

# **Network Infrastructure Security Solution**





#### Network Infrastructure Security Solution

Technology has rapidly become a critical asset for driving improvements in operational and financial efficiencies. With this reliance on technology comes increased risk. Within enterprise, data center, and industrial automation applications, broader access to networks, files, and web sites increases threats, posing greater security risks. Security considerations, while paramount, should not become a barrier for service improvements and IT investments.

Panduit is a world-class developer and provider of leading-edge solutions that help optimize the physical infrastructure to mitigate risk. Panduit offers Network Infrastructure Security Solutions that enhance information security measures at the physical layer by deterring unauthorized network access and physical system changes.



# Keyed Connectivity

Keyed copper and fiber cabling systems allow the design of secure, modular, end-to-end connectivity for communication and computing elements from the data center to the workstation. The keyed functionality increases network security integrity by providing positive and negative keying features that distinguish network connections mechanically. Up to 18 color-coded keys visually distinguish connections to prevent unintentional connection to network infrastructure for increased security, allowing multiple networks to be managed without the risk of interchanging access and limiting network access to unauthorized users.

#### Mini-Com® Keyed Copper Jack Modules

Keyed jack type is indicated by jack color. Select a patch cord (below) of the same color as the jack to match the keyed configuration.



CJK6X88TG

A CONTRACTOR

CJSK6X88TG
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Part Number	Description	Keyed Type and Color
UTP Keyed Jack Mo	dules	
CJK6X88TGBU	Category 6A, RJ45, 10 Gb/s, 8-position, 8-wire universal UTP keyed jack module.	Dhuat
CJK688TGBU	Category 6, RJ45, 8-position, 8-wire universal UTP keyed jack module.	Blue*

#### Shielded Keyed Jack Modules

· · · · · · · · · · · · · · · · · · ·	( modules	
CJSK6X88TGBU	Category 6A, RJ45, 10 Gb/s, 8-position, 8-wire universal shielded keyed jack module.	Blue**
CJSK688TGBU	Category 6, RJ45, 8-position, 8-wire universal shielded keyed jack module.	Diue

\*For standard jack module colors and keyed configurations other than Blue, replace BU suffix with BL (Black), RD (Red), YL (Yellow), GR (Green), or OR (Orange).

\*\*For standard jack module colors and keyed configurations other than Blue, replace BU suffix with BL (Black), RD (Red), YL (Yellow), GR (Green), OR (Orange). Each color represents a different keyed configuration.

#### Keyed Copper Patch Cords

Keyed patch cord type is indicated by patch cord color. Select a jack (above) of the same color as the patch cord to match the keyed configuration.



Keyed UTP Copper Patch Cords



P Copper Keyed Shielded Cords Copper Patch Cords

Part Number	Description	Length^	Keyed Type and Color*
UTP Keyed Patch C	ords		
UTPK6A3BU	Category 6A, 10 Gb/s UTP stranded CM patch cord with TX6- PLUS Keyed Modular Plug on one end and TX6- PLUS	3 feet	Blue*
UTPK6A1MBU	Non-Keyed Modular Plug on the other end.	1 meter	Blue*
UTPKSP3BU	Category 6, UTP solid CM patch cord with TX6- PLUS Keyed Modular Plug on one end and TX6- PLUS Non-Keyed Modular	3 feet	Blue*
UTPKSP1MBU	Plug on the other end.	1 meter	Blue*
Shielded Keyed Pat	ch Cords		
STPK6X3BU	Category 6A/6, shielded stranded CM patch cord with TX6 <sup></sup>	3 feet	Blue**

STPK6X3BU	Category 6A/6, shielded stranded CM patch cord with TX6 <sup></sup>	3 feet	Blue**	
	PLUS Keyed Shielded Modular Plug on one end and TX6 <sup>w</sup> PLUS			L.
STPK6X1MBU	Non-Keyed Shielded Modular Plug on the other end.	1 meter	Blue**	

<sup>A</sup>For standard foot lengths (3, 5, 7, 10, 14) or standard meter lengths (1, 2, 3, 5, 7, 10) change the length designation in the part number to the desired length. For example, the part number for a Category 6A, UTP, keyed, blue, 14-foot patch cord is UTPK6A14BU.

