equipment. Each of our PDU families deliver real-time power information with varying degrees of intelligent functionality ranging from basic Metered units to full-featured Managed PDUs — providing multiple options based on the level of data and control requirements, Siemon's intelligent PDUs may be used as stand-alone units, or they can communicate with third-party software through common open networking protocols. All of our network-capable intelligent PDUs also have the capacity to connect environmental sensors, allowing temperature, airflow, and humidity to be measured to further troubleshoot and optimize data center efficiency.

PDU Families

- Metered
- Monitored
- Smart
- Switched
- Managed

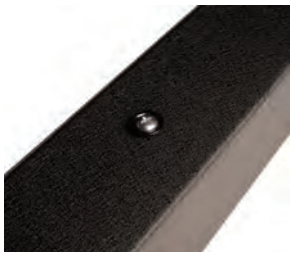
FUNCTION	METERED	MONITORED	SMART	SWITCHED	MANAGED
Built-In Display for Local Use	√	√	√	√	√
PDU-Level Monitoring	√	√	√	√	√
Remote Monitoring via Ethernet Port		√	√	√	√
Environmental Sensor Ports		√	√	√	√
Locking Outlets			√	√	√
Outlet-Level Monitoring			√		√
Outlet-Level Switching/ Control				√	√

Configurations

- Various plug inputs
- Single and 3-phase voltages
- Horizontal and Zero-U vertical styles
- 3m (9.8 ft.) cords (other lengths available on request)
- Test data included with each unit

Mounting

- Vertical PDUs mount via toolless button attachments and include a mounting bracket for additional flexibility
- Horizontal PDUs mount to standard EIA 19 in. configurations



Metered PDUs

Metered PDUs provide local visual monitoring capability through a built-in LED meter that displays real-time consumption data. Metered PDUs are a cost-effective alternative to monitored or switched PDUs when remote monitoring is not desired, while providing a more intelligent alternative to basic PDUs.

The 3 phase and 60A units measure current (amps) that scrolls through each phase

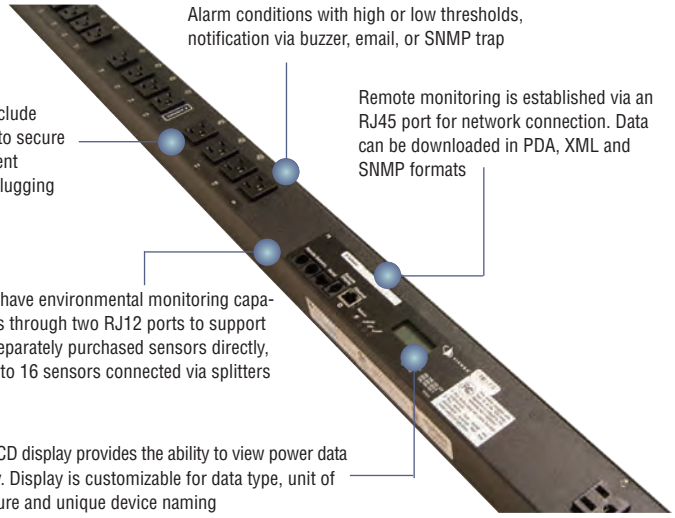
Single-phase PDUs measure power by scrolling through power factor, amps, volts and watts

Ordering Information

Mounting	Input Current	Input Voltage	Power	Input Plug	Output Receptacles	Output Receptacles	Length	Part Number
North America								
Vertical	20A x 2	120 dual input	1.9kW x 2	NEMA 5-20P	5-20R (20)	-	1683mm (66 in.)	7TV02-AB20Z-K2A
Vertical	20A x 2	120 dual input	1.9kW x 2	NEMA L5-20P	5-20R (20)	-	1683mm (66 in.)	7TV05-AB20Z-K2A
Vertical	20A, 3 phase	120 / 208 WYE	5.8kW	NEMA L21-20P	6-20R (24)	-	1683mm (66 in.)	7TV11-AC24Z-K1A
Vertical	20A, 3 phase	120 / 208 WYE	5.8kW	NEMA L21-20P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV11-BA24E-K1A
Vertical	20A, 3 phase	120 / 208 WYE	5.8kW	NEMA L21-20P	5-20R (24)	L6-20R (6)	1683mm (66 in.)	7TV11-AB24H-K1A
Vertical	30A	208	5kW	NEMA L6-30P	6-20R (24)	-	1683mm (66 in.)	7TV08-AC24Z-K1A
Vertical	30A	208	5kW	NEMA L6-30P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV08-BA24E-K1A
Vertical	30A, 3 phase	120 / 208 WYE	8.6kW	NEMA L21-30P	5-20R (24)	-	1683mm (66 in.)	7TV13-AB24Z-K1A
Vertical	30A, 3 phase	120 / 208 WYE	8.6kW	NEMA L21-30P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV13-BA24E-K1A
Vertical	30A, 3 phase	208 DELTA	8.6kW	NEMA L15-30P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV15-BA24E-K1A
Vertical	60A	208	10kW	IEC 2P / 3W	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV24-BA24E-K1A
International								
Vertical	16A, 3 phase	230/400 WYE	11.04kW	IEC 309 3P + N + E	C13 (24)	C-19 (6)	1683mm (66 in.)	7TV26-BA24E-K1A
Vertical	32A	230	7.36kW	IEC 309 2P + E	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV22-BA24E-K1A
Vertical	32A, 3 phase	230/400 WYE	22.08kW	IEC 309 3P + N + E	C-13 (24)	C-19 (6)	1683mm (66 in.)	7TV27-BA24E-K1A
Horizontal 1U	32A	230	7.36kW	IEC 309 2P + E	C-13 (24)	-	480mm (19 in.)	7TH22-BA24Z-K1A

Monitored and Smart PDUs

Building on the functionality of the Metered family, Monitored and Smart PDUs enable different levels of remote monitoring of power consumption.

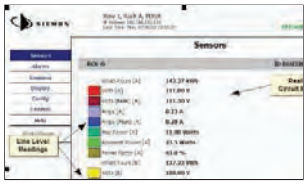


Monitored PDUs

Monitored PDUs collect data at an aggregate, device-level, generating a smaller quantity of information to simplify management.

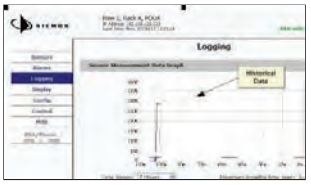
Smart PDUs

Smart PDUs offer the highest level of monitoring by providing outlet-level data collection.



The browser-based interface is used to view charts and logs without the need for additional software

The unit provides remote and local alarms and utilization logging



Ordering Information

Mounting	Input Current	Input Voltage	Power	Input Plug	Output Receptacles	Output Receptacles	Length	Part Number
North America								
Vertical	20A	120	1.9kW	NEMA 5-20P	5-20R (24)	-	1683mm (66 in.)	7MV02-AB24Z-K1A
Vertical	20A	120	1.9kW	NEMA L5-20P	5-20R (24)	-	1683mm (66 in.)	7MV05-AB24Z-K1A
Vertical	20A	208	3.3kW	NEMA 6-20P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV03-BA24E-K1A
Vertical	20A	208	3.3kW	NEMA L6-20P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV07-BA24E-K1A
Vertical	20A, 3 phase	120 / 208 WYE	5.8kW	NEMA L21-20P	5-20R (24)	-	1683mm (66 in.)	7MV11-AB24Z-K1A
Vertical	20A, 3 phase	120 / 208 WYE	5.8kW	NEMA L21-20P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV11-BA24E-K1A
Vertical	30A	120	2.9kW	NEMA L5-30P	5-20R (24)	-	1683mm (66 in.)	7MV06-AB24Z-K1A
Vertical	30A	208	5kW	NEMA L6-30P	6-20R (24)	-	1683mm (66 in.)	7MV08-AC24Z-K1A
Vertical	30A	208	5kW	NEMA L6-30P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV08-BA24E-K1A
Vertical	30A, 3 phase	120 / 208 WYE	8.6kW	NEMA L21-30P	5-20R (24)	-	1683mm (66 in.)	7MV13-AB24Z-K1A
Vertical	30A, 3 phase	120 / 208 WYE	8.6kW	NEMA L21-30P	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV13-BA24E-K1A
Vertical	35A, 3 phase	208 DELTA	10.1kW	IEC 3P / 4W	C-13 (30)	C-19 (6)	1778mm (70 in.)	7MV28-BA30E-K1A
Vertical	50A, 3 phase	208 DELTA	14.4kW	IEC 3P / 4W	C-13 (24)	C-19 (6)	1778mm (70 in.)	7MV29-BA24E-K1A
Vertical	60A, 3 phase	208 DELTA	17.3kW	IEC 3P / 4W	C-13 (24)	C-19 (6)	1778mm (70 in.)	7MV25-BA24E-K1A
Horizontal 1U	20A	120 or 208	1.9 or 3.3kW	NEMA C-20	C-13 (12)	-	480mm (19 in.)	7MH19-BA12Z-K1A
Horizontal 1U	20A	120	1.9kW	NEMA 5-20P	5-20R (10)	-	480mm (19 in.)	7MH02-AB10Z-K1A
Horizontal 1U	20A	120	1.9kW	NEMA L5-20P	5-20R (10)	-	480mm (19 in.)	7MH05-AB10Z-K1A
International								
Vertical	16A, 3 phase	230/400 WYE	11.04kW	IEC 309 3P + N + E	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV26-BA24E-K1A
Vertical	16A	230	3.68kW	IEC 309 2P + E	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV20-BA24E-K1A
Vertical	32A, 3 phase	230/400 WYE	22.08kW	IEC 309 3P + N + E	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV27-BA24E-K1A
Vertical	32A	230	7.36kW	IEC 309 2P + E	C-13 (24)	C-19 (6)	1683mm (66 in.)	7MV22-BA24E-K1A
Horizontal 1U	16A	230	3.68kW	IEC 309 C-20	C-13 (12)	-	480mm (19 in.)	7MH33-BA12Z-K1A

Switched and Managed PDUs

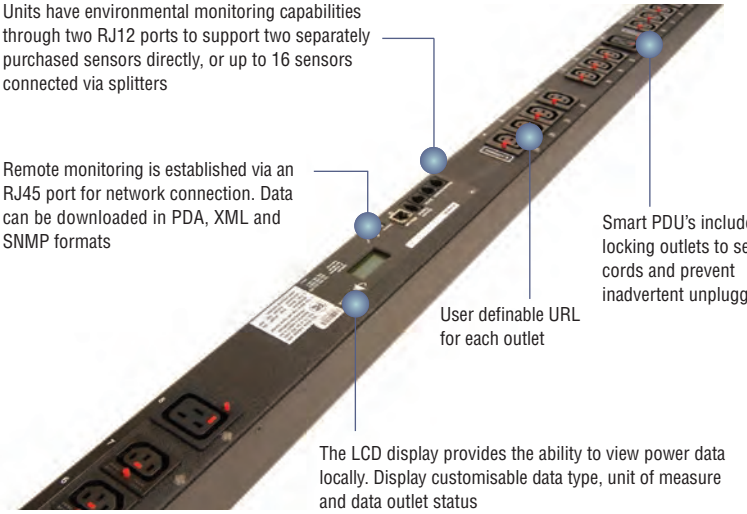
In addition to power monitoring, switched and managed PDUs enable users to remotely control individual receptacles by allowing equipment to be restarted or remotely shut down.

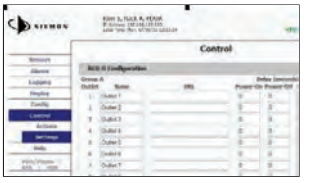
Switched PDUs

Switched PDUs combine total PDU power monitoring with port-level switching. They are the ideal solution when port control is needed but only aggregate consumption data is desired.

Managed PDUs

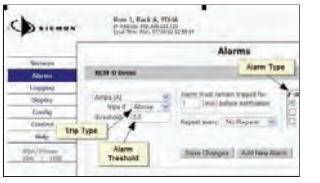
Managed PDUs offer the highest level of control and monitoring by providing outlet-level monitoring and outlet-level switching.





Sequential start up and shut down to manage loads

The browser-based interface is used to access charts, logs, and alarms



Ordering Information

Mounting	Input Current	Input Voltage	Power	Input Plug	Output Receptacles	Output Receptacles	Length	Part Number
Switched								
North America								
Vertical	30A	120	2.9kW	NEMA L5-30P	5-15R (24)	-	1778mm (70 in.)	7SV06-AA24Z-K1A
Vertical	30A	208	5kW	NEMA L6-30P	C-13 (20)	C-19 (4)	1778mm (70 in.)	7SV08-BA20D-K1A
Vertical	30A, 3 phase	120 / 208 WYE	8.6kW	NEMA L21-30P	C-13 (21)	C-19 (3)	1829mm (72 in.)	7SV13-BA21C-K1A
Vertical	30A, 3 phase	208 DELTA	8.6kW	NEMA L15-30P	C-13 (21)	C-19 (3)	1829mm (72 in.)	7SV15-BA21C-K1A
International								
Vertical	16A, 3 phase	230/400 WYE	11.04kW	IEC 309 3P + N + E	C-13 (21)	C-19 (3)	1683mm (66 in.)	7SV26-BA21C-K1A
Vertical	16A	230	3.68kW	IEC 309 2P + E	C-13 (21)	C-19 (3)	1683mm (66 in.)	7SV20-BA21C-K1A
Vertical	32A, 3 phase	230/400 WYE	22.08kW	IEC 309 3P + N + E	C-13 (21)	C-19 (3)	1829mm (72 in.)	7SV27-BA21C-K1A
Vertical	32A	230	7.36kW	IEC 309 2P + E	C-13 (20)	C-19 (4)	1778mm (70 in.)	7SV22-BA20D-K1A
Managed								
North America								
Vertical	20A, 3 phase	120 / 208 WYE	5.8kW	NEMA L21-20P	C-13 (21)	C-19 (3)	1683mm (66 in.)	7WV11-BA21C-K1A
Vertical	30A	208	5kW	NEMA L6-30P	C-13 (20)	C-19 (4)	1778mm (70 in.)	7WV08-BA20D-K1A
Vertical	30A, 3 phase	120 / 208 WYE	8.6kW	NEMA L21-30P	C-13 (21)	C-19 (3)	1829mm (72 in.)	7WV13-BA21C-K1A
Vertical	35A, 3 phase	208 DELTA	10.1kW	IEC 3P / 4W	C-13 (21)	C-19 (3)	1829mm (72 in.)	7WV28-BA21C-K1A
Vertical	60A, 3 phase	208 DELTA	17.3kW	IEC 3P / 4W	C-13 (18)	C-19 (6)	1683mm (66 in.)	7WV25-BA18E-K1A
Horizontal 1U	20A	120 or 208	1.9 or 3.3kW	NEMA C-20	C-13 (8)	-	480mm (19 in.)	7WH19-BA08Z-K1A
International								
Vertical	16A, 3 phase	230/400 WYE	11.04kW	IEC 309 3P + N + E	C-13 (21)	C-19 (3)	1683mm (66 in.)	7WV26-BA21C-K1A
Vertical	16A	230	3.68kW	IEC 309 2P + E	C-13 (21)	C-19 (3)	1683mm (66 in.)	7WV20-BA21C-K1A
Vertical	32A, 3 phase	230/400 WYE	22.08kW	IEC 309 3P + N + E	C-13 (21)	C-19 (3)	1829mm (72 in.)	7WV27-BA21C-K1A
Vertical	32A	230	7.36kW	IEC 309 2P + E	C-13 (20)	C-19 (4)	1778mm (70 in.)	7WV22-BA20D-K1A
Horizontal 1U	32A	230	7.36kW	IEC 309 2P + E	C-13 (8)	-	480mm (19 in.)	7WH22-BA08Z-K1A

