Category 6 UTP

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

- **Pair Siemon System 6® UTP cable with Siemon connectivity Category 6 for an end-to-end System 6 UTP cabling solution. System 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 ISO/IEC and TIA**
- **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 System 6 is not required**

Section Contents

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.

Compliant — Is compliant with UL2043 and is appropriate for use in air handling spaces

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 colour-coding provides wiring verification before and after lacing

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

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

Robust Hinged Cable Retention — Hinged clip accommodates multiple cable diameters

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

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

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	**06 =** Blue
02 = White	**07 =** Green
03 = Red	**09 =** Orange
04 = Grey	**20 =** Ivory
05 = Yellow	**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 3rd party 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 colour options available.

Front **Rear**

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

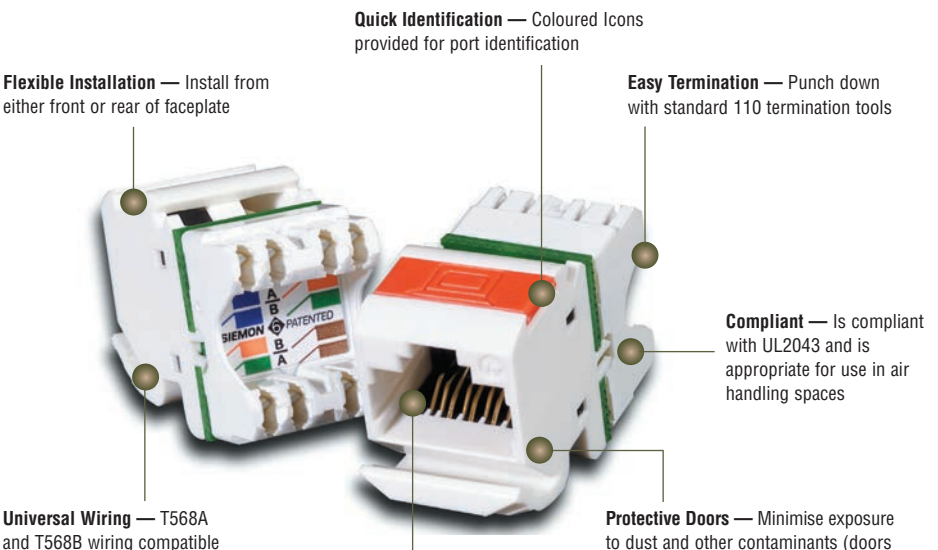
1 - Red Voice
1 - Blue Voice
1 - Bezel Colour-Matching Voice
1 - Bezel Colour-Matching Blank

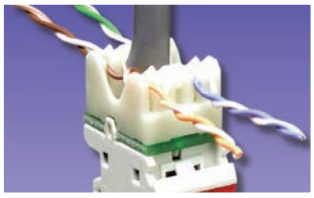
Contact Integrity — Featuring Siemon's patented crowned jack contact geometry that improves electrical and mechanical performance and ensures that any jack or plug contact damage due to arcing caused by unmating under PoE load occurs well away from the final mated contact position.

MAX® 6 UTP Modules

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

Compact design is ideal for high density applications. Up to six modules can be utilised in a single gang faceplate and twelve outlets in a double gang faceplate. Also, the angled MAX module 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.

Ultra Fast Termination

MAX 6 UTP outlets can be terminated using Siemon's MAX TurboTool™, in as little as 18 seconds.

Contact Integrity

Featuring Siemon's patented crowned jack contact geometry that improves electrical and mechanical performance and ensures that any jack or plug contact damage due to arcing caused by unmating under PoE load occurs well away from the final mated contact position.

MAX 6 UTP Outlets

MX6-(XX). . . . . .

Category 6 angled MAX outlet, T568A/B, rear strain relief cap and protective colour-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 colour: 01 = Black, 02 = White, 03 = Red, 04 = Grey, 05 = Yellow, 06 = Blue, 07 = Green, 09 = Orange, 20 = Ivory, 25 = Bright White, 80 = Light Ivory

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

Flat outlets include one colour-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).

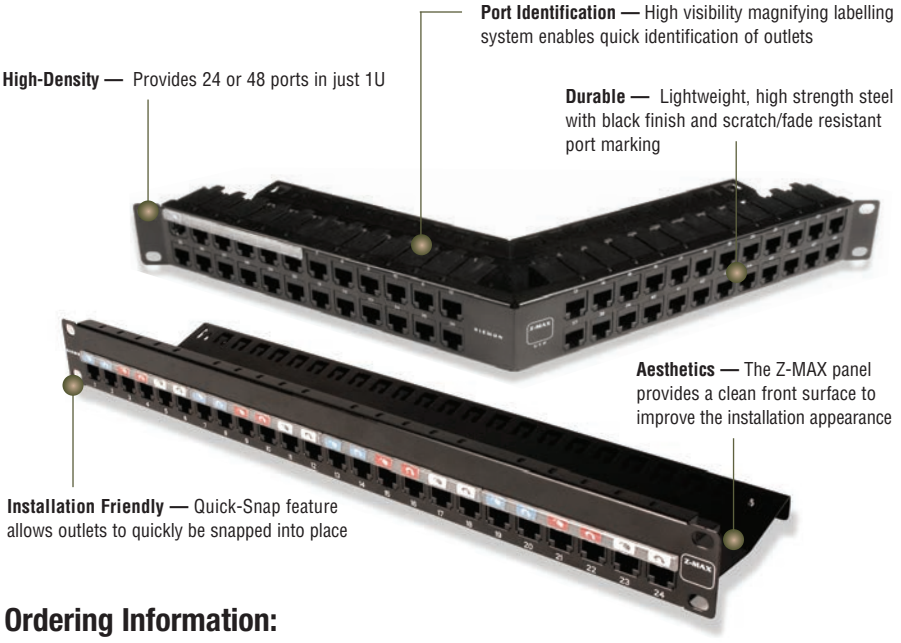
Add "VP" to end of part number for value pack option. Value pack is a kit of 250 outlets, doors, terms caps and colour match icons. (Available in flat/ angled only. Door only included with angled version.)

Note: Keystone version is designed for integration with various 3rd party mounting products and is not compatible with MAX® mounting hardware.