Accessories

Environmental Sensors

7ENS-TEMP .....
Temperature Sensor

7ENS-TEMPHAF .....
Temperature/ Airflow/ Humidity Sensor

7ENA-SPLIT-5.....
Splitter RJ12 x 5 way

7ENS-WATER.....
Water Sensor

7ENS-WKIT .....
Water Sensor Cable

SPECIFICATIONS

General	
Safety Compliance	UL 60950 (North America PDUs only), CE (International PDUs only)
Emissions	FCC Part 15 Class A
Cord Length	3m (10 ft.)
Circuit breakers	30A and higher units
Outlet Color Coding	On 3 phase units for load balancing
Material	18 Gauge Steel
Finish	Black powder coat
Warranty	3 Years
Environmental	
Operating Temperature	10 to 40°C (50 to 104°F)
Storage Temperature	-25 to 65°C (-13 to 149°F)
Operating Humidity	5% to 95% (non-condensing)
Storage Humidity	5% to 95% (non-condensing)
Operating Elevation	0 to 2000m (0 to 6561 ft.)
Storage Elevation	0 to 15240m (0 to 50000 ft.)
Networking	(not applicable to metered units)
Networking Protocols	HTTP, HTTPS (SSL/TLS), SMTP, POP3, ICMP, DHCP, TCP/IP, NTP, Telnet, Syslog
Ethernet Link Speed	10 Mbit; half-duplex
Data Formats	HTML, SNMP, CSV/Plain Text, XML

High Speed Interconnects

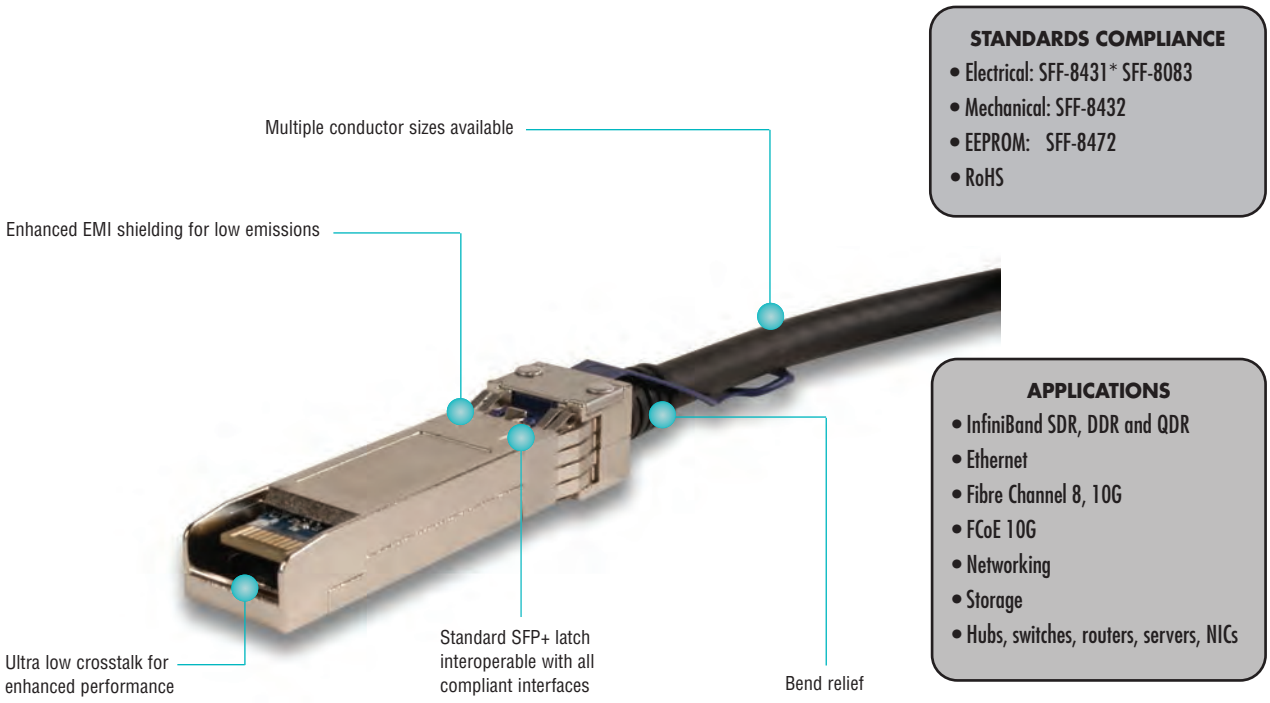
Siemon has developed a full offering of interconnect assemblies for ultra high-speed point-to-point applications. Supporting speeds up to 56Gb/s across an array of application standards, the line features QSFP+, SFP+, and CXP interfaces, as well as hybrid assemblies. Independently tested to be interoperable with most major equipment manufacturers, Siemon interconnects deliver cost-effective, flexible support for your high-speed, direct attach equipment connections.

Section Contents

SFP+ Copper Cable Assemblies

SFP+ copper cable assemblies from Siemon were developed specifically as a cost-effective and lower-power alternative to optical modules for short reach links in high-speed interconnect applications such as high-performance computing (HPC), enterprise networking and network storage markets. These assemblies support data transfer rates up to 10+ Gb/s per lane, meeting or exceeding current standards specifications.

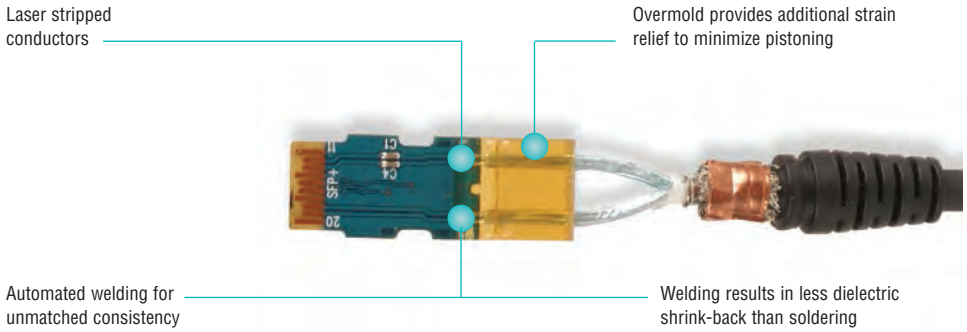
These SFP+ fully-shielded assemblies combine twin-axial shielded cable configuration with robust die cast housings for enhanced support of high frequency data rates. These SFP+ assemblies are impedance matched to ensure interoperability and minimise EMI leakage through their fully-shielded design.



STANDARDS COMPLIANCE
- Electrical: SFF-8431* SFF-8083
- Mechanical: SFF-8432
- EEPROM: SFF-8472
- RoHS

APPLICATIONS
- InfiniBand SDR, DDR and QDR
- Ethernet
- Fibre Channel 8, 10G
- FCoE 10G
- Networking
- Storage
- Hubs, switches, routers, servers, NICs

PCB Termination



Product Information

PERFORMANCE SPECIFICATIONS

Electrical	
Min. Dielectric Withstand Voltage	300 VDC
Insulation Resistance	1000 Mohms
Current Rating	0.5 Amp Min/Signal Contact
General	
Operating Temperature	-10 to 70°C (14 to 158°F)
Flammability Rating	UL 94 V-0
Green Features	RoHS, Lead-Free
Shield	Braid/Foil
Marking	Mfg Name, Part#, Date Code

Plug	
Backshell Material	Nickel-Plated Zinc Diecast
Contact Material	PCB with Gold-Plated Pads
Latch	Positive Latching w/ Pull
Insertion Force	30N (6.7 lbf.) Max
Withdrawal Force	20N (4.5 lbf.) Max
Retention Force	90N (20.2 lbf.) Max
Durability	50 Cycles Min
Cable	
Conductor	Solid
Wire Gauge	30 AWG to 24 AWG
Impedance	100± 5 ohms
Construction	Twinaxial
Cable OD	30 AWG = 4.5mm (0.18 in.)
	28 AWG = 4.7mm (0.19 in.)
	26 AWG = 5.2mm (0.20 in.)
	24 AWG = 6.2mm (0.24 in.)
Jacket Type	PVC
Bend Radius	5X Cable OD

Ordering Information:

SFP+ Passive Copper Cable Assembly, Double-ended, Black

Part Number	Length	Gauge
SFPP30-01	1m (3.3 ft.)	30
SFPP30-02	2m (6.6 ft.)	30
SFPP30-03	3m (9.8 ft.)	30
SFPP28-05	5m (16.4 ft.)	28
SFPP24-07	7m (23.0 ft.)	24

Note: Contact Customer Service for additional lengths and wire gauges.

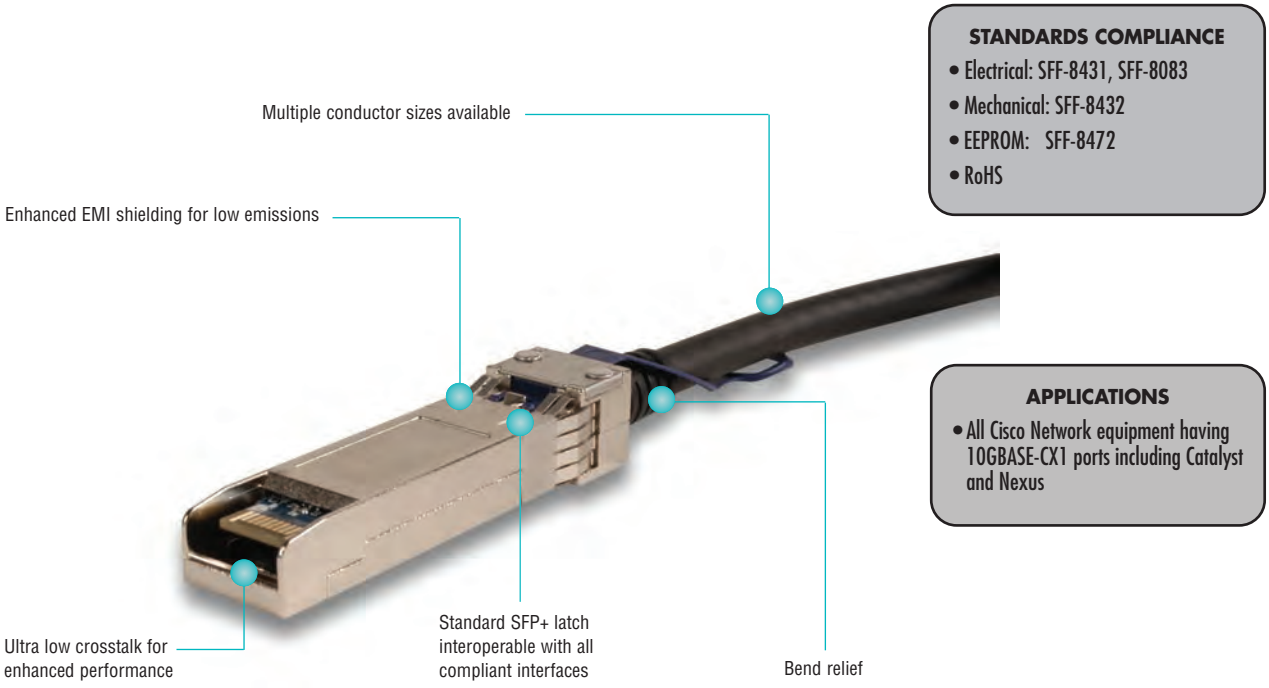
Cisco Compatible SFP+ Twinax Copper Cables

Cisco Compatible SFP+ Twinax Copper direct-attach cables (DAC's) are programmed specifically to work with Cisco equipment. When these cables are plugged into Cisco equipment they will not trigger the error message that a non-Cisco transceiver has been detected. These cables do not violate Cisco's warranty.

Cisco Compatible SFP+ DAC's from Siemon were developed specifically as a cost-effective and lower-power alternative to optical modules for short reach links in high-speed interconnect applications such as high-performance computing (HPC), enterprise networking including top-of-rack switching and network storage markets. The assemblies support data transfer rates up to 10+Gb/s per lane, meeting or exceeding current standards specifications.

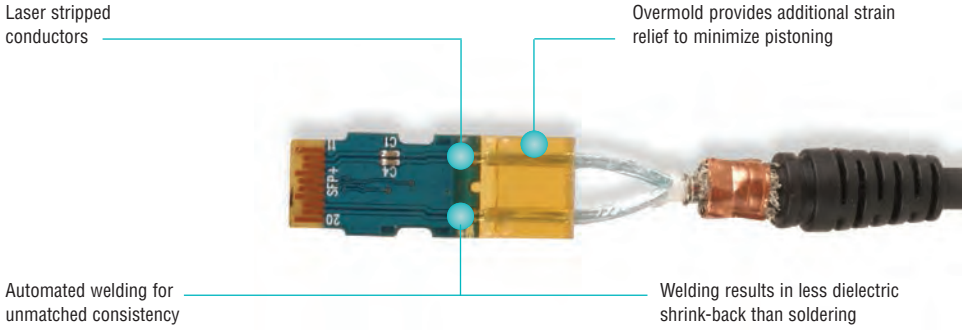
These SFP+ fully-shielded assemblies combine twin-axial shielded cable configuration with robust die cast housings for enhanced support of high frequency data rates. These SFP+ assemblies are impedance matched to ensure interoperability and minimize EMI leakage through their fully-shielded design.

STANDARDS COMPLIANCE
- Electrical: SFF-8431, SFF-8083
- Mechanical: SFF-8432
- EEPROM: SFF-8472
- RoHS



APPLICATIONS
- All Cisco Network equipment having 10GBASE-CX1 ports including Catalyst and Nexus

PCB Termination



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Product Information

PERFORMANCE SPECIFICATIONS

Electrical	
Min. Dielectric Withstand Voltage	300 VDC
Insulation Resistance	1000 Mohms
Current Rating	0.5 Amp Min/Signal Contact
General	
Operating Temperature	-10 to 70° C (32 to 15° F)
Flammability Rating	UL 94 V-0
Green Features	RoHS, Lead-Free
Shield	Braid/Foil
Marking	Mfg Name, Part#, Date Code

Plug	
Backshell Material	Nickel-Plated Zinc Diecast
Contact Material	PCB with Gold-Plated Pads
Latch	Positive Latching w/ Pull
Insertion Force	30N (6.7 lbf.) Max
Withdrawal Force	20N (4.5 lbf.) Max
Retention Force	90N (20.2 lbf.) Max
Durability	50 Cycles Min
Cable	
Conductor	Solid
Wire Gauge	30 AWG to 24 AWG
Impedance	100± 5 ohms
Construction	Twinaxial
Cable OD	30 AWG = 4.5mm (0.18 in.)
	24 AWG = 6.2mm (0.24 in.)
Jacket Type	PVC
Bend Radius	5X Cable OD

Ordering Information:

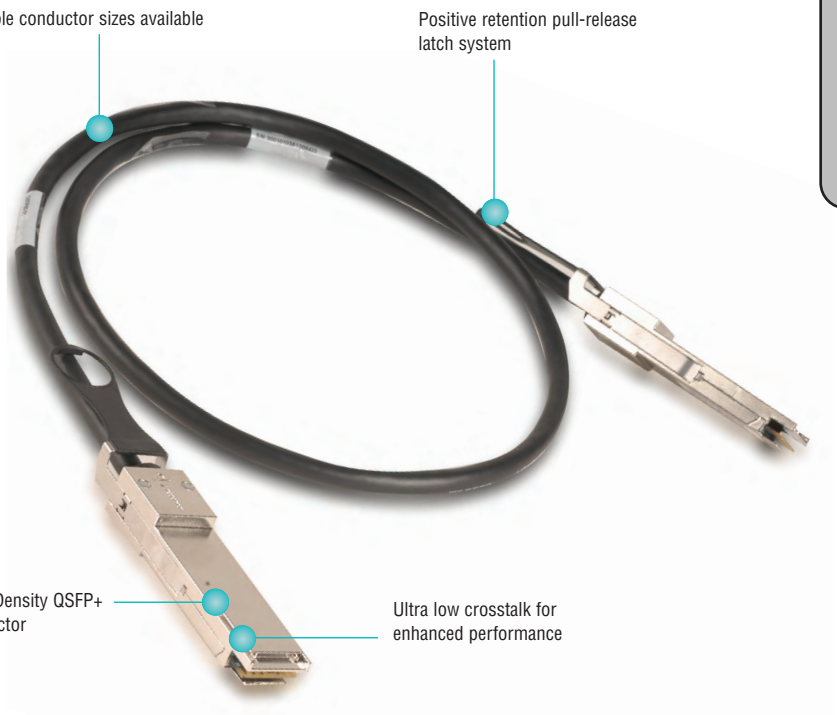
SFP+ Passive Copper Cable Assembly, Double-ended, Black

Part Number	Length	Gauge
SFPH10GBCU1MS	1m (3.3 ft.)	30
SFPH10GBCU1.5MS	1.5m (4.9 ft.)	30
SFPH10GBCU2MS	2m (6.6 ft.)	30
SFPH10GBCU2.5MS	2.5m (8.2 ft.)	30
SFPH10GBCU3MS	3m (9.8 ft.)	30
SFPH10GBCU5MS	5m (16.4. ft.)	24

Note: Contact Customer Service for additional lengths and wire gauges.

QSFP+ Passive Copper Assemblies

Siemon QSFP+ Copper Cable assemblies were developed for high-density applications, offering a cost-effective, low-power option for high-speed data center interconnects. The QSFP+ form factor (Quad SFP+) can replace up to four standard SFP+ connections, providing greater density and reduced system cost. The direct-attach assemblies support emerging 40Gb/s applications and are available in standard lengths up to 6 meters (19.7 ft.) with longer custom lengths available.



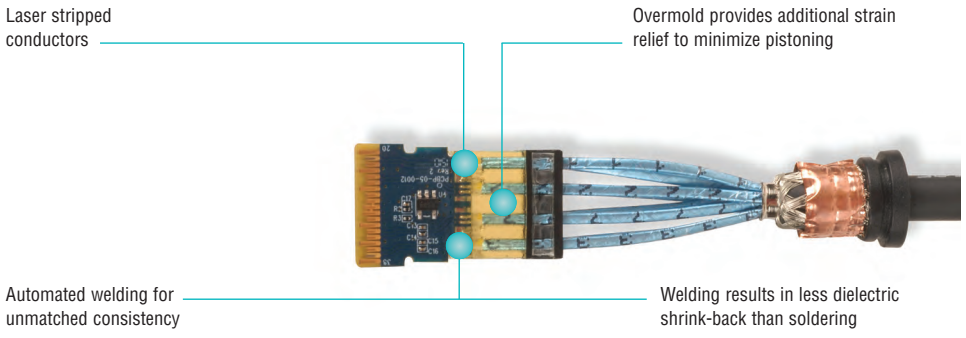
STANDARDS COMPLIANCE

- Electrical: IBTA V2 Revision 1.3, IEEE 802.3ba
- SFF-8436, SFF-8636
- RoHS

APPLICATIONS

- InfiniBand 4X SDR, DDR, QDR
- Ethernet 10G,40G
- Fibre Channel 10G,40G, SAN
- RapidIO
- Myrinet 40G
- Rack-to-Rack, Shelf-to-Shelf Interconnect
- Networking
- Storage
- Hubs, switches, routers, servers

PCB Termination



Product Information

PERFORMANCE SPECIFICATIONS

Electrical	
Min. Dielectric Withstand Voltage	300 VDC
Insulation Resistance	1000 Mohms
Current Rating	0.5 Amp Min/Signal Contact
General	
Operating Temperature	0 to 70° C (32 to 158° F)
Flammability Rating (Plastics)	UL 94
Green Features	RoHS, Lead-Free
Shield	Braid/Foil
Marking	Mfg Name, Part#, Date Code

Plug	
Backshell Material	Nickel Plated Zinc Diecast
Contact Material	PCB with Gold-Plated Pads
Plastic Material	PA66
Latch	Positive Latching w/Pull Tab
Insertion Force	40N (9.0 lbf.) Max
Withdrawal Force	30N (6.7 lbf.) Max
Retention Force	90N (20.2 lbf.) Min
Durability	250 Cycles
Tightest Recommended Vertical Spacing (Belly to Belly)	11.8mm (0.47 in.) Center to Center
Tightest Recommended Vertical Spacing (Stacked)	17.5mm (0.69 in.) Center to Center
Cable	
Conductor	Solid
Wire Gauge	30 AWG to 24 AWG
Impedence	100 +/- 5 ohms
Construction	Twinaxial
Cable OD	30 AWG = 6.5mm (0.26 in.)
	28 AWG = 7.5mm (0.29 in.)
	26 AWG = 8.6mm (0.34 in.)
	24 AWG = 9.7mm (0.38 in.)
Jacket Type	PVC
Bend Radius	5X Cable OD -Single 10X Cable OD - Repeated

Ordering Information:

QSFP+ to QSFP+ Passive Copper Cable Assemblies

Part Number	Length	Gauge
QSFP30-00.5	0.5m (1.6 ft.)	30
QSFP30-01	1m (3.3 ft.)	30
QSFP30-01.5	1.5m (4.9 ft.)	30
QSFP30-02	2m (6.6 ft.)	30
QSFP30-02.5	2.5m (8.2 ft.)	30
QSFP30-03	3m (9.8 ft.)	30
QSFP26-05	5m (16.4 ft.)	26
QSFP24-06	6m (19.7 ft.)	24

Maximum Lengths

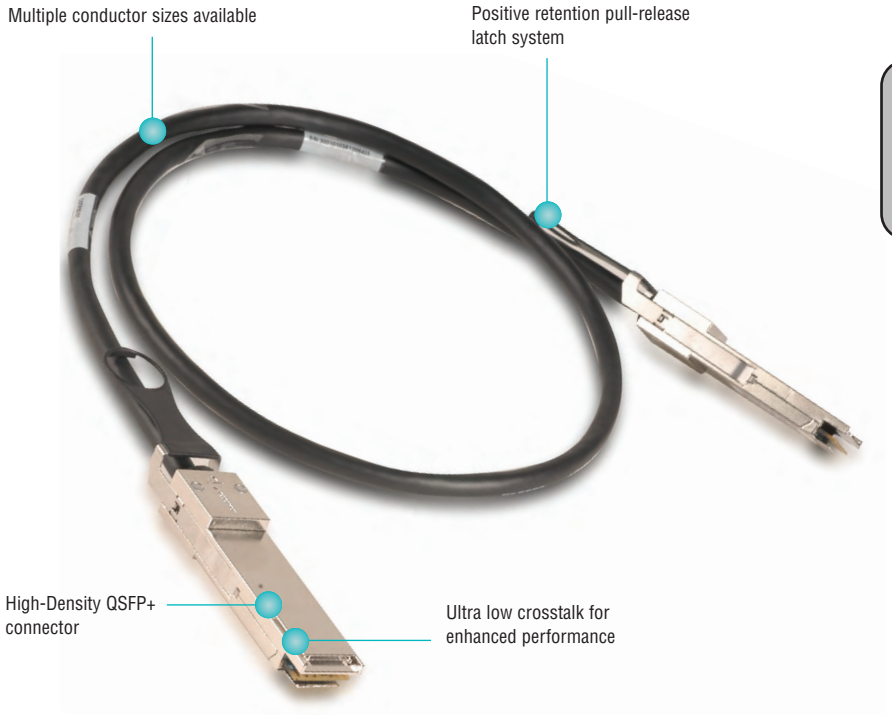
Gauge	IBTA DDR	IBTA QDR[1]	IEEE 802.3ba
30	5m (16.4 ft.)	3m (9.8 ft.)	3m (9.8 ft.)
28	7m (23.0 ft.)	4m (13.1 ft.)	4m (13.1 ft.)
26	8m (26.2 ft.)	5m (16.4 ft.)	5m (16.4 ft.)
24	10m (32.8 ft.)	6m (19.7 ft.)	n/a

1 Per IBTA cable MOI V0.69: -13dB @5GHz
2 May not meet IBTA QDR insertion loss limits but is acceptable for most InfiniBand and all Ethernet applications.

Note: Contact Customer Service for additional lengths.

QSFP+ FDR Passive Copper Assemblies

Siemon QSFP+ FDR Copper Cable assemblies provide 56Gb/s of bandwidth (4 X 14Gb/s). These QSFP+ (SFF-8436) cables exceed industry standards to support DDR, QDR, FDR and emerging 4x16Gb/s applications. Siemon's QSFP+ Fourteen Data Rate assemblies are a high-density, cost-effective, low-power option for leading edge 56Gbs high-speed data centers, available in standard lengths up to 3 meters (9.8 ft) with longer custom lengths available upon request.



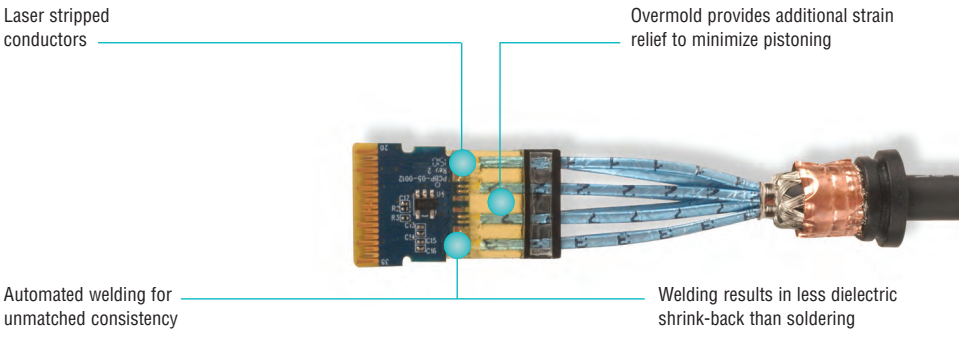
STANDARDS COMPLIANCE

- Electrical: IBTA V2 Revision 1.3, IEEE 802.3ba
- SFF-8436, SFF-8636
- RoHS

APPLICATIONS

- InfiniBand 4X SDR, DDR, QDR
- Ethernet 10G,40G
- Fibre Channel 10G,40G, SAN, 4x16G
- RapidIO
- Myrinet 40G
- Rack-to-Rack, Shelf-to-Shelf Interconnect
- Networking
- Storage
- Hubs, switches, routers, servers

PCB Termination



Product Information

PERFORMANCE SPECIFICATIONS

Electrical	
Min. Dielectric Withstand Voltage	300 VDC
Insulation Resistance	1000 Mohms
Current Rating	0.5 Amp Min/Signal Contact
General	
Operating Temperature	0 to 70° C (32 to 158° F)
Flammability Rating (Plastics)	UL 94
Green Features	RoHS, Lead-Free
Shield	Braid/Foil
Marking	Mfg Name, Part#, Date Code

Plug	
Backshell Material	Nickel Plated Zinc Diecast
Contact Material	PCB with Gold-Plated Pads
Plastic Material	Nylon
Latch	Positive Latching w/Pull Tab
Insertion Force	40N (9.0 lbf.) Max
Withdrawal Force	30N (6.7 lbf.) Max
Retention Force	90N (20.2 lbf.) Min
Durability	250 Cycles
Tightest Recommended Vertical Spacing (Belly to Belly)	11.8mm, (0.47 in.) Center to Center
Tightest Recommended Vertical Spacing (Stacked)	17.5mm, (0.69 in.) Center to Center
Cable	
Conductor	Solid
Wire Gauge	30 AWG to 24 AWG
Impedence	100 +/- 5 ohms
Construction	Twinaxial
Cable OD	30 AWG = 6.1mm (0.24 in.)
	28 AWG = 8.7mm (0.34 in.)
Jacket Type	PVC
Bend Radius	5X Cable OD -Single 10X Cable OD - Repeated

Ordering Information:

QSFP+ to QSFP+ FDR Passive Copper Cable Assemblies

Part Number	Length	Gauge
QSFPFDR30-0.5	0.5m (1.6 ft.)	30
QSFPFDR30-01	1m (3.3 ft.)	30
QSFPFDR30-02	2m (6.6 ft.)	30
QSFPFDR28-03	3m (9.8 ft.)	28

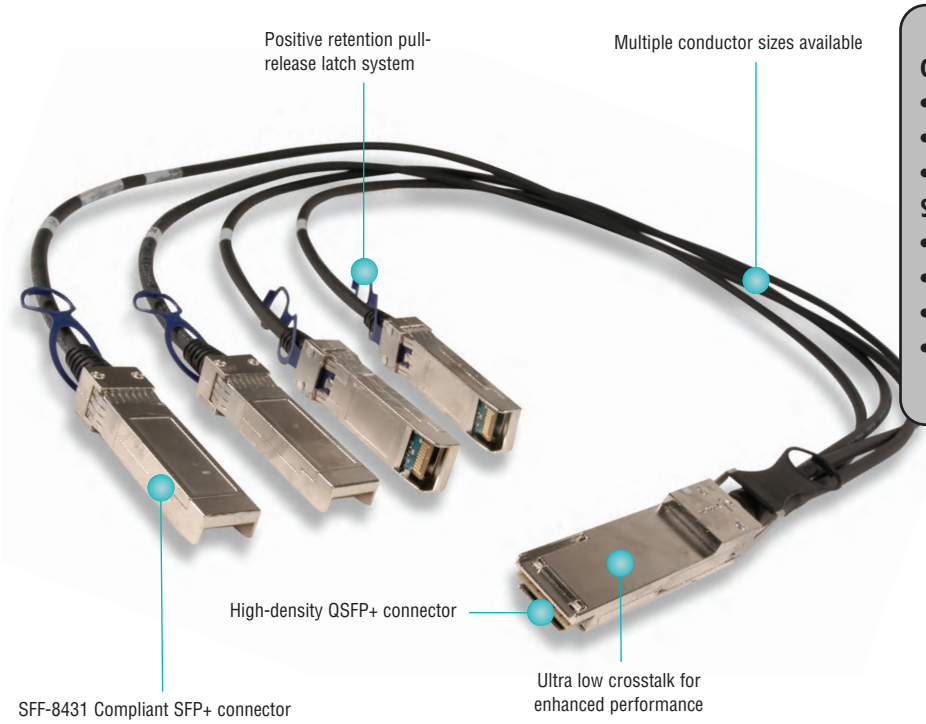
Maximum Lengths

Gauge	IBTA DDR	IBTA QDR	IEEE 802.3ba	IBTA FDR
30	5m (16.4 ft.)	3m (9.8 ft.)	3m (9.8 ft.)	2m (6.6 ft.)
28	7m (23.0 ft.)	4m (13.1 ft.)	4m (13.1 ft.)	3m (9.8 ft.)

Note: Contact Customer Service for additional lengths.

QSFP+ to 4 SFP+ Passive Copper Assemblies

Siemon hybrid cables allow users to connect SFP+ and QSFP+ equipment. They offer a cost-effective, low-power option for high-speed data center interconnects. The direct-attach assemblies support 4 lanes of 10Gb/s (40Gb/s composite) and are available in standard lengths up to 5 meters (16.4 ft.) with longer custom lengths available.