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

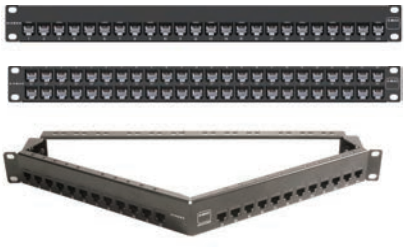
Ideal for Trunking Applications
Combine Z-MAX trunk assemblies (with panel outlets) and empty Z-MAX panels for rapid data centre deployment

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, 1U, black with outlets
Z6-PNL(X)-U48K	Z-MAX 48-port, Category 6 UTP patch panel, 1U, black, with outlets
Z-PNL(X)-24E	Z-MAX 24-port UTP patch panel, 1U, black, empty
Z-PNL(X)-U48E	Z-MAX 48-port UTP patch panel, 1U, 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, 1U, black, with outlets
Z6-P(X)-48	Z-MAX 48-port, Category 6 UTP patch panel with removable wire manager kit, 1U, black, with outlets
Z-P(X)-24	Z-MAX 24-port UTP patch panel with removable wire manager, 1U, black, empty
Z-P(X)-48	Z-MAX 48-port UTP patch panel with removable wire manager, 1U, 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.*
** included in kit only*
Note: 1U = 44.5mm (1.75 in.)

Panel Accessories:

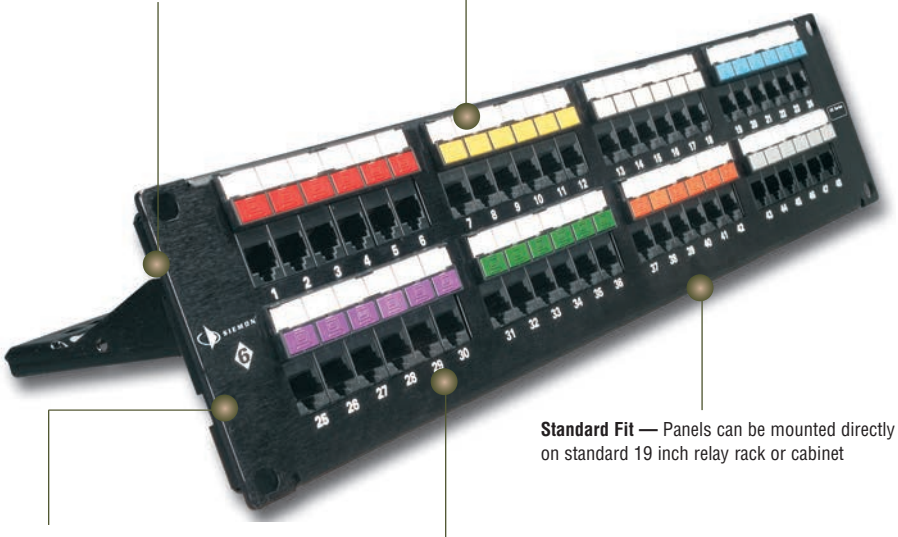
Part #	Description
Z-PNL-PL24	Patch panel label sheet, numbered 1 to 24, bag of 100
Z-PNL-PL48	Patch panel label sheet, numbered 25 to 48, bag of 100
Z-PNL-PS	Patch panel label holder, (6 port ea.) bag of 25
Z6-P	Z-MAX 6 UTP panel outlet
Z-BL-01	Z-MAX panel blank, bag of 10, black

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

Z-BL-01

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, labelling, and cable management features with Siemon's popular Category 6 patch panel.



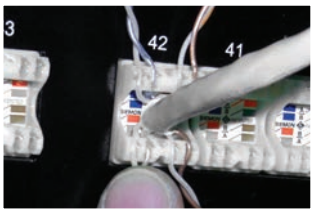
Universal Wiring — HD 6 patch panels feature universal wiring for both T568A/B compatible with standard 110 style single position punch tool.

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



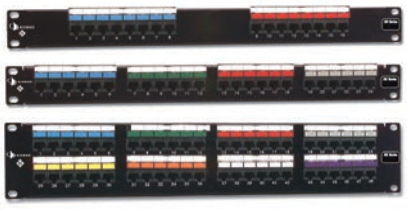
Pyramid™ Wire Entry System
Pyramid wire entry system on S310 blocks separates paired conductors when lacing cables to reduce installation time.

Circuit Protection
Rear metal enclosure protects printed circuitry.

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

HD6 UTP Patch Panels

Part #	Description
HD6-16	16-Port Category 6 UTP HD patch panel, 1U, black
HD6-24	24-Port Category 6 UTP HD patch panel, 1U, black
HD6-48	48-Port Category 6 UTP HD patch panel, 2U, black
HD6-96	96-Port Category 6 UTP HD patch panel, 4U, black



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

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

HD6 Angled Patch Panels

Part #	Description
HD6-24A	24-Port angled Category 6 UTP HD patch panel, 1U, black
HD6-48A	48-Port angled Category 6 UTP HD patch panel, 2U, black
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: 1U = 44.5mm (1.75 in.)

HD Panel Accessories

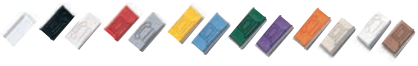
Part #	Description
HD-RWM	Rear cable management bracket for HD patch panels (not compatible with HD5-S-24)
HD5-ICON6-LBL	10 Sheets of labels for HD5-ICON6 for laser printing (48 labels per sheet)*
HD5-LBL-480	Adhesive strips for sequentially numbering panel ports 1 through 480 for 24-, 48-, or 96-port 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 colour-coding and port designation for 24-, 48-, or 96-port panels (icons not included)
CT-ICON-(XX)	25 Coloured 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 colour: 00 = clear (TAB-XX only), 01 = Black, 02 = White, 03 = Red, 04 = Grey, 05 = Yellow, 06 = Blue, 07 = Green, 08 = Violet, 09 = Orange, 20 = Ivory, 25 = Bright White, 60 = Brown, 80 = Light Ivory

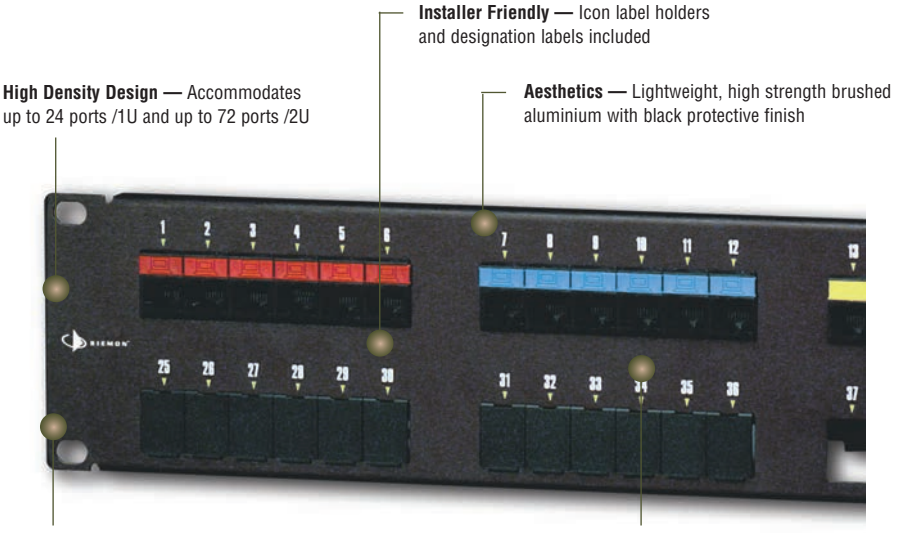
Add "B" for bulk pack of 100 icons.