STANDARDS COMPLIANCE

QSFP+ End

- Electrical: IBTA V2 Revision 1.3, IEEE 802.3ba
- SFF-8436, SFF-8636
- RoHS

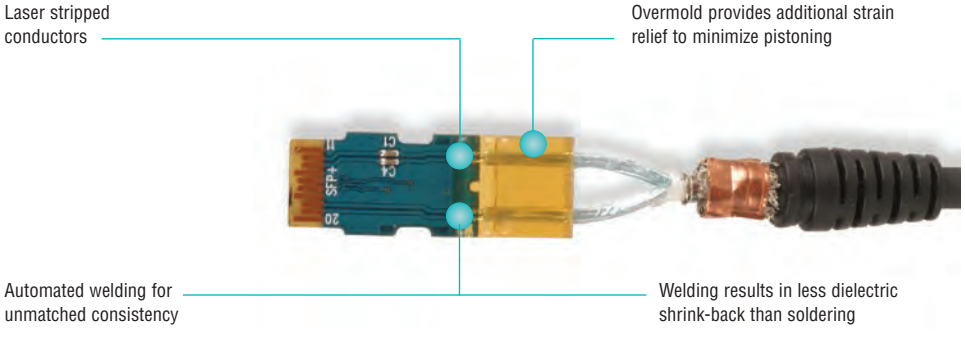
SFP+ End

- SFF-8431
- SFF-8432
- SFF-8472
- RoHS

APPLICATIONS

- InfiniBand SDR, DDR
- Ethernet 1G, 10G
- Fibre Channel
- Rack-to-Rack, Shelf-to-Shelf Interconnect
- Networking
- Storage
- Hubs, switches, routers, servers

PCB Termination



** Proposed IBTA return loss limit*

Product Information

PERFORMANCE SPECIFICATIONS

Electrical	
Min. Dielectric Withstand Voltage	300 VDC
Insulation Resistance	1000 Mohms
Current Rating	0.5 Amp Min/Signal Contact
General	
Operating Temperature	0 to 70° C (32 to 158° F)
Flammability Rating (Plastics)	UL 94
Green Features	RoHS, Lead-Free
Shield	Braid/Foil
Marking	Mfg Name, Part#, Date Code

Plug	
Backshell Material	Nickel Plated Zinc Diecast
Contact Material	PCB with Gold-Plated Pads
Latch	Positive Latching w/Pull Tab
Insertion Force	QSFP+: 40N (9.0 lbf.) Max SFP+ 30N (6.7 lbf.) Max
Withdrawal Force	QSFP+: 30N (6.7 lbf. Max SFP+ 20N (4.5 lbf.) Max
Retention Force	90N (20.2 lbf.) Min
Durability	QSFP+: 250 Cycles Min SFP+ 50 cycles Min
Cable	
Conductor	Solid
Wire Gauge	30 AWG and 28 AWG
Impedence	100 +/- 5 ohms
Construction	Twinaxial
Jacket Type	PVC
Bend Radius	5X Cable OD -Single 10X Cable OD - Repeated

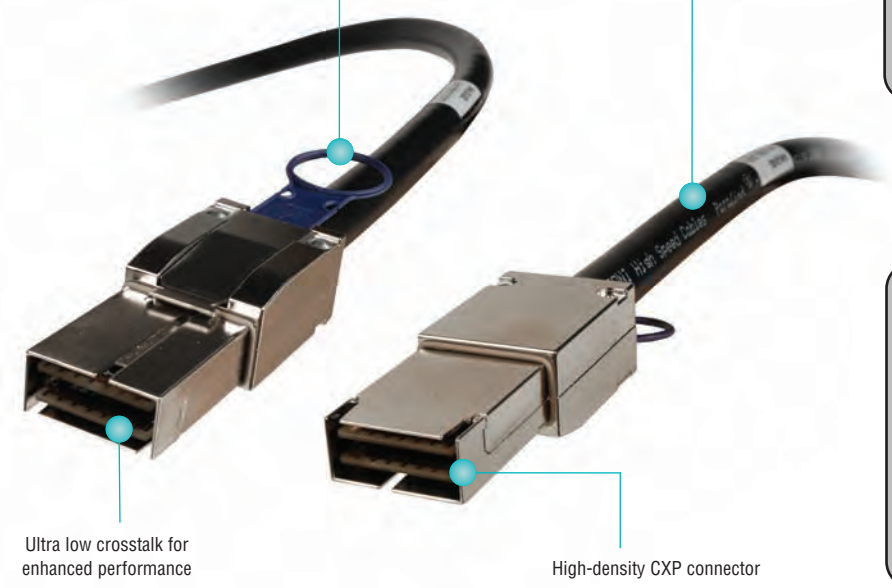
Ordering Information:

QSFP+ to SFP+ Passive Copper Cable Assemblies

Part Number	Length	Gauge
SFPPQSFP30-00.5	0.5m (1.6 ft.)	30
SFPPQSFP30-01	1m (3.3 ft.)	30
SFPPQSFP30-02	2m (6.6 ft.)	30
SFPPQSFP28-03	3m (9.8 ft.)	28
SFPPQSFP28-05	5m (16.4 ft.)	28

CXP Passive Copper Assemblies

Siemon CXP Copper Cable assemblies were developed for high-density applications, offering a cost-effective, low-power option for high-speed data center interconnects. The CXP form factor can replace up to three standard QSFP+ connections, providing greater density and reduced system cost. These direct attached assemblies support 12 channels of 10Gb/s (QDR) for 120Gb/s InfiniBand, or 10 channels of 10Gb/s for 100Gb/s (IEEE 802.3ba) and are available in standard lengths up to 4 meters (13.12 ft) with longer custom lengths available.



STANDARDS COMPLIANCE

- SFF-8642
- IBTA V2 Revision 1.3
- IEEE 802.3ba
- RoHS

APPLICATIONS

- InfiniBand 12xSDR, 12xDDR, 12xQDR
- Ethernet 10G, 40G, 100G
- Rack-to-Rack, Shelf-to-Shelf Interconnect
- Networking, NIC
- Storage: DAS, SAN, NAS
- Hubs, switches, routers, servers

Product Information

PERFORMANCE SPECIFICATIONS

Electrical	
Min. Dielectric Withstand Voltage	300 VDC
Insulation Resistance	1000 Mohms
Current Rating	0.5 Amp Min/Signal Contact
General	
Operating Temperature	0 to 70° C (32 to 158° F)
Flammability Rating (Plastics)	UL 94
Green Features	RoHS, Lead-Free
Shield	Braid/Foil
Marking	Mfg Name, Part#, Date Code

Plug	
Backshell Material	Nickel Plated Zinc Diecast
Contact Material	PCB with Gold-Plated Pads
Plastic Material	Nylon
Latch	Positive Latching w/Pull Tab
Insertion Force	150N (33.7 lbf.) Max
Withdrawal Force	30N (6.7 lbf.) Max
Durability	250 Cycles
Tightest Recommended Vertical Spacing (Belly to Belly)	27mm (1.1 in.) Center to Center
Tightest Recommended Vertical Spacing (Stacked)	16.5mm (0.65 in.) Center to Center
Cable	
Conductor	Solid
Wire Gauge	30 AWG, 28 AWG and 27 AWG
Impedence	100 +/- 5 ohms
Construction	Twinaxial
Cable OD	30 AWG = 9.5mm (0.37 in.)
	28 AWG = 11mm (0.43 in.)
	27 AWG = 13.8mm (0.54 in.)
Jacket Type	PVC
Bend Radius	5X Cable OD -Single 10X Cable OD - Repeated

Ordering Information:

CXP to CXP Passive Copper Cable Assemblies

Part Number	Length	Gauge
CXP30-01	1m (3.3 ft.)	30
CXP30-02	2m (6.6. ft.)	30
CXP28-03	3m (9.8 ft.)	28
CXP27-04	4m (13.1 ft.)	27

Maximum Lengths

Gauge	IBTA DDR	IBTA QDR	IEEE 802.3ba
30	4m (13.1 ft.)	2m (6.6 ft.)	2m (6.6 ft.)
28	7m (23.0 ft.)	3m (9.8. ft.)	3m (9.8 ft.)
27	7m (23.0 ft.)	3m (9.8 ft.)	3m (9.8 ft.)

CXP27-04 is not guaranteed to meet IBTA QDR or IEEE 802.3ba inserstion loss requirements.

Note: Contact Customer Service for additional lengths.

CXP to 3 QSFP+ Breakout Passive Copper Assemblies

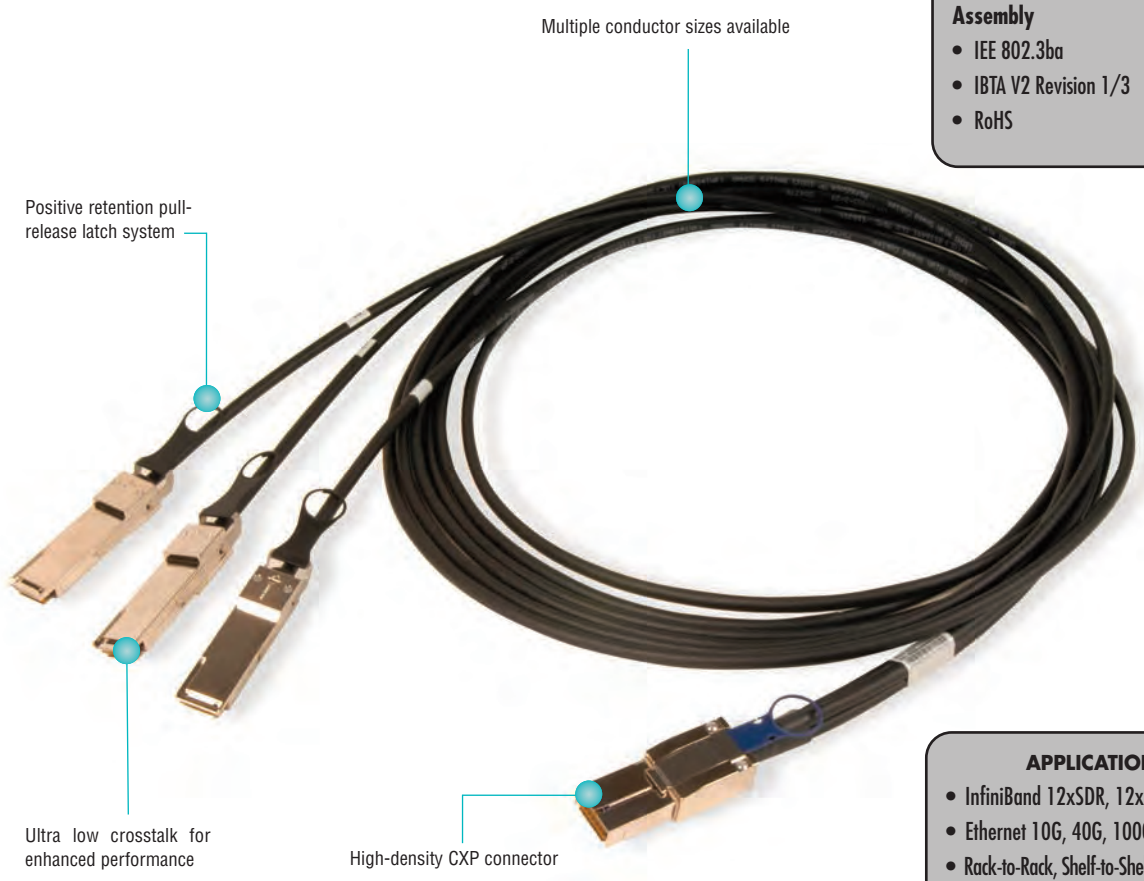
Siemon CXP to 3 QSFP+ Copper Cable assemblies allow users to connect CXP and QSFP+ equipment together. Compliant with both CXP and QSFP+ specifications, this breakout cable provides a cost effective, low-power option for high density, high-speed data center interconnects. The CXP form factor can replace up to three standard QSFP+ connections, providing greater density and reduced system cost. These direct-attach assemblies support emerging 100Gb/s applications and are available in standard lengths up to 3 meters (9.8 ft.) with longer custom lengths available.

STANDARDS COMPLIANCE

QSFP+ End
- SFF-8436

CXP End
- SFF-8642

Assembly
- IEE 802.3ba
- IBTA V2 Revision 1/3
- RoHS



APPLICATIONS
- InfiniBand 12xSDR, 12xDDR, 12xQDR
- Ethernet 10G, 40G, 100G
- Rack-to-Rack, Shelf-to-Shelf Interconnect
- Networking, NIC
- Storage: DAS, SAN, NAS
- Hubs, switches, routers, servers

Product Information

PERFORMANCE SPECIFICATIONS

Electrical	
Min. Dielectric Withstand Voltage	300 VDC
Insulation Resistance	1000 Mohms
Current Rating	0.5 Amp Min/Signal Contact
General	
Operating Temperature	0 to 70° C (32 to 158° F)
Flammability Rating (Plastics)	UL 94
Green Features	RoHS, Lead-Free
Shield	Braid/Foil
Marking	Mfg Name, Part#, Date Code

Plug	
Backshell Material	Nickel Plated Zinc Diecast
Contact Material	PCB with Gold-Plated Pads
Plastic Material	Nylon
Latch	Positive Latching w/Pull Tab
Insertion Force	CXP: 150N (33.7 lbf.) Max: QSFP+ 40 N (9.0 lbf.) Max.
Withdrawal Force	CXP: 50N (11.2 lbf.) Max: QSFP+ 30 N (6.7 lbf.) Max.
Durability	250 Cycles
CXP Tightest Recommended Horizontal Spacing	27mm (1.1 in.) Center to Center
CXP Tightest Recommended Vertical Spacing (Stacked)	16.5mm (0.65 in.) Center to Center
Cable	
Conductor	Solid
Wire Gauge	30 AWG to 26 AWG
Impedence	100 +/- 5 ohms
Construction	Twinaxial
Cable OD	30AWG = 9.5mm (0.37 in.)
	28AWG = 11mm (0.43 in.)
Jacket Type	PVC
Bend Radius	5X Cable OD -Single 10X Cable OD - Repeated

Ordering Information:

CXP to QSFP+ Passive Copper Cable Assemblies

Part Number	Length	Gauge
CXPQSFP30-01	1m (3.3 ft.)	30
CXPQSFP30-02	2m (6.6 ft.)	30
CXPQSFP28-03	3m (9.8 ft.)	28

Maximum Lengths

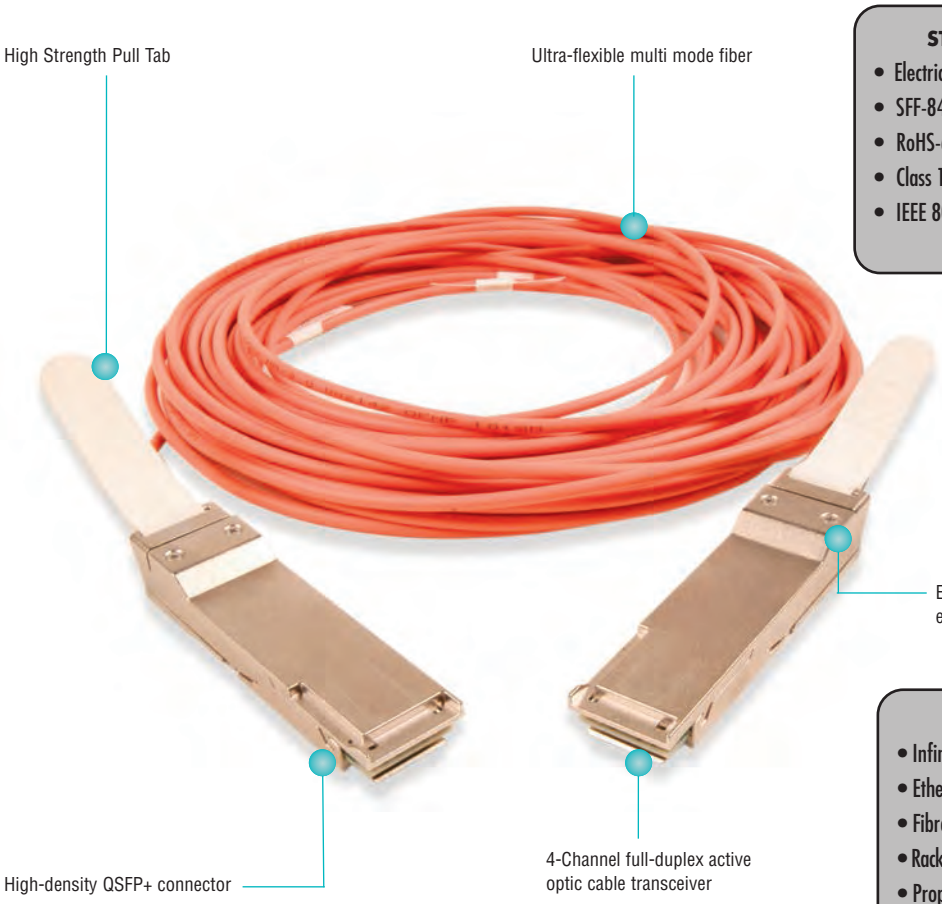
Gauge	IBTA DDR	IBTA QDR	IEEE 802.3ba
30	4m (13.1 ft.)	2m (6.6 ft.)	2m (6.6 ft.)
28	6m (19.7 ft.)	3m (9.8 ft.)	3m (9.8 ft.)

CXP27-04 is not guaranteed to meet IBTA QDR or IEEE 802.3ba inserstion loss requirements.

40Gb/s QSFP+ Active Optical Cable Assemblies

Siemon 40Gb/s Low Power Active Optical Cable assemblies offer a cost-effective, extended reach option for high-speed data center interconnects. These AOC assemblies incorporate integrated opto-electronics with four fiber optic transceivers per end, each operating at data rates from 1 to 10.5 Gb/s and supporting a reach up to 100 meters (328 ft.).

AOC's offer customers the flexibility of traditional optical modules by interfacing to systems via a standard QSFP+ MSA, SFF-8436 connector. The cable is electrically compliant with the SFP+ interface supporting InfiniBand, Ethernet, Fibre Channel and other applications. The QSFP+ connector includes the Digital Diagnostic Monitoring Interface (DDMI).



STANDARDS COMPLIANCE

- Electrical: IBTA V2 Revision 1.3, IEEE 802.3ba
- SFF-8436, SFF-8636
- RoHS-6 (lead free)
- Class 1 laser product per IEC 60825-1
- IEEE 802.3ba

APPLICATIONS

- InfiniBand SDR, DDR, QDR
- Ethernet 40G BASE-SR4
- Fibre Channel 4G, 8G, 10G
- Rack-to-Rack, Shelf-to-Shelf Interconnect
- Proprietary Cluster Interconnect
- Networking
- Storage
- Hubs, switches, routers, servers

Product Information

PERFORMANCE SPECIFICATIONS

Electrical	
Supply Voltage	3.1 to 3.6V
Power Consumption Per End	0.8W typical, 1.2W Max
General	
Operating Temperature	0 to 70° C (32 to 158° F)
Storage Temperature	-25 to 75° C (-13 to 167° F)
Channels	4 channels, bi-directional
Connector (each end)	QSFP+

Cable	
Type	OFNP (PVC)
Minimum Bend Radius	15xDIA - Dynamic 10xDIA - Static
Minimum Cable Assembly Bend Radius	Cable and Connector: 56mm (2.2 in.)
Cross Section (without connector)	3mm (.12 in.) OD
Channel Parameters	
Channels	4 Lanes, bi-directional
Date Rate	10.5 Gbps/ channel Max.
Operating Optical Wavelength	850nm

Ordering Information:

QSFP+ to QSFP+ Active Optical Cable Assemblies

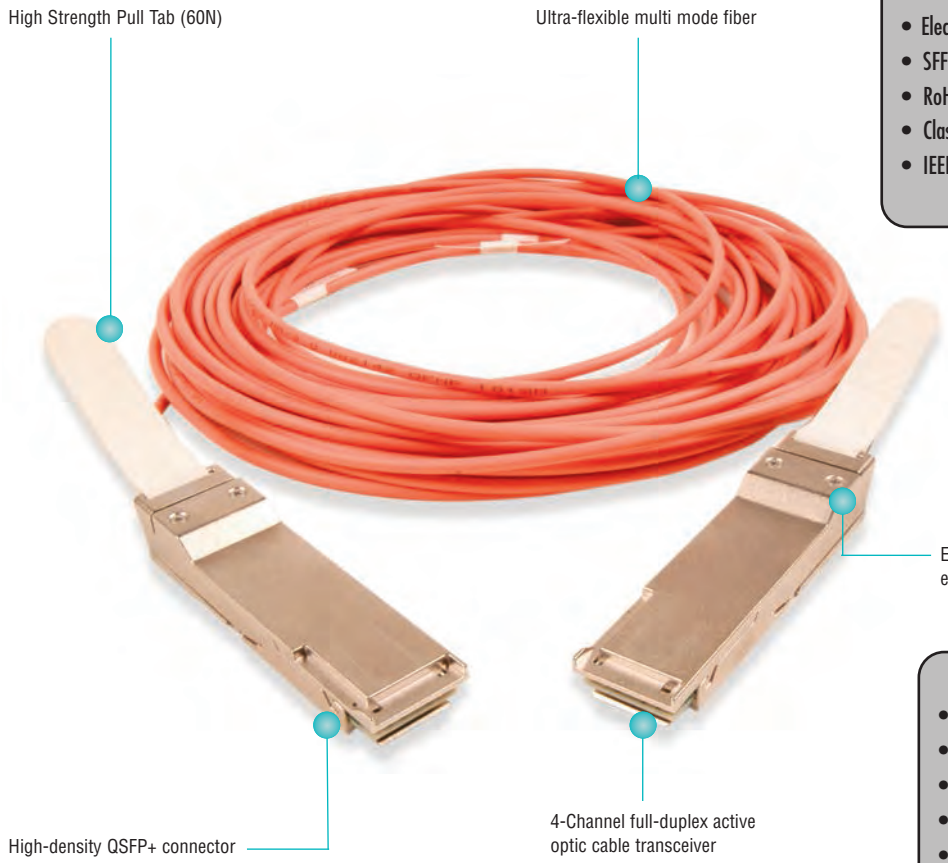
Part Number	Length
QSFP-FB-005	5m (16.4 ft.)
QSFP-FB-010	10m (32.8 ft.)
QSFP-FB-015	15m (49.2 ft.)
QSFP-FB-020	20m 65.6 ft.)
QSFP-FB-030	30m (98.4 ft.)
QSFP-FB-050	50m (164 ft.)
QSFP-FB-100	100m (328 ft.)

Note: Contact Customer Service for additional lengths.

56Gb/s QSFP+ Active Optical Cable Assemblies

Siemon 56Gb/s Low Power Active Optical Cable assemblies offer a cost-effective, extended reach option for high-speed data center interconnects. These AOC assemblies incorporate integrated opto-electronics with four fiber optic transceivers per end, each operating at data rates from 1 to 14 Gb/s and supporting a reach up to 100 meters. The cable is available in a number of standard lengths up to 100 meters.

AOC's offer customers the flexibility of traditional optical modules by interfacing to systems via a standard QSFP+ MSA, SFF-8436 connector. The cable is electrically compliant with the SFP+ interface supporting InfiniBand, Ethernet, Fiber Channel and other applications. The QSFP+ connector includes the Digital Diagnostic Monitoring Interface (DDMI).



STANDARDS COMPLIANCE

- Electrical: IBTA V2 Revision 1.3, IEEE 802.3ba
- SFF-8436, SFF-8636
- RoHS-6 (lead free)
- Class 1 laser product per IEC 60825-1
- IEEE 802.3ba

APPLICATIONS

- InfiniBand SDR, DDR, QDR
- Ethernet 40G BASE-SR4
- Fiber Channel 16 GFC
- Rack-to-Rack, Shelf-to-Shelf Interconnect
- Proprietary Cluster Interconnect
- Networking
- Storage
- Hubs, switches, routers, servers

Product Information

PERFORMANCE SPECIFICATIONS

Electrical	
Supply Voltage	3.1 to 3.6V
Power Consumption Per End	0.8W typical, 1.2W max
General	
Operating Temperature	0 to 70° C (+32 to 158°F)
Storage Temperature	-25 to 75° C (-13 to 167°F)
Channels	4 channels, bi-directional
Connector (each end)	QSFP+

Cable	
Type	OFNP (PVC)
Minimum Bend Radius	15xDIA - Dynamic 10xDIA - Static
Minimum Cable Assembly Bend Radius	Cable and Connector: 56mm (2 in.)
Cross Section (without connector)	3mm (0.11 in.) OD
Channel Parameters	
Channels	4 Lanes, bi-directional
Date Rate	14.025 Gbps/ channel Max.
Operating Optical Wavelength	850nm

Ordering Information:

QSFP+ to QSFP+ Active Optical Cable Assemblies

Part Number	Length
QSFPFDR-F-005	5m (16.4 ft.)
QSFPFDR-F-010	10m (32.8 ft.)
QSFPFDR-F-015	15m (49.2 ft.)
QSFPFDR-F-020	20m 65.6 ft.)
QSFPFDR-F-030	30m (98.4 ft.)
QSFPFDR-F-050	50m (164 ft.)
QSFPFDR-F-100	100m (328 ft.)

Note: Contact Customer Service for additional lengths.

Ruggedized/Industrial Connectivity

Siemon's line of ruggedized/industrial connectivity allows cabling professionals to deliver high-performance copper and fiber cabling in harsh environments that would damage standard connectivity. Including sealed and vibration-resistant outlets, couplers, cords and mounting accessories for twisted-pair copper and fiber systems, Siemon's ruggedized connectivity is ideal for industrial, outdoor and other harsh environments.

Section Contents

Ruggedized Copper Connectivity

Siemon is well-known for its industry leading high performance connectivity. The same high performance copper and fiber products are available with our patented Ruggedized MAX® & Z-MAX® housings. Ruggedized outlets and modular patch cords provide an IP66/IP67-rated seal, protecting plug and outlet contacts from dust, moisture, vibration, and common cleaning chemicals. These solutions are ideal for protecting valuable connections in laboratory environments, hospitals, food processing plants and other harsh environments.

Easy Termination — The Ruggedized MAX outlets utilize a standard 110 tool for quick and easy punch-down termination while Z-MAX outlets feature an innovative record-setting termination method

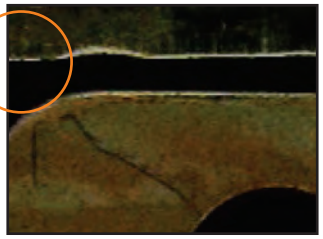
Gripping Ribs — Plug housing and dust caps feature ribs to provide additional gripping for mating and unmating

Standardized Interface — Ruggedized connector has been recognized by the Open DeviceNet Vendor Association (ODVA), TIA-1005-2009 and IEC 61076-3-106

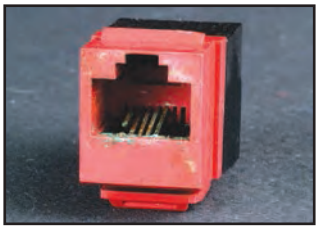
Ensures Proper Seal — Quarter-turn bayonet-style mating ensures proper plug depth into the outlet and an IP66/IP67 rated seal

Compared to all other RJ-45 products on the market today the Z-MAX termination process embraces the principle that simpler is better. By establishing straight forward steps that eliminate potential errors, Siemon has been able to set a new benchmark for the fastest UTP and shielded category 6A outlet termination speed.

Meets Harsh Demands of the Environment
Specially designed Ruggedized connectors can withstand humidity, dust and vibration.



Vibration Causes Contact Damage In Typical Outlets
Seen under a microscope after exposure to extreme vibration, contact between a typical modular plug and outlet can pit the contact pins, causing intermittent transmission problems.



Humidity Affects Typical Outlets
Humidity corrodes contact pins inside typical outlets. Repeated exposure can eventually destroy the contact pins, rendering the outlet unusable. The Ruggedized outlet's special housing prevents this corrosion.

Ruggedized Z-MAX® Outlets

The Ruggedized Z-MAX Outlets feature Siemon's high performance Z-MAX Outlets with innovative and fastest termination method in the industry. The combination of premium connectivity and Ruggedized housing with quarter-turn bayonet-style mating design provides a high performance solution for harsh environments.

Part #	Description
XG2-Z5S	Category 5e Shielded Z-MAX Ruggedized outlet, T568A/B
XG2-Z6	Category 6 UTP Z-MAX Ruggedized outlet, T568A/B
XG2-Z6A	Category 6A UTP Z-MAX Ruggedized outlet, T568A/B
XG2-Z6AS	Category 6A Shielded Z-MAX Ruggedized outlet, T568A/B

Ruggedized MAX® Outlets

The Ruggedized MAX outlet features a MAX module housed in a protective shell. The outlet's outer housing is made of durable, chemical-resistant, Ruggedized-grade thermoplastic and features Siemon's patented quarter-turn bayonet-style mating design. Guaranteed category 5e and 6 performance to 160 MHz even in the most punishing environments.

Part #	Description
X5	Category 5e UTP, MAX Ruggedized outlet, T568A/B
X5-X5S	Category 5e Shielded, MAX Ruggedized bulkhead coupler (outlet to outlet)
X6	Category 6 UTP, MAX Ruggedized outlet, T568A/B

Ruggedized MAX Plugs

The Ruggedized MAX Plug features a category 5e modular plug contained in Siemon's Ruggedized-grade housing with patented quarter-turn bayonet-style mating design. The plug can be terminated in the field, allowing custom lengths to be assembled quickly on site in the event a cable is cut or damaged. It terminates to twisted-pair cable with 22 – 26 AWG (0.64 – 0.40mm) solid or 7-strand conductors with an insulated conductor diameter of 0.86 – 0.99mm.

Part #	Description
XP85	Category 5e UTP, MAX Ruggedized plug, 8-position, 8-contacts
XP85S	Category 5e Shielded, MAX Ruggedized plug, 8-position, 8-contacts

Ruggedized Category 6 UTP Patch cords

Ruggedized patch cords combine the high performance and quality that Siemon cords are known for with a protective Ruggedized-grade plug housing. These assemblies feature standard black MC® 6 cordage.

Ruggedized to Ruggedized

Part #	Description
XC6-(XX)	Category 6 UTP, Ruggedized plug-to-Ruggedized plug, CMX

Ruggedized to Modular

Part #	Description
XC6-(XX)-B05	Category 6 UTP, Ruggedized plug-to-modular RJ-45 plug, yellow boot, CMX

Use (XX) to specify length: 03 = 0.9m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.1m (7 ft.), 10 = 3.1m (10 ft.), 15 = 4.6m (15 ft.)

Ruggedized Category 6A Shielded Patch cords

These cable assemblies provide the final component necessary to contruct a category 6A shielded channel solution for harsh environments when used in conjunction with Siemon's category 6A shielded cable and category 6A compatible shielded Ruggedized outlets.

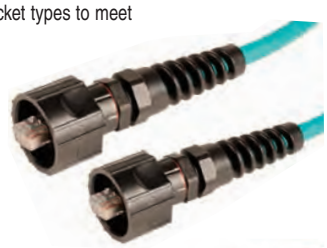
Ruggedized to Modular

Part #	Description
XC6A-S(XX)-BO5	Category 6A Patch Cord, Shielded (S/FTP), Ruggedized-to-Modular, Ivory w/Yellow boot, CM/LSOH

Use (XX) to specify length: 03 = 0.9m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.1m (7 ft.), 10 = 3.1m (10 ft.), 15 = 4.6m (15 ft.), 20 = 6.1m (20 ft.)

Ruggedized Category 5E UTP Patch Cords

Designed to withstand the rigors of harsh environments Siemon's Ruggedized category 5e stranded cordage is petroleum and UV resistant, is not effected by common chemicals and water, operates in a wider temperature range and provides a longer flex life. Available in two jacket types to meet various environmental requirements (see table on last page for jacket comparison)



Ruggedized to Ruggedized

Part #	Description
XC5-(XX)	Category 5e UTP, Ruggedized plug-to-Ruggedized plug, PVC jacket
XC5-(XX)T	Category 5e UTP, Ruggedized plug-to-Ruggedized plug, TPE jacket

Ruggedized to Modular

Part #	Description
XC5-(XX)-B05	Category 5e UTP, Ruggedized plug-to-modular RJ-45 plug, yellow boot, PVC jacket
XC5-(XX)-B05T	Category 5e UTP, Ruggedized plug-to-modular RJ-45 plug, yellow boot, TPE jacket

Modular to Modular

Part #	Description
XC5NS-(XX)-B05T	Category 5e UTP, modular RJ-45 plug -to-modular RJ-45 plug, yellow boot, TPE jacket

PVC = Polyvinyl Chloride, TPE =Thermoplastic Elastomer

Use (XX) to specify length: 03 = 0.9m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.1m (7 ft.), 10 = 3.1m (10 ft.), 15 = 4.6m (15 ft.), 20 = 6.1m (20 ft.)
PVC jacket color is teal. TPE jacket color is black.