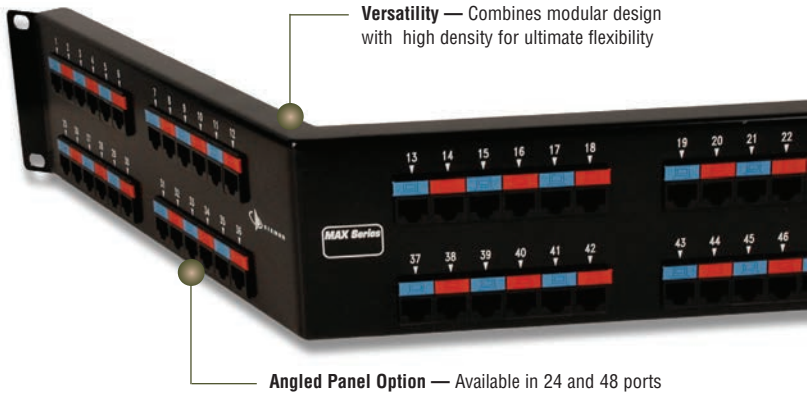
*Visit our web site or contact our Technical Support Department for labelling software.

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.

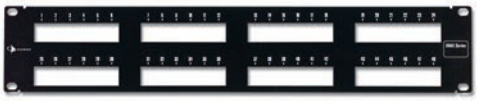
Eliminates Horizontal Cable Managers
Angled panels route patch cords directly into vertical cable managers saving valuable rack space.

MAX® Patch Panels

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

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

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



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

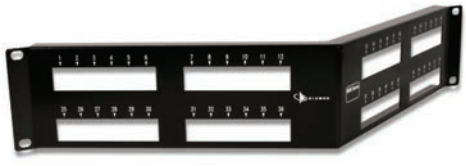
Panels include rear cable manager, designation labels, cable ties, and mounting hardware.
MAX Panels are not compatible with shielded MAX or shielded Z-MAX® modules. Use the TERA-MAX® or Z-MAX shielded panel.
Note: 1U= 44.5mm (1.75 in.)

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, black

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



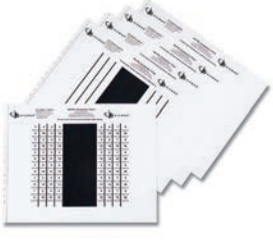
Part #	Description
PNLA-CVR-01	Angled panel cover, black

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.)

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

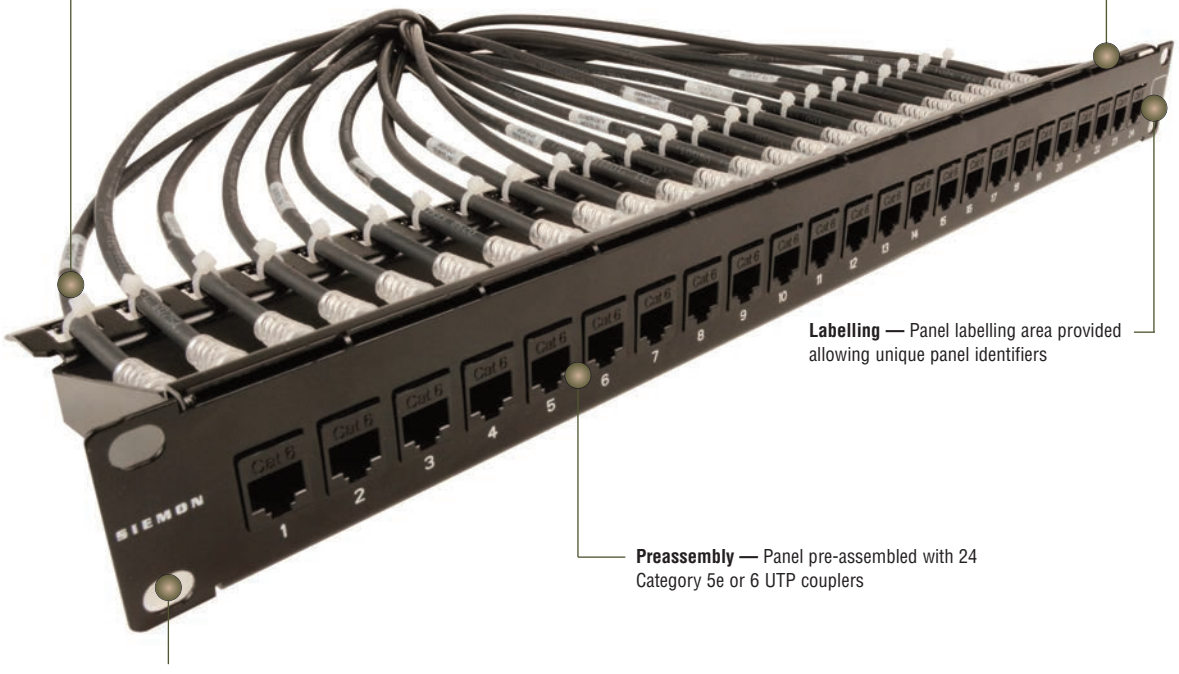
*Visit our web site or contact our Technical Support Department for labelling software.