Ruggedized Category 5E Shielded

Designed to withstand the rigors of harsh environments, Siemon's Ruggedized category 5e stranded cordage is petroleum and UV resistant, is not effected by common chemicals and water, operates in a wider temperature range and provides a longer flex life. Available in three Ruggedized jacket types to meet various environmental requirements (see table on last page for jacket comparison)

Ruggedized to Ruggedized

Part #	Description
XC5S-(XX)	Category 5e Shielded (SF/UTP) Ruggedized plug-to-Ruggedized plug, PVC jacket
XC5S-(XX)T	Category 5e Shielded (SF/UTP) Ruggedized plug-to-Ruggedized plug, TPE jacket
XC5S-(XX)U	Category 5e Shielded (SF/UTP) Ruggedized plug-to-Ruggedized plug, PUR jacket

Ruggedized to Modular

Part #	Description
XC5S-(XX)-B05	Category 5e Shielded (SF/UTP) Ruggedized plug-to-modular RJ-45 plug, yellow boot, PVC jacket
XC5S-(XX)-B05T	Category 5e Shielded (SF/UTP) Ruggedized plug-to-modular RJ-45 plug, yellow boot, TPE jacket
XC5S-(XX)-B05U	Category 5e Shielded (SF/UTP) Ruggedized plug-to-modular RJ-45 plug, yellow boot, PUR jacket

Modular to Modular

Part #	Description
XC5SNS-(XX)-B05T	Category 5e Shielded (SF/UTP) modular RJ-45 plug-to-modular RJ-45 plug, yellow boot, TPE jacket
XC5SNS-(XX)-B05U	Category 5e Shielded (SF/UTP) modular RJ-45 plug-to-modular RJ-45 plug, yellow boot, PUR jacket

PVC = Polyvinyl Chloride, PUR = Polyurethane, TPE =Thermoplastic Elastomer

Use (XX) to specify length: 03 = 0.9m (3 ft.), 05 = 1.5m (5 ft.), 07 = 2.1m (7 ft.), 10 = 3.1m (10 ft.), 15 = 4.6m (15 ft.), 20 = 6.1m (20 ft.)
PVC and PUR jacket color is teal. TPE jacket color is black.

Ruggedized Dust Caps

The Ruggedized dust caps are the ideal way to protect your investment in your Ruggedized cabling system. Outlet dust caps can be used to protect unused outlets or to seal an outlet during wash down periods when the outlet and plug may be disconnected. Plug dust caps protect Ruggedized patch cords from exposure to elements or accidental damage when not mated to an outlet.

Dust caps are constructed of industrial-grade thermoplastic for superior protection and durability. Additionally, outlet and plug dust caps feature a retention tether, which prevents them from being misplaced when not in use.

XP-CAP2 . . . . . .
Ruggedized plug dust cap with metal retention tether

XG2-CAP . . . . . .
Ruggedized plug dust cap with nylon retention tether

X-CAP . . . . . .
Ruggedized MAX outlet dust cap with metal retention tether

XG2-CAP. . . . . .
Ruggedized Z-MAX outlet dust cap with nylon retention tether

Ruggedized Surface Mount Boxes

The Siemon Ruggedized MAX Surface Mount Box (IBOX) mounts either Siemon copper or fiber Ruggedized outlets. Boxes provide an IP66/IP67 (NEMA 4X) seal and can be mounted on virtually any flat surface. Available in 1, 2, 3, and 4-port versions. Compression fittings provided for cable entry.

X-IBOX-01 . . . . . .
Ruggedized surface mount box, 1-port, supplied with 1 cable entry compression fitting

X-IBOX-02 . . . . . .
Ruggedized surface mount box, 2-port, supplied with 2 cable entry compression fittings

X-IBOX-03 . . . . . .
Ruggedized surface mount box, 3-port, supplied with 3 cable entry compression fittings

X-IBOX-04 . . . . . .
Ruggedized surface mount box, 4-port, supplied with 4 cable entry compression fittings

Note: Compression fittings accommodate cable diameters from 4.1–7.9mm (0.16 - 0.31 in.)

Technical Tip!
Contact Technical Support for punch tool to create Ruggedized knockouts for custom mounting.

Ruggedized Stainless Steel Faceplates

Mount Siemon's Ruggedized outlets and adapters into these stainless steel faceplates for a protective seal from moisture and debris. The faceplates are available in 1-, 2- , 3- and 4-port options with a rear sealing gasket and carry an IP44 rating.

XFP-S-01-SS. . . . . .
Single gang faceplate, 1-port, stainless steel

XFP-S-02-SS . . . . . .
Single gang faceplate, 2-port, stainless steel

XFP-D-03-SS. . . . . .
Double gang faceplate, 3-port, stainless steel

XFP-D-04-SS. . . . . .
Double gang faceplate, 4-port, stainless steel

Faceplates include mounting screws with sealed screw head.

Ruggedized LC Fiber Connectivity

The Siemon Ruggedized LC Fiber solution provides a robust fiber connection with an IP66/IP67-rated seal and is ideal for protecting fiber connections in laboratory environments, hospitals, food processing plants and other harsh environments.

The Siemon Ruggedized Fiber solution is ideal for installations requiring extended distances, in close proximity to heavy sources of EMI, or where fiber active equipment is used.

Robust Design — Protects fiber connections in virtually any harsh environment

Specialized Bend Relief — Compression fitting provides a superior rear seal and ensures fiber meet minimum bend radius requirements

Proper Seal — Bayonet-style mating ensures proper fiber alignment and an IP66/IP67 rated seal

High Performance — Meets TIA-568-C.3 and, ISO/IEC 11801 Ed 2.0 specifications for Multimode and Singlemode components

Field-Termination — Plug includes two industrial qualified Multimode LC connectors that accepts 2 strand, round, breakout style fiber optic cable

Rear of adapter accepts standard LC connectors

Precision Performance

R&D labs develop, design and implement rigorous testing programs using sophisticated instrumentation. The Ruggedized LC provides reliability with leading edge technology for applications where highly accurate performance is critical.

Robust and Reliable

Ruggedized Fiber connections help to streamline operations and reduce costs in manufacturing environments by avoiding regular replacement of standard connectors that cannot withstand these environments.

Meets Harsh Demands of the Environment

The Ruggedized LC connector is ideal in areas where chemicals, corrosive gases and liquids are commonplace.

Ruggedized LC Fiber Plug and Outlet

Ruggedized Multimode

Part #	Description
XPLC2-MM	Ruggedized LC fiber plug, Multimode, duplex. Includes two Multimode LC connectors
XLC-MM	Ruggedized LC fiber adapter, Multimode, duplex

Ruggedized Singlemode

Part #	Description
XPLC2-SM	Ruggedized LC fiber plug, Singlemode, duplex. Includes two Singlemode LC connectors
XLC-SM	Ruggedized LC fiber adapter, Singlemode, duplex

Note: Ruggedized LC fiber plug accepts 2 strand, round, breakout style fiber optic cable with O.D. ranges from 5 – 8mm (0.19 - 0.31 in.) with two 2.4 – 3.0mm (0.09 - 0.11 in.) jacketed sub-units.

Field-Installable LC Fibre Connector

Siemon LC buffered connectors have been qualified for use in Siemon's Ruggedized fiber system. Use these connectors to terminate 62.5/125 or 50/125 micron Multimode or Singlemode fiber and plug into the rear of the Ruggedized LC outlet.

Part #	Description
FC1-LC-MM-B80	LC simplex connector, Multimode, buffered fiber, beige boot
FC2-LC-MM-J80	LC duplex connector, Multimode, jacketed fiber, beige boot
FC1-LC-SM-B02	LC simplex connector, Singlemode, buffered fiber, white boot
FC2-LC-SM-J02	LC duplex connector, Singlemode, jacketed fiber, white boot

Ruggedized LC Fiber Kit

Use the Ruggedized LC Kit with Siemon's *LightSpeed*® Termination Kit for Ruggedized LC connector terminations. The kit contains a dual LC polishing puck, which decreases polish time by 50%.

Part #	Description
FTERM-XLC	Ruggedized LC fiber termination kit used in conjunction with FTERM-L2 includes dual polishing puck
FT-LC2PUCK	Dual LC polishing puck
FT-MSLC2HEAD	Dual LC microscope adapter

Technical Information

Enclosure Protection	IP66/IP67	**Temperature:** -40°C (-40°F) to 85°C (185°F) Service Environment Testing: IEC 61753-1 Ed. 1.0	**Plug/Outlet**
Shell Material	PBT - Polybutylene Terephthalate (Valox®), UL94V-0		**Plug/Outlet**
Collar Nut Material	Acetal, Acetal/Elastomer alloy (Delrin®)		**Plug/Outlet**
Gasket Material	Silicone		**Plug/Outlet**
Ferrule Material	Silicone		**Plug**
Adapter Sleeve Material	Ceramic		**Outlet**
Mechanical Durability	500 mating cycles minimum		**Plug/Outlet**
Chemical Resistance	Materials selected to provide the widest range of protection from most solvents and common industrial chemicals. (Details available upon request)		**Plug/Outlet**
Bulkhead Thickness	0.762mm to 3.175mm (0.030 in. to 0.125 in.)		**Outlet**
Strain Relief	250 Newtons (56 lbs) typical		**Plug**
Optical Performance	TIA-568-C.3, ISO/IEC 11801 ED 2.2, Telcordia GR-326-CORE		**Plug/Outlet**

Tools and Testers

Section Contents

STM-8

The STM-8 is an economical and versatile hand-held tester designed to test UTP and shielded cabling for opens, shorts, reversals, miswires, split pairs and cable length. Its rugged, state-of-the-art construction, easy-to-read LCD display and multiple remotes allow one person to quickly test and identify up to four different cable runs from one location.

Extended Battery Life — A low battery status indication is provided, as well as automatic shut-off

Long Length Testing — Test cable runs up to 900m (2952 ft.)

Easy Reference — Indications for 6- and 8-position jacks

Line Voltage Indicator — The presence of line voltage is indicated on the display to help prevent accidental damage to the unit

Universal Compatibility — The UTP modular cords are equipped with patented "universal" plugs, that fit into any standard 6- or 8-position modular jack

Multi-Location Testing — Additional remotes can be purchased separately

Tests All Wiring Configurations

Tests T568A, T568B, USOC, 10BASE-T, Token Ring, and TP-PMD wiring configurations.

Determines Unknown Wiring

In FIND mode, the STM-8 will detect and identify which wiring scheme is present in the cabling being tested.

Determines Cable Length

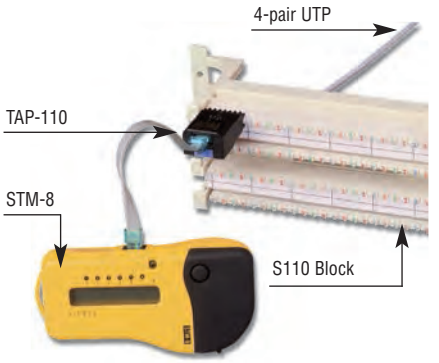
In the LENGTH mode, the STM-8 will determine the distance measurements on any given cable link up to 900m (2952 ft.). This feature may be used with all four identifiable remotes.

STM-8 and STM-8-S

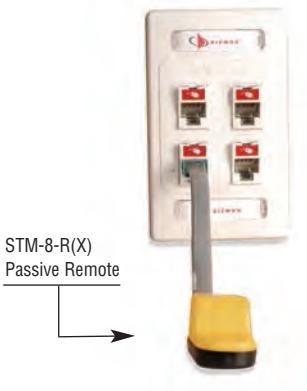
Part #	Description
STM-8	UTP tester. Includes carrying case, remote "A", two universal plug-ended modular cords, wiring guide, 9V alkaline battery, instructions, and warranty card
MC-8-005	Universal plug-ended modular replacement cord

Horizontal Cross-Connect

The S110® Test Adapter can be used to test horizontal cabling that is terminated on 110-type connecting blocks

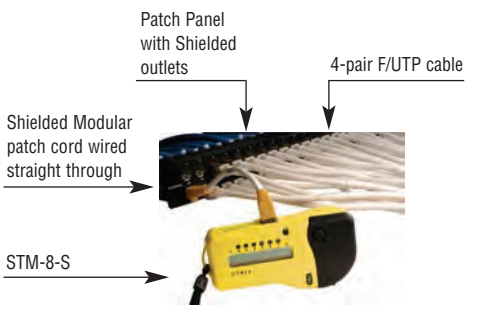


Work Area Outlet

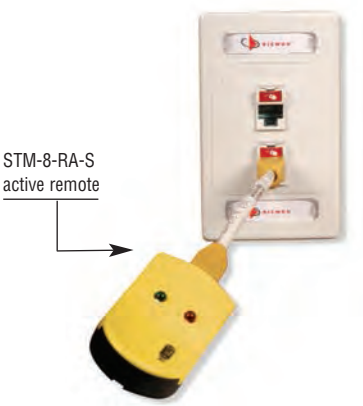


STM-8-S	Shielded twisted-pair tester. Includes carrying case, active remote, two screened modular cords, wiring guide, 9V alkaline battery, instructions, and warranty card
MC5-S-8-005	Shielded modular replacement cord

Horizontal Cross-Connect



Work Area Outlet



Accessories

Siemon's active remote utilizes a shielded jack for testing both UTP and shield continuity of F/UTP cabling. LEDs on remote indicate test results after each test cycle; solid green LED flash for pass and solid red LED flash for fail. Identifiable passive remotes are also available for testing multiple locations.

STM8-RA-S . . . . . .

Active remote for UTP or F/UTP with two shielded modular cords, instructions, 3V lithium battery, and warranty card

STM8-R(X). . . . . .

Additional identifiable UTP passive remotes
Use (X) to specify remote identity:
A = remote A,
3 = kit of remotes B, C, and D

MT-5000

The MT-5000 is a versatile, hand-held tester — it is fast, reliable, and durable. It tests opens, shorts, and miswires from 1- to 25-pairs and can accommodate a combination of 25-pair and modular jack terminations. For instance, using the 25-pair test adapter, the remote unit can be attached to a 66 block that is connected to multiple horizontal cable runs in the equipment closet. Then, using the modular jack in the master unit, one person can test up to six 4-pair station cables in the work area. Cable runs of up to 762m (2500 ft.) can be tested with accuracy.

The MT-5000 tests individual conductors, not pairs. This allows testing of all wiring configurations including USOC, T568A, and T568B.

The MT-5000 consists of a master and a remote unit. The master controls all of the test functions, so one person can perform testing. Test results are reported on a large, easy-to-read LCD display. Each unit has both male and female 25-pair connectors, one 6-position (1-, 2- or 3-pair) modular jack, and one 8-position (4-pair) keyed modular jack. The unit also features a low-battery status indicator, a power input jack, and a power saving auto-off switch. It comes in a padded, nylon carrying case with batteries included.

Part #	Description
MT-5000	Cable tester (master and remote) with case and two universal plug-ended modular cords
MC-8-005	Universal plug-ended modular replacement cord, 152 mm (6 in.)

25-Pair Test Adapters

Siemon 25-pair test adapters are designed for accessing all 25 pairs on a 66M connecting block. A positive connection ensures accurate testing with easy installation and removal. They can also be used to field-connectorise 66M blocks. Available with either male or female 25-pair connectors.

Part #	Description
TAP-50F	25-pair S66™ test adapter with female connector
TAP-50M	25-pair S66 test adapter with male connector

See page 9.23 for 25-pair cable assemblies.

TAP-50

MODAPT®

This modular adapter allows in-line testing for any plug/jack combination. It includes two 4-pair jacks plus a 152mm modular cord terminated with our patented 4-pair "universal" plug for accessing any standard 6 or 8-position jack. Individual conductors are broken out by pin number and correspond to eight separate test pads. Test equipment can be securely attached to the test pads using alligator clips. For quick reference in the field, USOC, T568A, and T568B wiring charts are printed right onto the MODAPT body. When used with Siemon's TESTAR® adapter and S110® test adapter, the MODAPT can be used to test connections on S66M and S110 blocks.

Part #	Description
MODAPT	Test adapter with one 152mm (6 in.) 4-pair universal plug-ended modular cord
MC-8-005	Universal plug-ended modular replacement cord, 152 mm (6 in.)

TESTAR®

The TESTAR creates easy test access to 66 quick clips. It plugs directly onto S66M blocks, establishing a positive connection and providing a 4-pair modular jack for plugging in test equipment. The body is molded in blue plastic and has molded-in finger grips for easy handling.