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

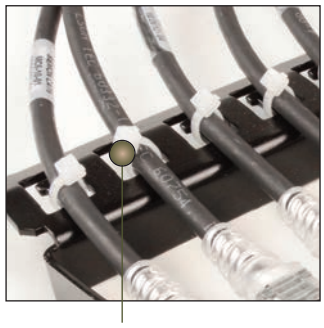


Labelling — Panel labelling area provided allowing unique panel identifiers

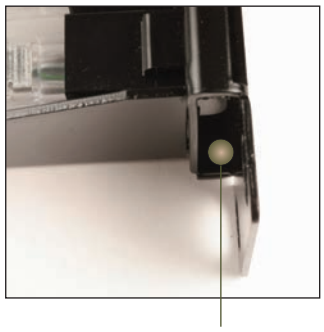
Preassembly — Panel pre-assembled with 24 Category 5e or 6 UTP couplers

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	EIA/ECA-310-E
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
Colour	Black

Ordering Information:

Part # **Description**

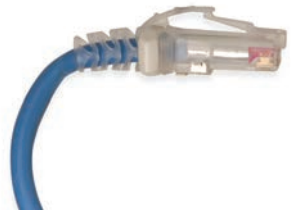
MX-K-C5-IL-24 . . . . . In-line coupler panel, Category 5e UTP, 1U, black

MX-K-C6-IL-24 . . . . . In-line coupler panel, Category 6 UTP, 1U, black

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

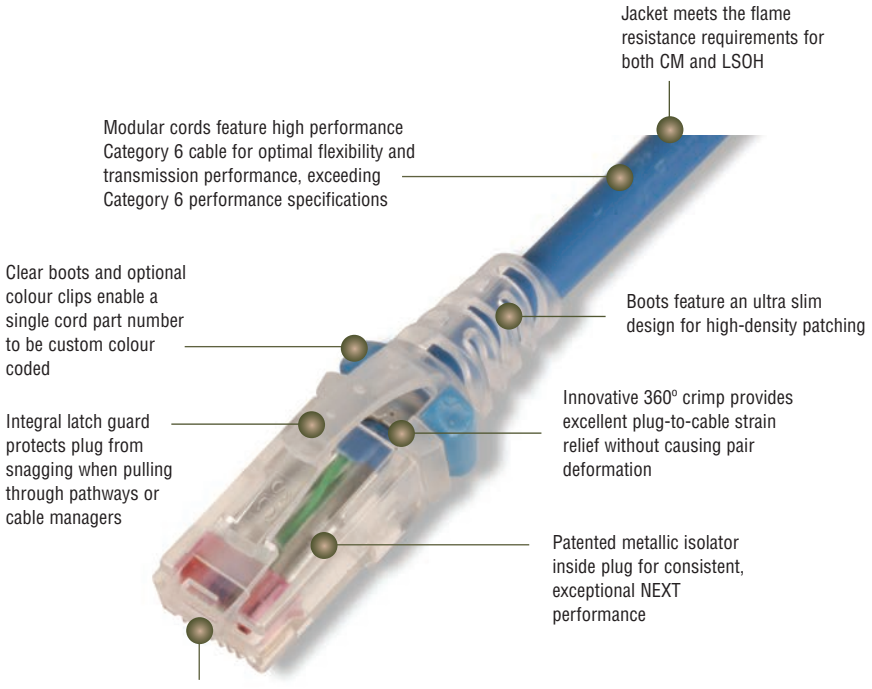
MC® 6 UTP Modular Cords

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.



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

Colour Coding
Optional coloured clips enable field colour coding and can easily be snapped into place without having to disconnect cords.



STANDARDS COMPLIANCE
- ISO/IEC 11801 Ed 2.2 (Class E_A)
- IEC 60603-7
- ANSI/TIA-568-C.2 (Category 6)
- TIA-968-A (formerly FCC Part 68 Subpart F)
- IEEE 802.3af (PoE)
- IEEE 802.3at (PoE+)
- UL US Listed

MC 6 UTP Modular Cords

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

MC6-(XX)M-(XX)

Cord Length
- **01** = 1m (3.3 ft.)
- **1.5** = 1.5m (5.0 ft.)
- **02** = 2m (6.6 ft.)
- **03** = 3m (9.8 ft.)
- **05** = 5m (16.4 ft.)
- **7.5** = 7.5m (24.6 ft.)

Cord Colour
- **01** = Black
- **02** = White
- **03** = Red
- **04** = Grey
- **05** = Yellow
- **06** = Blue
- **07** = Green
- **08** = Violet
- **09** = Orange

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

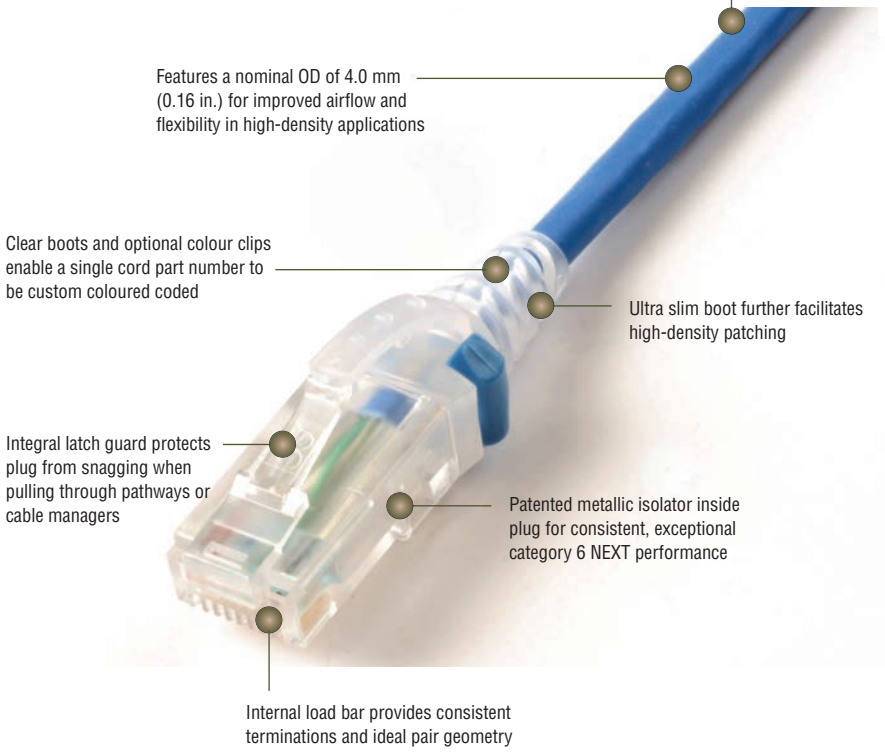
Clip Colour

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

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

SkinnyPatch™ 6 UTP Modular Cords – International

Siemon's SkinnyPatch 6 Modular Cords deliver Category 6 performance with a reduced cable diameter for improved airflow and increased flexibility in high-density patching areas. The cord's smaller 28 AWG stranded copper construction offers a significantly tighter bend radius for easier cable routing and enhanced cable management, providing pathway space savings in racks and cabinets while facilitating moves, adds and changes in tight spaces. Confirmed by Intertek, an independent third party test lab, SkinnyPatch 6 Modular Cords exceed ISO/IEC 11801 Edition 2.2 and ANSI/TIA-568-C.2 Category 6/Class E performance standards. These cords also feature Siemon's patented metallic isolator for exceptional NEXT performance and innovative 360-degree crimp for excellent plug-to-cable strain relief.



Colour Coding

Optional coloured clips enable field colour coding and can be easily snapped into place without having to disconnect cords

Excellent Bend Relief

Boot and integrated strain relief ensures minimum bend radius for category 6 performance

Diameter

Smaller diameter cable significantly reduces bundle and pathway fill for space savings.

Improved Airflow

Offers improved airflow, accessibility and cable management in high-density applications.

PERFORMANCE SPECIFICATIONS •

- ISO/IEC 11801 Ed 2.2 (Class E)*
- IEEE 802.3 PoE Type 1, Type 2**
- ANSI/TIA-568-C.2* (Category 6)
- TIA 968-A
- ANSI/TIA-1096-A
- UPoE**
- Power over HDBASE-T (PoH) **
- IEC 60603-7
- cUL US Listed
- IEC 60332-1, 60754, 61034

*Patch cord length is limited to 8 metres for a maximum channel length of 98 metres.

** See table for recommended maximum bundle size

Product Information

PERFORMANCE SPECIFICATIONS*

ELECTRICAL	
Contact Resistance	20 mΩ
Input to Output DC Resistance	200 mΩ
Min. Dielectric Withstand Voltage (contact to contact)	1000 V DC or AC peak
Insulation Resistance	500 mΩ
Compatibility	Category 6 and 5e
Current Rating @ 25°C (77°F)	1.5 A
Remote Powering	PoE Type 1, Type 2, UPoE, PoH
Attenuation De-rating Factor	1.9
MECHANICAL — GENERAL	
Operating Temperature	-10 to 60 °C, (14 to 140 °F)
Flammability Rating	UL 94 - V0
Green Features	RoHS, lead-free, halogen-free, PVC free
Contact Materials	Copper alloy with contact plating of 50 microinches gold or equivalent
Plastic Materials	Flame retardant thermoplastic
Marking	P/N, length, performance level

MECHANICAL — PLUG	
Number of Plug Insertion Cycles	750
Min. Plug Retention Force	50N (11.24 lbf)
Plug Compatibility	Compatible with RJ45 outlets
MECHANICAL — CABLE	
Wire Size (Nominal)	28 AWG 7x36 Stranded bare copper
Construction	UTP
Cable O.D. (Nominal)	4.0mm (0.16 in.)
Wiring	T568A/B as specified by part #
Jacket Type	CM/LSOH
Bend Radius	16mm (0.64 in.)

MAXIMUM RECOMMENDED BUNDLE SIZE		
Application	Current per Pair (mA)	28 AWG Patch Cords
PoE Type 1	350	48
PoE Plus Type 2	600	48
UPoE	600	24
PoH	1000	24

Ordering Information:

MC6-(XX)M-(YY)-28. . . . . SkinnyPatch Category 6 double-ended, 4-pair, 28 AWG UTP stranded modular patch cord, T568A/B, clear boot.

Length

01 = 1m (3.3 ft.)
1.5 = 1.5m (5.0 ft.)
02 = 2m (6.6 ft.)
03 = 3m (9.8 ft.)
05 = 5m (16.4 ft.)
7.5 = 7.5m (24.6 ft.)

Jacket Colour

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

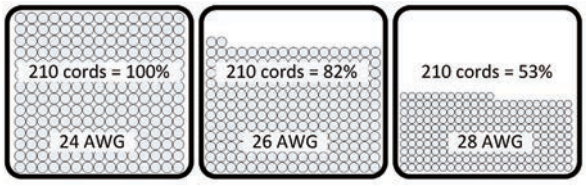
Add "B" to end of part number for bulk project pack of 100 cords.

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

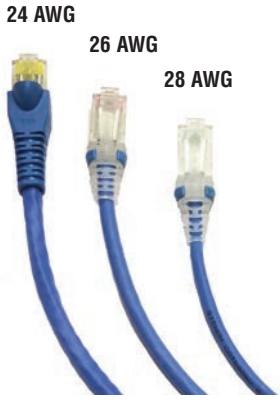
Clip Colour

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

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



Fill Comparision: Category 6 Cords in a 101mm cable manager

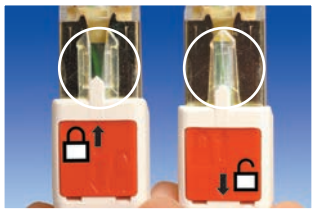


Construction
Smaller 28 AWG construction results in a smaller bend radius for easier routing in tight spaces.

BladePatch® 6 UTP Modular Cords

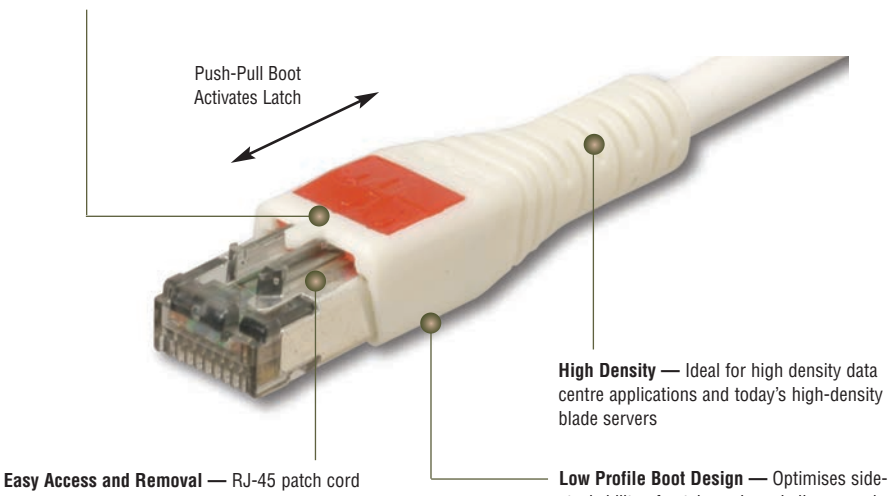
Siemon's BladePatch 6 offers a unique Category 6 solution for high-density patching environments. It features an innovative push-pull boot design to control the latch, enabling easy access and removal of the cord in tight-fitting areas. The BladePatch cord is ideal for patching blade servers, patch panels,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



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

High Density — Ideal for high density data centre 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