Part #	Description
TESTAR-8T-C5	Category 5e compatible, 4-pair, 8-position, TESTAR, T568A
TESTAR-8A-C5	Category 5e compatible, 4-pair, 8-position, TESTAR, T568B

Other TESTARs

The positive connection made by the TESTAR eliminates possible problems associated with handling alligator clips or test probes such as accidental shorting across terminals or intermittent test connections. Test equipment is inserted into the TESTAR through a 1-, 2-, 3-, or 4-pair modular jack. To utilize equipment requiring alligator clips, our MODAPT® adapter can be plugged into the TESTAR.

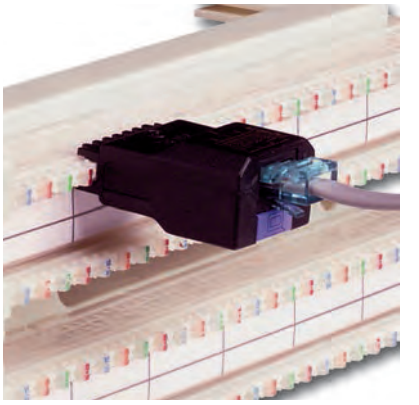
Part #	Description
TESTAR-2	1-pair, 6-position, TESTAR, USOC
TESTAR-4	2-pair, 6-position, TESTAR, USOC
TESTAR-6	3-pair, 6-position, TESTAR, USOC
TESTAR-8R1	4-pair, 8-position, TESTAR, USOC
TESTAR-8	4-pair, 8-position, TESTAR, T568B
TESTAR-8T	4-pair, 8-position, TESTAR, T568A

1-pair 2-pair 3-pair 4-pair

S110® Test Adapters

Siemon's 4-pair S110 test adapters provide a convenient way to test 110-type connecting blocks. These adapters plug directly onto any 110-type connecting block and provide a modular jack for connection to test equipment or patch cords. It is the only 110 style test adapter that can be attached to both terminated and unterminated 110 connecting blocks. The adapters are end-stackable, and are polarised to prevent incorrect insertion.

The adapters have an area for a colored icon (a blue and red icon are included) for additional identification. They are available in T568A and T568B wiring configurations and are category 5e compatible.



Part #	Description
TAP-110-T4	Category 5e compatible, 4-pair, 8-position, S110 test adapter, T568A
TAP-110-A4	Category 5e compatible, 4-pair, 8-position, S110 test adapter, T568B

4-pair

Technical Tip!
The adapters utilize a unique, spring-loaded contact design to ensure a reliable connection without disturbing existing cross-connect terminations. This also extends the life-cycle of the test adapter.

Termination Tools

Z-TOOL™

The Z-TOOL is an integral part of the exclusive Z-MAX® termination process and is used with both UTP and shielded Z-MAX modules. This easy-to-use and ergonomic designed tool is used both to secure the cable retention/grounding clip and to fully enage the termination module into the back of the outlet.

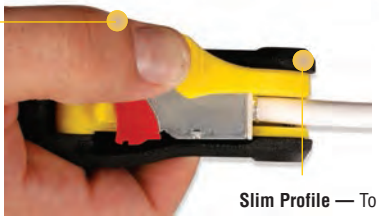
Alignment Aids — Keyed guide ensures correct outlet insertion during termination

Ergonomic — Minimal hand strain, limited pressure and zero-impact for comfortable repeatability

Attachment Point — For key ring or lanyard and rack-mount capability

One-Handed Activation — Allows final Z-MAX termination step to be accomplished with one hand for operation space-restricted areas

Retention Clip Locking — Additional function closes and locks hinged cable retention/grounding clip



Slim Profile — To fit in a pocket or toolbox

Ordering Information:

Part #	Description
Z-TOOL	Z-MAX Termination Tool

S110®/S210® Multi-Pair Termination Tools

The Siemon S110/S210 multi-pair termination tool is a versatile impact tool designed to terminate and cut UTP cable, and seat connecting blocks. The impact mechanism and termination blades have been designed to reliably terminate and cut UTP cable the first time, every time. The tool features an easy to hold, ergonomically designed handle that helps reduce fatigue when trimming wire or seating connecting blocks to the wiring base.

S788J4-210
4-pair S210 termination tool

S788J4B-210
4-pair S210 replacement cutting blade and insertion assembly

S788J4H-210
4-pair S210 replacement head for impact tool, including housing, cutting blade and insertion assembly

S788J4
4-pair S110 termination tool

S788J4B
4-pair S110 replacement cutting blade and insertion assembly

S788J4H
4-pair S110 replacement head for impact tool, including housing, cutting blade and insertion assembly

S788J5
5-pair S110 termination tool

S788J5B
5-pair S110 replacement cutting blade and insertion assembly

S788J5H
5-pair S110 replacement head for impact tool, including housing, cutting blade and insertion assembly

MAX® TurboTool™

Siemon's MAX TurboTool significantly reduces the time associated with the termination of category 5e and 6 UTP MAX outlets. In contrast to single conductor punchdown tools which require eight individual termination cycles for each outlet, the MAX TurboTool seats and cuts all 8 conductors with a single action.

Durable Construction — 13 gauge CRS ensures reliable operation through daily handling

Definitive Ratcheting Action — Provides positive audible and tactile feedback indicating that the termination process is complete

Established Platform — The tool shares the same proven core ratcheting platform as Siemon's PT-908 crimp tool which has been in the market for nearly 20 years

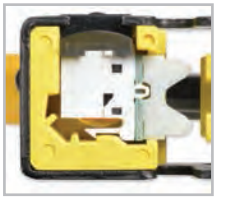
High Contrast Colors — Provide optimal visibility to prevent tool from inadvertently being left behind in low light areas

Replaceable Termination Cartridges — Allows the wearable part of the tool to be readily replaced

Retention Clip — Ensures outlets are fully seating prior to termination

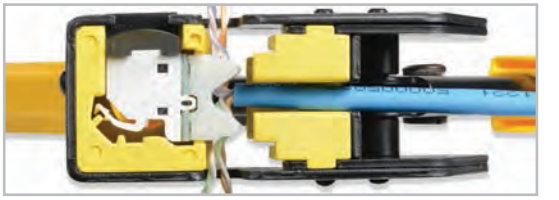
Flat

Angled



Keystone

The tool supports termination of all category 5e and 6 MAX outlets – flat, angled and keystone



The rear cable channel provides cable access for the full range of category 5e and 6 UTP cable sizes while the side slots provide clearance for laced twisted-pair conductors

Ordering Information:

Part #	Description
MAX-TT	MAX TurboTool

Part #	Description
MAX-TTREP	Replacement MAX TurboTool Cartridge Kit - Includes outlet nesting die, termination die, attachment hardware and Allen wrench

S814 Impact Tool

The S814 impact tool terminates wires on 66 and 110 clips. The tool is spring-loaded and fully adjustable; a helpful feature when working with wires of varying thicknesses. The bayonet-style mount allows the blades to be changed quickly and easily, and a compartment in the handle stores an extra blade.

Part #	Description
S814	Tool body only
S814-66	Tool body with 66 termination blade
S814-110	Tool body with 110 termination blade
S81401-66	66 termination blade
S81401-110-88	110 termination blade

Technical Tip!
Termination blades for Siemon punch down tools are reversible — one end terminates and cuts off the excess wire, the other end terminates without cutting.

Palm Guard

The Siemon palm guard has been ergonomically designed to provide a safe and convenient means of terminating our flat or angled CT® couplers and MAX® modules. The palm guard absorbs the impact of termination while securing the connector to prevent movement. Includes an adjustable elastic strap and a removable insert, which can be used to hold MAX modules while terminating on flat surfaces.

Part #	Description
PG	Palm guard with MAX insert
PG-MX6	MAX Insert

CI-KIT

The CI-KIT provides all the tools that a telecommunications technician needs for day-to-day activities. Included in the kit is an S814 impact tool with 66 and 110 termination blades, a probe pic, electrician's scissors, mini flathead screwdriver, and a CPT-WEB cable preparation tool. These tools are stored in a handy, lightweight clip-on pouch which allows the installer to cut, strip, and terminate cabling without having to carry separate tools or larger tool kits.

Part #	Description
CI-KIT	Clip-on tool kit with S814 impact tool (with 66 and 110 termination blades), probe pic, electrician's scissors, mini flathead screwdriver, and CPT-WEB tool
CI-POUCH	Clip-on CI-KIT tool pouch only

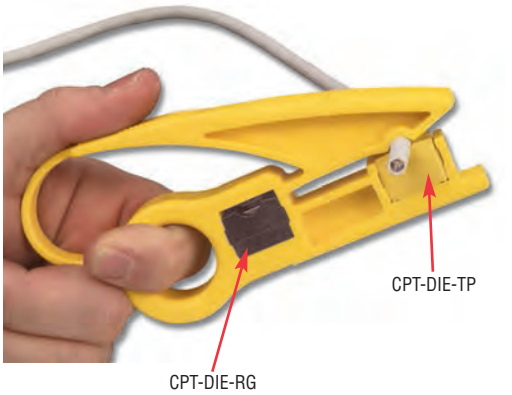
CI-KIT2

Siemon's CI-KIT2 includes all the components of the standard CI-KIT, with the addition of our popular AllPrep™ cable preparation tool in place of the CPT-WEB tool. Also, a "D-Ring" has been added to carry additional tools. These tools are stored in a handy, lightweight, clip-on pouch which allows the installer to cut, strip and terminate cabling without having to carry separate tools or larger tool kits.

Part #	Description
CI-KIT2	Clip-on tool kit with S814 impact tool (with 66 and 110 termination blades), probe pic, electrician's scissors, mini flathead screwdriver, and AllPrep cable preparation tool
CI-POUCH2	Clip-on CI-KIT2 tool pouch only

AllPrep™ Cable Preparation Tool

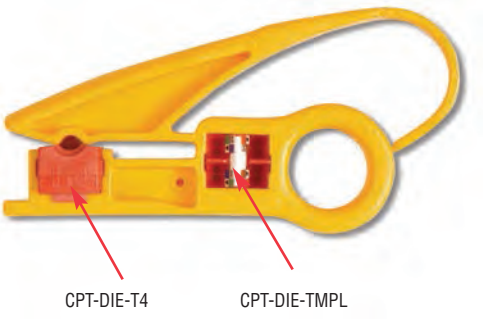
The AllPrep cable preparation tool provides a robust and reliable method of preparing both coaxial and twisted-pair cable for termination. The tool features two color-coded dies that are interchangeable for each media type. The coaxial die strips RG59 and RG6 coaxial cable and the twisted-pair die strips a wide variety of UTP, shielded and fiber cables.



Part #	Description
CPT-RGTP	AllPrep cable preparation tool for coax/twisted pair cables
CPT-DIE-RG	Replacement coax die (black)
CPT-DIE-TP	Replacement twisted-pair die (yellow)
CPT-DIE-6A	Green die
CPT-DIE-XX	White die
CPT-DIE-EZ	Blue die

TERA® Cable Preparation Tool

The TERA cable preparation tool significantly reduces the time required to prepare fully shielded (S/FTP) cable. The tool includes an insert die with a blade, which is specifically designed to accurately strip the jacket and foil from 4-pair fully shielded cable without damaging the conductors. A template is also included to pre-align cable pairs and ensure proper pair positioning during termination.



Part #	Description
CPT-T	TERA preparation tool. Includes CPT-DIE-T4 and TERA cable preparation template
CPT-DIE-T4	Replacement TERA cable die (red)
CPT-DIE-TMPL	Replacement TERA wiring guide (red)

CPT

The CPT provides a simple and effective method to remove the outer cable jacket from 2-, 3-, or 4-pair cables without damaging the inner conductor insulation. The CPT is recommended for use with any round cable with an exterior diameter from 2.54 – 6.35mm (0.1 - 0.25 in.) and an outer jacket thickness from 0.380 – 0.635mm (0.015 - 0.25 in.)

Part #	Description
CPT	Cable preparation tool

CPT-WEB

The CPT-WEB is designed to easily strip the outer cable jacket, flatten and separate the webbed conductors of Siemon's category 5e cross-connect jumper wire and other UTP cable with webbed conductor pairs.

Part #	Description
CPT-WEB	Webbed cable preparation tool

PT-908 Crimp Tool

This 3-in-1 ratchet-style crimp tool cuts, strips, and crimps modular plugs on either round or flat cables. The parallel action design maintains accurate alignment of the die with the plug for a precision crimp every time. The PT-908 comes with a padded carrying case which includes a storage compartment for carrying spare dies, replacement stripper blades, and modular plugs, and will attach to a technician's belt.

PT-908 . . . . . .

Crimp tool with built-in round cable cutter/stripper, 8-position die set and padded nylon carrying case

PT-908-D . . . . . .

Crimp tool with built-in round cable cutter/stripper, 8-position die set packaged in a clear plastic display case

PT-DIE-8 . . . . . .

Replacement 8-position die set

PT-DIE-6 . . . . . .

6-position die set

Technical Tip!

Siemon does not recommend field termination of modular cords. We recommend the use of factory-terminated and tested modular cords for any category 5e or higher application.

Glossary

Alien Crosstalk: Noise or interference caused by electromagnetic coupling from one cable to another cable, expressed in decibels.

Attenuation: See Insertion Loss.

Attenuation to Crosstalk Ratio (ACR): The difference between insertion loss and crosstalk measured in decibels.

Attenuation to Crosstalk Ratio, Far-end (ACR-F): Crosstalk measured at the opposite end from which the disturbing signal is transmitted, normalized by the insertion loss of the cable or cabling.

Backbone Cabling: Alternate name for Cabling Subsystem 2 or Cabling Subsystem 3 in a typical commercial building environment.

Balance: An indication of signal voltage equality and phase polarity on a conductor pair. Perfect balance occurs when the signals across a twisted-pair are equal in magnitude and opposite in phase with respect to ground.

Balanced Signal Transmission: Two voltages, equal and opposite in phase with respect to each other, across the conductors of a twisted-pair (commonly referred to as tip and ring).

Balun: An impedance matching transformer used to convert unbalanced signals to balanced signals and vice versa.

Bandwidth: A range of frequencies, usually the difference between the upper and lower limits of the range, typically expressed in megahertz (MHz). Bandwidth may also be used to describe the information-carrying capacity of a medium, for example optical fiber bandwidth is specified in megahertz kilometers (MHz.km).

Bonding: The permanent joining of metallic parts to form an electrically conductive path that will assure electrical continuity and the capacity to conduct safely any current likely to be imposed on it.

Bridged Tap: The multiple appearances of the same cable pair or optical fiber at several distribution points. Also known as parallel connections.

Bridging: A means of providing through connections between conductors or pairs that are terminated on connecting blocks. These through connections are commonly provided by means of individual metallic “bridging” clips or multiple “bridging” clips that are housed in a plastic insulator.

Building Distributor (BD): The international term for intermediate cross-connect; the location where the building backbone cable(s) terminates and at which connections to the campus backbone cable(s) may be made.

Bundled Cable: An assembly of two or more cables continuously bound together to form a single unit prior to installation (sometimes referred to as loomed, speed-wrap or whip cable constructions).

Cabling: A combination of cables, wire, cords and connecting hardware used in the telecommunications infrastructure.

Cabling Subsystem 1: Cabling from the equipment outlet to Distributor A, Distributor B, or Distributor C.

Cabling Subsystem 2: Cabling between Distributor A and either Distributor B or Distributor C (if Distributor B is not implemented).

Cabling Subsystem 3: Cabling between Distributor B and Distributor C.

Campus Backbone: Cabling between buildings that share telecommunications facilities.

Campus Distributor (CD): The international term for main cross-connect; the location where the campus backbone cabling begins.

Category:

1. ANSI/TIA/568-C family of Standards: These North American standards define mechanical and electrical performance of balanced twisted-pair cabling and components by a category of performance (i.e. category 3, category 5e, category 6, category 6A, and category 8).

2. ISO/IEC 11801 2nd edition and addenda: These international standards define mechanical and electrical performance of telecommunications cabling by a class of performance (class C, class D, class E, class EA, class F, and class FA) and components by a category or performance (i.e. category 3, category 5, category 6, category 6A, category 7, and category 7A).