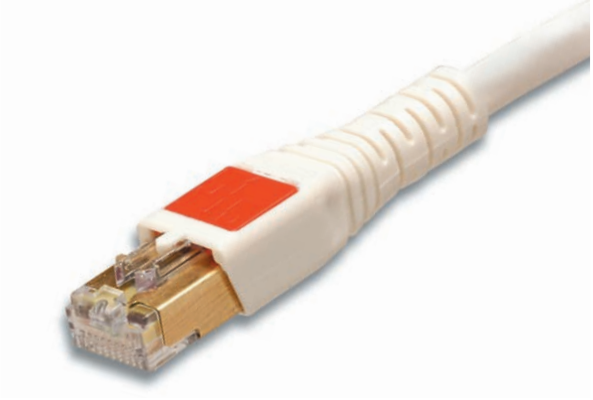
Low Profile Boot Design — Optimises side-stackability of patch cords and allows use in even the most dense equipment

BladePatch 6 UTP

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

BP6-(XX)-(XX)

Cord Length	Cord Colour
01 = 1m (3.3 ft.)	**01** = Black
1.5 = 1.5m (5.0 ft.)	**02** = White
02 = 2m (6.6 ft.)	**03** = Red
03 = 3m (9.8 ft.)	**04** = Grey
05 = 5m (16.4 ft.)	**05** = Yellow
7.5 = 7.5m (24.6 ft.)	**06** = Blue
	07 = Green
	08 = Violet
	09 = Orange



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

IC 6 UTP Solid Modular Cords

Siemon's Category 6 IC solid single-ended and double-ended modular cords are designed for use in Category 6 applications where one end is plugged into a patch panel in a consolidation point (CP) and the other end is terminated to the back of a work area outlet or in a cross connect where one end is terminated to the back of a patch panel and the other end is plugged into equipment. 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.

System 6® IC Modular Cords

Part #	Description
IC6-8A-(XX)M-B(XX)L	System 6 IC, single-ended, 4-pair UTP 23 AWG solid, modular cord, violet jacket with coloured boot T568B, LSOH
IC6-8T-(XX)M-B(XX)L	System 6 IC, single-ended, 4-pair UTP 23 AWG solid, modular cord, violet jacket with coloured boot, T568A, LSOH

Use 1st (XX) to specify cord length: 03 = 03m ((9.8 ft.), 05 = 05m (16.4 ft.), 10 = 10m (32.8 ft.), 15 = 15m (49.2 ft.), 20 = 20m (65.6 ft.)

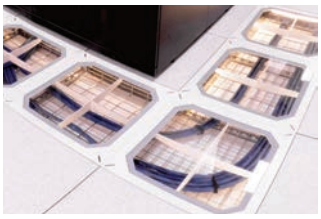
Use 2nd (XX) to specify colour of boot: 01 = Black, 02 = White, 03 = Red, 04 = Grey, 05 = Yellow, 06 = Blue, 07 = Green

Add "D" to denote double-ended.

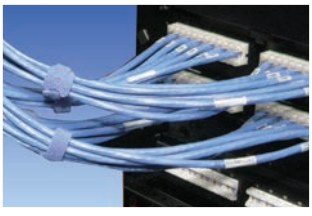
Cable assembly constructed with EU CPR rated cable - Dca

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 System 6® cable, Siemon copper trunking cable assemblies were designed with data centre 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.

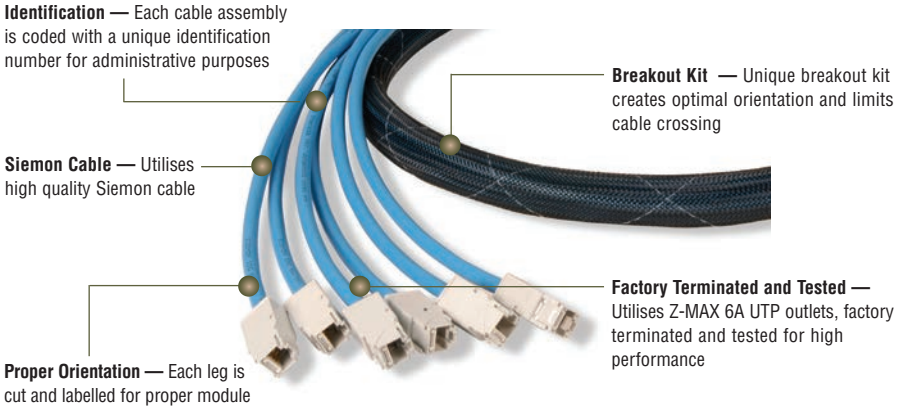


Data Centres
Ideal for data centres, raised floor and ladder rack environments enabling up to 75% faster deployment time. Well organised cable bundles improve cable management and air flow.



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

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



Ordering Information:

MAX System 6 Double-Ended Trunking Cable Assemblies

Part #	Description
TCLD8E-A1A1(XXX)M.	6 Leg solid cable trunking cable assembly, violet jacket, LSOH

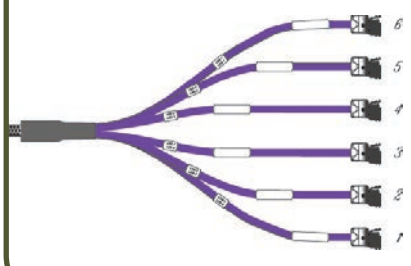
Z-MAX System 6 Double-Ended Trunking Cable Assemblies w/Panel Outlets

Part #	Description
TCLD8E-P0P0(XXX)M.	6 Leg solid cable trunking cable assembly, violet jacket, LSOH

Use (XXX) to specify length: 004-090m in increments of 1 metre (3.3 ft.)
Standard wiring is T568B.
Other lengths and configurations available upon request.

Trunk cable assembly constructed with EU CPR rated cable - Dca

STRAIGHT CUT



System 6® UTP 4-Pair Cable (International)

System 6 cable provides significant headroom above all ISO/IEC and ANSI/TIA Category 6 / Class E transmission performance specifications. Combine our high performance category 6 connectivity with System 6 cable and the result is a system with superior electrical performance for optimum applications support.

COMPLIANCE

- ISO/IEC 11801 Ed. 2.2 (Class E)
- IEC 61156-5:2009 (Category 6)
- ANSI/TIA-568-C.2 (Category 6)
- UL CMR and CSA FT4
- UL CM, IEC 60332-1, Class E_{ca}
- LSOH: IEC 60332-1, IEC 60332-3-22, IEC 60754, IEC 61034, and EN 50399 Class $D_{ca}s_2d_2a_1$

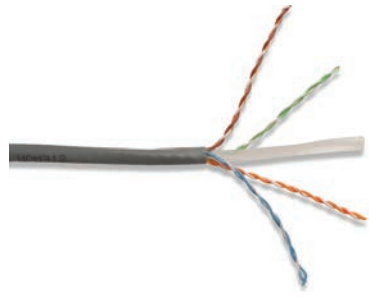
CABLE CONSTRUCTION

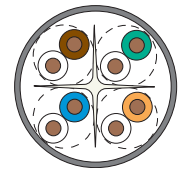
- UTP, 4-Pair
- CM, CMR and LSOH jacket types available
- Centre isolation member maintains pair geometry for optimal NEXT performance

Part #	Description
9C6(X)4-E3-RXA	305m (1000 ft.) Reelex
9C6(X)4-E3-5CR	500m (1640 ft.) reel
9C6(X)4-E3-1KR	1000m (3280 ft.) reel

Use (X) to specify jacket type:
L = LSOH (IEC 60332-1, IEC 60332-3-22), Violet Jacket, Class E_{ca}, D_{ca}
M = PVC (CM, IEC 60332-1), Grey Jacket, Class E_{ca}
R = PVC (CMR, CSA FT4), Blue Jacket

For special colour or packaging requests, please contact Siemon Customer Service





ELECTRICAL SPECIFICATIONS

DC Resistance	<7.32Ω/100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<160 pF/100m
NVP	68%
Delay Skew	≤35ns

PHYSICAL PROPERTIES

	LSOH	CM/CMR
Pulling Tension (max)	110N (25 lbf)	110N (25 lbf)
Bend Radius (min)	25mm (0.98 in.)	25mm (0.98 in.)
Installation Tempera-	0 to 50°C (+32 to 122°F)	0 to 50°C (+32 to 122°F)
Storage Temperature	-20 to 60°C (-4 to 140°F)	-20 to 60°C (-4 to 140°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

Freqency (MHz)	Insertion Loss (dB)		NEXT (dB)		PS NEXT (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)		ACR-N (dB)		PS ACR-N (dB)		TCL (dB)		Propagation Delay (nS) (ns)	
1.0	2.0	1.8	77.3	87.3	75.3	82.3	70.8	84.8	68.8	79.8	21.0	29.0	75.3	85.5	73.3	80.5	40.0	57.1	550.0	545.0
4.0	3.7	3.5	68.3	78.3	66.3	73.3	58.8	72.8	56.8	67.8	24.0	32.0	64.5	74.8	62.5	69.8	40.0	47.4	532.0	527.0
10.0	5.9	5.6	62.3	72.3	60.3	67.3	50.8	64.8	48.8	59.8	26.0	38.0	56.4	66.7	54.4	61.7	40.0	50.5	525.0	520.0
16.0	7.5	7.1	59.2	69.2	57.2	64.2	46.7	60.7	44.7	55.7	26.0	34.0	51.8	62.1	49.8	57.1	38.0	49.4	523.0	518.0
20.0	8.4	7.9	57.8	67.8	55.8	62.8	44.8	58.8	42.8	53.8	26.0	34.0	49.4	59.9	47.4	54.9	37.0	54.6	522.0	517.0
31.25	10.6	10.0	54.9	64.9	52.9	59.9	40.9	54.9	38.9	49.9	24.6	32.0	44.3	54.9	42.3	49.9	35.1	48.2	520.0	515.0
62.5	15.2	14.4	50.4	60.4	48.4	55.4	34.9	48.9	32.9	43.9	22.5	32.0	35.1	46.0	33.1	41.0	32.0	48.4	519.0	514.0
100.0	19.6	18.6	47.3	57.3	45.3	52.3	30.8	44.8	28.8	39.8	21.1	32.0	27.7	38.7	25.7	33.7	30.0	53.6	518.0	513.0
160.0	25.4	24.1	44.2	54.2	42.2	49.2	26.7	40.7	24.7	35.7	19.7	31.0	18.9	30.1	16.9	25.1	28.0	45.6	517.0	512.0
200.0	28.7	26.8	42.8	52.8	40.8	47.8	24.8	38.8	22.8	33.8	19.0	29.0	14.1	26.0	12.1	21.0	27.0	44.7	517.0	512.0
250.0	32.6	30.5	41.3	51.3	39.3	46.3	22.8	37.0	20.8	31.8	18.3	29.0	8.8	20.8	6.8	15.8	26.0	38.8	516.0	511.0
300.0*	-	33.7	-	50.0	-	45.0	-	36.0	-	30.0	-	27.0	-	16.3	-	11.3	-	44.6	-	511.0
400.0*	-	40.3	-	48.0	-	43.0	-	32.0	-	27.0	-	26.0	-	7.7	-	2.7	-	42.1	-	511.0
500.0*	-	39.9	-	48.0	-	42.0	-	31.0	-	26.0	-	25.0	-	8.1	-	2.1	-	36.8	-	511.0
550.0*	-	39.7	-	46.0	-	42.0	-	30.0	-	26.0	-	24.0	-	6.3	-	2.3	-	34.9	-	510.0

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

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

System 6® UTP 4-Pair Cable (International)

COMPLIANCE

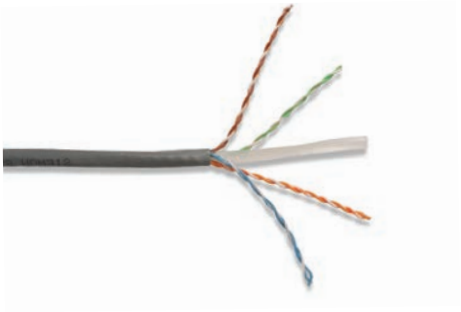
- ISO/IEC 11801 Ed. 2.2 (Class E)
- IEC 61156-5:2002 (Category 6)
- TIA-568-C.2 (Category 6)
- PVC: UL CM, IEC 60332-1
- LSOH: IEC 60332-1, IEC 60754, and IEC 61034
- EN 50399 Class E_{ca}

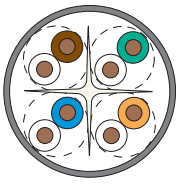
CABLE CONSTRUCTION

- UTP
- Nominal jacket OD: 5.6mm (0.22 in.)
- 0.52mm (0.02 in.) solid (non-tinned) copper
- Central isolation member
- Reverse sequential numbering

Part #	Description
9C6M4-E2	CM, grey jacket, Class E_{ca}, 305m (1000 ft.) Reel-in-Box
9C6L4-E2	LSOH, violet jacket, Class E_{ca}, 305m (1000 ft.) Reel-in-Box

Other cable lengths also available: Add "-5CR" for 500m (1640 ft.) reel, "-1KR" for 1000m (3280 ft.) 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 (18 lbf)
Bend Radius (min)	25mm (0.98 in.)
Installation Temperature	5 to 60°C (41 to 140°F)
Storage Temperature	0 to 60°C (+32 to 140°F)
Operating Temperature	-10 to 60°C (14 to 140°F)