Channel: The end-to-end transmission path connecting any two points between application specific equipment. Equipment and work area cords, with the exception of the modular interface connecting to equipment, are included in the channel.

Class: See category.

Common Mode Transmission: A transmission scheme where voltages appear equal in magnitude and phase across a conductor pair with respect to ground; may also be referred to as longitudinal mode.

Consolidation Point (CP): A connection facility within Cabling Subsystem 1 for interconnection of cables extending from building pathways to the equipment outlet.

Cord: An assembly of cord cable with a plug on one or both ends used to connect telecommunications equipment to horizontal or backbone cabling.

Cross-connect: A facility enabling the termination of cables as well as their interconnection or cross-connection with other cabling or equipment; also known as a distributor.

Cross-connection: A connection scheme between cabling runs, subsystems and equipment using patch cords or jumpers that attach to connecting hardware on each end.

Crosstalk: Noise or interference caused by electromagnetic coupling from one signal path to another. Crosstalk performance is generally expressed in decibels.

Data center: A building or portion of a building whose primary function is to house a computer room and its support areas.

Decibel (dB): A standard unit for expressing transmission gain or loss as derived from a ratio of signal voltages or power.

Delay Skew: The difference in propagation delay between the fastest and slowest pair in a cable or cabling system.

Demarcation Point (DP): A point where operational control or ownership changes.

Differential Mode Transmission: A transmission scheme where voltages appear equal in magnitude and opposite in phase across a twisted-pair with respect to ground; may also be referred to as balanced mode.

Distributor A: Optional connection facility that is cabled between the equipment outlet and Distributor B or Distributor C in a hierarchical star topology; representing the horizontal cross-connect (HC) in a typical commercial building environment.

Distributor B: Optional intermediate connection facility that is cabled to Distributor C in a hierarchical star topology; representing the intermediate cross-connect (IC) in a typical commercial building environment.

Distributor C: Central connection facility in a hierarchical star topology; representing the main cross-connect (MC) in a typical commercial building environment.

Electromagnetic Compatibility (EMC): The ability of a system to minimize radiated emissions and maximize immunity from external noise sources.

Electromagnetic Interference (EMI): The interference in signal transmission or reception caused by the radiation of electrical and magnetic fields.

Entrance Facility (EF): The location where both public and private network telecommunications services (e.g. cables, antennae, etc.) enters into a building and/or where backbone pathways linking to other buildings in a campus environment are located. The entrance facility may contain public network interface devices as well as telecommunications equipment. Entrance facilities are often used to house electrical protection equipment and connecting hardware for the transition between outdoor and indoor cable.

Entrance Point, Telecommunications: The point of emergence of telecommunications conductors through an exterior wall, a concrete floor slab, or from a rigid metal conduit or intermediate metal conduit.

Equipment Outlet (EO): Outermost connection facility in a hierarchical star topology; representing the telecommunications outlet/connector (TO) in a typical commercial building environment.

Equipment Room (ER): A centralized space for telecommunications equipment that serves the occupants of the building or multiple buildings in a campus environment. An equipment room is considered distinct from a telecommunications room because it is considered to be a building or campus serving (as opposed to floor serving) facility and because of the nature or complexity of the equipment that it contains.

Equipment Room, Telecommunications: A centralized space for telecommunications equipment that serves the occupants of the building. An equipment room is considered distinct from the telecommunications room because of the nature and complexity of the equipment it houses.

Ethernet: A family of copper and optical fiber communications technologies for local area networks (LANs).

Far-end Crosstalk (FEXT): Crosstalk measured at the opposite end from which the disturbing signal is transmitted.

Fiber Optic Transmission: See Optical Fiber Transmission.

Fibre Channel: A high-speed network communications technology (commonly running at 2, 4, 8, or 16 Gb/s speeds) that can be deployed over optical fiber or twisted-pair cabling and is primarily used for storage networking.

Floor Distributor (FD): The international term for horizontal cross-connect; the distributor used to connect between the horizontal cable and other cabling subsystems or equipment.

Fully Shielded twisted-pair (S/FTP): A balanced twisted-pair cable containing balanced twisted-pair conductors that are individually foil shielded, surrounded by an overall metallic braid, and bound in a single cable sheath.

Ground: A conducting connection, whether intentional or accidental, between an electrical circuit (telecommunications) or equipment and earth, or to some conducting body that serves in place of the earth.

Hertz (Hz): A measure of frequency as defined in units of cycles per second.

Horizontal Cabling: Alternate name for Cabling Subsystem 1 in a typical commercial building environment.

Horizontal Cross-connect (HC): A cross-connect of horizontal cabling to other cabling, e.g., horizontal, backbone, or equipment.

Hybrid Cable: An assembly of two or more cables, of the same or different types or categories, covered by one overall sheath.

InfiniBand: A switched network communications technology featuring point-to-point bidirectional serial links connecting I/O networks such as storage area networks (SAN) or processors with high-speed peripheral devices such as disks.

Insertion loss:

1. In a copper twisted-pair system, the voltage loss resulting from the insertion of a connector into a transmission line.

2. In an optical fiber system, the loss of optical power caused by inserting a component, such as a connector, coupler or splice, into a previously continuous optical path.

Insulation Displacement Connection (IDC): A wire connection device that penetrates the insulation of a copper wire when it is being inserted (punched-down) into a metal contact, allowing an electrical connection to be made.

Interbuilding Backbone: Telecommunications cable(s) that is part of the campus subsystem that connects one building to another.

Interconnection: A connection scheme that provides direct access to the cabling infrastructure and the ability to make cabling system changes using equipment cords.

Intermediate Cross-Connect (IC): The connection point between a backbone cable that extends from the main cross-connect (first-level backbone) and the backbone cable from the horizontal cross-connect (second-level backbone).

Intrabuilding Backbone: Telecommunications cable(s) that are part of the building /subsystem that connect one equipment room to another.

Jumper: An assembly of twisted-pairs without connectors on either end used to join telecommunications links at a cross-connect.

Laser Optimized: A multimode optical fiber with a refractive index profile optimized for use with laser light sources such as a vertical-cavity surface-emitting laser, or VCSEL.

Link: An end-to-end transmission path provided by the cabling infrastructure. Cabling links include all cables and connecting hardware that comprise the horizontal or backbone subsystems. Equipment and work area cables are not included as part of a link.

Local Area Network (LAN): A geographically limited data communications system for a specific user group consisting of a group of interconnected computers, sharing applications, data, and peripheral devices such as printers and CD-ROM drives intended for the local transport of data, BAS services, video, and voice.

Longitudinal Conversion Loss (LCL): A measure (in dB) of the differential voltage induced on a conductor pair as a result of subjecting that pair to longitudinal voltage. LCL is a measure of circuit balance.

Main Cross-connect (MC): A cross-connect for first level backbone cables, entrance cables, and equipment cables.

Modular Jack: A telecommunications outlet/connector for wire or cords as defined in the FCC Part 68 Subpart F. Modular jacks can have 4, 6 or 8 contact positions, but not all the positions need be equipped with contacts.

Modular Plug: A telecommunications connector for wire or cords as defined in the FCC Part 68 Subpart F. Modular plugs can have 4, 6 or 8 contact positions, but not all the positions need be equipped with contacts.

Multimode Optical Fiber: An optical fiber that will allow multiple modes of light to propagate. The fiber may be either a graded-index or step-index fiber. Multimode optical fibers have a much larger core than singlemode fibers.

Multi-user Telecommunications Outlet Assembly (MuTOA): A grouping in one location of several telecommunications/outlet connectors.

Nanosecond (ns): One billionth of a second (10-9 seconds).

Near-end Crosstalk (NEXT Loss): The undesired coupling of a signal from one pair of wires to another. Signal distortion as a result of signal coupling from one pair to another at various frequencies.

Network Demarcation Point: The point of interconnection between the local exchange carrier's telecommunication facilities and the telecommunications systems wiring and equipment the end user's facility. This point shall be located on the subscriber side of the telephone company's protector or the equivalent thereof in cases where a protector is not required.

Open Office Cabling: The cabling that distributes from the telecommunications closet to the open office area utilizing a consolidation point or multi-user telecommunications outlet assembly.

Optical Fiber Transmission: A communications scheme whereby electrical data is converted to light energy and transmitted through optical fibers.

Outlet/Connector, Telecommunications: A connecting device in the work area on which horizontal cable terminates.

Patch Cord: A length of cable with connectors on one or both ends used to join telecommunications links at a cross-connect.

Patch Panel: Connecting hardware that typically provides means to connect horizontal or backbone cables to an arrangement of fixed connectors that may be accessed using patch cords or equipment cords to form cross-connections or interconnections.

Pathway: A facility (i.e. conduit) for the placement and protection of telecommunications cables. Same as raceway or ducting.

Plenum: A compartment or chamber to which one or more air ducts are connected and that forms part of the air distribution system.

Private Branch Exchange (PBX): A private switching system usually serving an organization, such as a business, located on the customer's premises. It switches calls both inside a building or premises and outside to the telephone network, and can sometimes provide access to a computer from a data terminal.

Propagation Delay: The amount of time that passes between when a signal is transmitted and when it is received at the opposite end of a cable or cabling.

Punch Down: A method for securing wire to a quick clip in which the insulated wire is placed in the terminal groove and pushed down with a special tool. As the wire is seated, the terminal displaces the wire insulation to make an electrical connection. The punch down operation may also trim the wire as it terminates.

Return Loss: Noise or interference caused by impedance discontinuities along the transmission line at various frequencies; may be called echo. Return loss is expressed in decibels.

Shielded twisted-pair (F/UTP): A balanced twisted-pair cable surrounded by foil (screen) and bound in a single cable sheath.

Shielded twisted-pair (F/FTP): A balanced twisted-pair cable where each twisted pair is surrounded by an individual foil, and all four pairs are surrounded by an overall foil (screen), bound in a single cable sheath.

Singlemode Optical Fiber: An optical fiber that will allow only one mode of light to propagate; this fiber is typically a step-index fiber.

Small Form Factor: An optical fiber connector and adapter that provide for two strands of fiber in a footprint similar to an unshielded twisted-pair (RJ-style) plug and socket.

Star Topology:

1. A method of cabling each telecommunications outlet/connector directly to a cross-connect in a horizontal cabling subsystem.

2. A method of cabling each cross-connect (HC and IC) to the main cross-connect (MC) in a backbone cabling subsystem.

Surge: A rapid rise in current or voltage, usually followed by a fall back to a normal level; also referred to as a transient.

Telecommunications: Any transmission, emission or reception of signs, signals, writings, images, sounds or information of any nature by cable, radio, visual, optical or other electromagnetic systems.

Telecommunications Room (TR): An enclosed space for housing telecommunications equipment, cable terminations, and cross-connect cabling used to serve work areas located on the same floor.
The telecommunications room is the typical location of the horizontal cross-connect and is considered distinct from an equipment room because it is considered to be a floor serving (as opposed to building or campus serving) facility.

Topology: The physical or logical layout of links and nodes in a network. These include star, ring, and bus configurations.

Transfer Impedance: A measure (in milliohms/meter) of shield effectiveness.

Trunk: A communication line between two switching systems. The term "switching systems" typically includes equipment in a central office (the telephone company) and PBXs. A tie trunk connects PBXs. Central office trunks connect a PBX to the switching system at the central office.

Unshielded Twisted-Pair (UTP): A balanced twisted-pair cable bound in a single cable sheath.

Work Area: A space, typically in a commercial building, where the occupants interact with telecommunications equipment.

Work Area Cord: See Cord.

Acronyms & Abbreviations

ACR	Attenuation-to-crosstalk ratio
ANSI	American National Standards Institute
AWG	American wire gauge
BAS	Building Automation System
BD	Building distributor
BER	Bit Error Rate
CD	Campus distributor
CP	Consolidation point
CSA	Canadian Standards Association
dB	Decibel
DA	Distributor A
DB	Distributor B
DC	Distributor C
EF	Entrance facility
EMC	Electromagnetic compatibility
EMI	Electromagnetic interference
EO	Equipment Outlet
ER	Equipment room
FCC	Federal Communications Commission
FD	Floor distributor
ft.	Feet
FEXT	Far-end crosstalk
F/UTP	Shielded or screened twisted-pair
Gb/s	Gigabit per second
GHz	Gigahertz
HC	Horizontal cross-connect
HDA	Horizontal Distribution Area (same as Zone Distributor in ISO)
HVAC	Heating, ventilation and air conditioning
IC	Intermediate cross-connect
IDA	Intermediate Distribution Area
IDC	Insulation displacement connection
IEC	International Electrotechnical Commission
IEEE®	Institute of Electrical and Electronic Engineers®
ISO	International Standards Organisation
Kb/s	Kilobit per second
Km	Kilometer
LAN	Local area network
lbf	Pounds force
LED	Light emitting diode
m	Meter
µm	Micron; one millionth of a metre (0.000001); also micrometer
Mb/s	Megabits per second
MC	Main cross-connect
MDA	Main Distribution Area (same as Main Distribution in ISO)
MPO	Multi-fiber push on
MTP®	Registered trademark of US Connec MPO-Style Connector
MHz	Megahertz
MHz.km	Megahertz kilometer
mm	Millimeter
MuTOA	Multi-user Telecommunications Outlet Assembly
NAS	Network Attached Storage
NEXT	Near-end crosstalk
nm	Nanometer
POE	Power over Ethernet
PBX	Private branch exchange
PDU	Power Distribution Unit
RF	Radio frequency
RMS	Rack mount space
SAN	Storage Area Network
SC	Subscriber connector
S/FTP	Fully shielded twisted-pair
TIA	Telecommunications Industry Association
TO	Telecommunications outlet/connector
UL®	Underwriters Laboratories Inc.®
UPS	Uninterruptible power supply
USOC	Universal Service Order Code
UTP	Unshielded twisted-pair
Vrms	Volts root mean square
WA	Work area
ZDA	Zone Distribution Area (same as Local Distribution Point in ISO)

Warranty

Siemon delivers a range of product and system warranties:

- **A one (1) year repair or replace warranty on Tools and Testers and active electronics (ie MapIT G2)**
- **A five (5) year repair or replace warranty for all Siemon Products (cabling system connecting hardware) when not installed in a certified Siemon Cabling System®**
- **An extended Siemon Cabling System Warranty covering application assurance, product, quality and performance margins when designed and installed by a Siemon Certified Installer℠ and registered with Siemon.**

*Please contact your local Siemon Company sales office or visit Siemon's website for more information.

Limited Five (5) Year Product Warranty

Siemon warrants its products to be free from defects in material and workmanship. Should any product fail to conform, Siemon will, upon written notice from Distributor of such non-conforming product, within five (5) years after date of purchase, either replace it F.O.B. original point-of-delivery, or refund the purchase price, at Siemon's option, and shall have the right to require Distributor to return the defective product to Siemon's plant unless such return is impracticable. The remedies provided herein shall be Buyer's sole and exclusive remedies, and no statement or recommendation not contained herein shall have any force or effect unless in writing and signed by an authorized officer of Siemon. Siemon makes no warranty, expressed or implied, as to merchantability or fitness for a particular purpose of any product sold. In no event will Siemon be liable for any special incidental, or consequential damages, where asserted in contract, tort, or otherwise. This warranty applies only to those cabling products that are used to terminate or cross-connect telecommunications cabling. Warranty terms for other categories of cabling products (e.g., tools, test equipment, protection apparatus, etc.) may vary.

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WEB RESOURCES

Contractor Resource Center

Online resource dedicated to the needs of cabling contractors, focused on the products, tools and news you can use every day to be more efficient and successful.

Link: http://www.siemon.com/us/contractors/

Standards Informant

Your guide to the latest activities and advancements in critical network cabling and data center standards. Created and maintained by the experts that lead the standards-setting bodies.

Link: http://blog.siemon.com/standards/

Network Infrastructure Blog

Data center and enterprise cabling experts from across the global IT market deliver educational resources, industry intelligence and actionable advice on a wide range of network infrastructure issues.

Link: http://blog.siemon.com/infrastructure/

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