TRANSMISSION PERFORMANCE

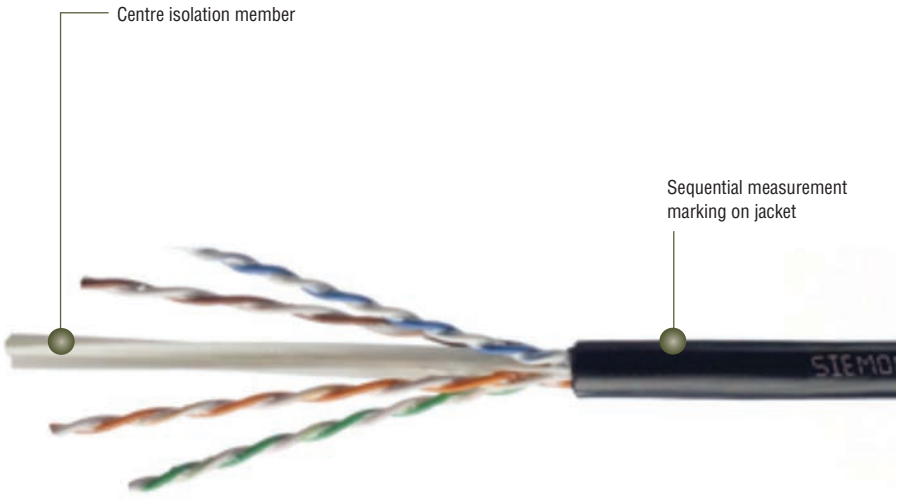
GUARANTEED WORST CASE SIEMON TYPICAL

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	2.1	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 (328 ft.).

Solution 6™ OSP UTP Cable (ERA/IME)

Siemon Category 6 compatible UTP Outside Plant (OSP) direct burial cable. Suitable for direct burial, aerial, and underground conduit applications

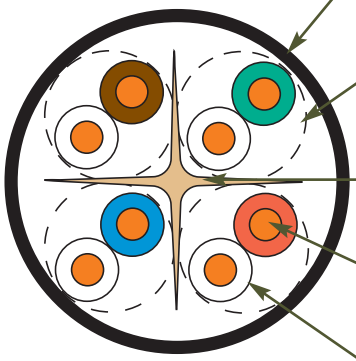


HIGHLIGHTS

- UTP, 4-pair
- Polyolefin Jacket, UV Resistant
- Gel filled (Non Conductive)
- Supports all applications designed to operate over category 6 or lower rated systems.
- RoHS
- Approved for use in direct burial, aerial and underground conduit applications

STANDARDS COMPLIANCE

- ISO/IEC 11801 Ed 2.2 (Class E)
- ANSI/TIA - 568-C.2 (Category 6)
- IEC 61156-5 Ed 2.0 (Category 6)
- EN 50173-1
- EN-50288-6-1



Jacket
- Nominal Cable O.D. = 7.19mm (0.28 in.)
- Jacket Material: PE
- UV Resistant

Moisture Barrier
- Waterblocking Gel

Isolation Member
- Maintains pair geometry before, during and after installation for optimal NEXT Loss performance

Conductor
- 23 AWG solid bare copper = 0.57mm (0.022 in.) nom.

Insulation
- Conductor Insulation: PE 1.12mm (0.044 in.) nom.

Product Information

ELECTRICAL SPECIFICATIONS

DC Resistance	<8.8 Ω/100m
DC Resistance Unbalance	5%
Mutual Capacitance	5.6 nF/100m
Capacitance Unbalance	<1500 pF/km
NVP	67%
TCL	30-10log(f/100)dB
Delay Skew	45 ns/100m
Propagation Delay	565 ns/100m @10 MHz Max

PHYSICAL PROPERTIES

Pulling Tension (max)	100N (25 lbf)
Bend Radius (min)	28.8mm (1.132 in.)
Installation Temperature	-15 to 50°C (-59 to 122°F)
Storage Temperature	-55 to 70°C (-131 to 158°F)
Operating Temperature	-55 to 60°C (-131 to 140°F)

TRANSMISSION PERFORMANCE

GUARANTEED WORST CASE

SIEMON TYPICAL :
Based on data from a randomly selected cable sample.

Frequency (MHz)	Insertion Loss (dB/100)		NEXT (dB)		PS NEXT (dB)		ACR-N (dB)		PS ACR-N (dB)		ACR-F (dB)		PS ACR-F (dB)		Return Loss (dB)	
1	2.00	1.64	74.3	88.59	72.3	88.37	72.3	86.85	70.3	86.64	67.8	92.95	64.8	91.3	20.00	30.62
4	3.80	3.31	65.3	74.6	63.3	74.57	61.5	71.29	59.5	71.28	55.8	79.03	52.8	78.07	23.00	37.22
10	6.00	5.27	59.3	78.58	57.3	77.75	53.3	73.31	51.3	72.66	47.8	66.59	44.8	66.38	25.00	38.23
16	7.60	6.71	56.2	72.19	54.2	71.85	48.7	65.48	46.7	65.36	43.7	59.13	40.7	59.2	25.00	39.91
20	8.50	7.51	54.8	71.5	52.8	71.39	46.3	63.98	44.3	63.71	41.8	55.49	38.8	55.37	25.00	41.7
31.25	10.70	9.47	51.9	73.7	49.9	71.06	41.2	64.24	39.2	61.92	37.9	47.78	34.9	47.75	23.60	34.02
62.5	15.40	13.53	47.4	66.9	45.4	65.31	32.00	53.37	30.00	52.29	31.9	42.88	28.9	42.32	21.50	38.61
100	19.80	17.28	44.3	66.08	42.3	64.24	24.5	49.99	22.5	47.92	27.8	29.73	24.8	29.73	20.10	30.64
160	25.60	22.18	41.2	61.77	39.2	60.93	15.6	41.12	13.6	40.11	23.7	29.93	20.7	29.93	18.70	27.29
200	29.00	24.89	39.8	61.8	37.8	60.7	10.8	38.63	8.8	37.53	21.8	25.05	18.8	25.51	18.00	26.26
250	32.80	28.08	38.3	59.31	36.3	57.28	5.5	34.2	3.5	30.34	19.8	25.99	16.8	25.98	17.3	24.85

**Cable compliant to Category 6 requirements with the exception of propagation delay.*

Ordering Information:

Category 6 Outside Plant Direct Burial 4-Pair Cable 23 AWG UTP (Black PE Jacket)

Part #	Description
9C6O4-E2.	305m (1000 ft.) reel