\*For standard cable colors and keyed configurations other than Blue, replace BU suffix with BL (Black), RD (Red), YL (Yellow), GR (Green), or OR (Orange).

\*\*For standard cable colors and keyed configurations other than Blue, replace BU suffix with BL (Black), RD (Red),

YL (Yellow), GR (Green), OR (Orange). Each color represents a different keyed configuration.

3

#### Mini-Com® Keyed Fiber Optic Connectors and Adapter Modules



CMDABLLCZIW



FX1BNKBNNSBM001

FLCSMCXBRD

Part Number	Description	Color
CMDABLLCZIW+	Keyed A (Black), LC Sr./Sr. SFF duplex fiber adapter module.	Keyed A - Black
FLCSMCXBRD^^	LC (keyed B - red), pre-polished cam, multimode simplex fiber optic connector; 900 $\mu$ m tight buffered fiber installation.	Keyed B - Red

+For standard adapter module colors other than Off White, replace IW suffix with BL (Black), AW (Arctic White), BU (Blue), or EI (Electric Ivory).

<sup>^^</sup>For standard colors and keyed configurations, replace suffix with desired color: ABL (Black) BRD (Red), CGR (Green), DYL (Yellow), EOR (Orange), FDB (Dark Blue), GVL (Violet), HAQ (Aqua), JRO (Rose), KIG (Slate), LLB (Brown), PWT (White), QCG (Charcoal), RLV (Lavender), SPE (Peach), TSB (Steel Blue), VMA (Maroon) or WMI (Mint).

Each color represents a different keyed configuration.

# Keyed LC Opti-Core® Fiber Optic Patch Cords and Pigtails



FX2EPKFSNSNM001

Part Number	Description	Length (m)++	Keyed Type and Color^
FX2EPKAKASAM001	OM3 2 Fiber Patch Cord 1.6mm Black Plenum, Duplex Keyed LC (Keyed A - Black) to Duplex Keyed LC (Keyed A - Black) Std IL - 1 Meter.	1	Keyed A – Black
FX1BNKBNNSBM001	OM3 1 Fiber 900µm Buffered Patch Cord Red, Duplex Keyed LC (Keyed B - Red) to Pigtail, Std IL - 1 Meter.	1	Keyed B – Red
FX2EPKFSNSNM001	OM3 2 Fiber Patch Cord 1.6mm Dark Blue Plenum, Duplex Keyed LC (Keyed F - Dark Blue) to Duplex SC, Std IL - 1 Meter.	1	Keyed F – Dark Blue

<sup>^</sup>For standard colors and keyed configurations, replace suffix with desired color: A (Black), B (Red), C (Green), D (Yellow), E (Orange), F (Dark Blue), G (Violet), H (Aqua), J (Rose), K (Slate), L (Brown), P (White), Q (Charcoal), R (Lavender), P (Peach), T (Steel Blue), V (Maroon) or W (Mint). Each color represents a different keyed configuration.

++For standard lengths 1 to 10 meters (increments of one meter) 15, 20 or 30 meters, change the length designation in the part number to the desired length. For example, the part number for a Keyed, 5 meter, red, LC to LC mm duplex patch cord is FX2ERKBKBSBM005.

Note: Standard jacket colors are Aqua for OM3, Orange for OM2/OM1 and Yellow for OS2/OS1.

#### Keyed LC OptiCom® Fiber Adapter Panels

FAP12WDYLDLCZ



FAP8WEORDLCZ



Part Keyed Type Number Description and Color+++ FAP12WDYLDLCZ LC Fiber Adapter Panel with 12 LC Keyed (D - Yellow) Keyed D duplex adapters. Yellow FAP8WEORDLCZ LC Fiber Adapter Panel with 8 LC Keyed (E - Orange) Keyed E duplex adapters. Orange **FAP6WBRDDLCZ** LC Fiber Adapter Panel with 6 LC Keyed (B - Red) Keyed B duplex adapters. Red

+++For standard colors and keyed configuration, replace suffix with desired color: ABL (Black) BRD (Red), CGR (Green), DYL (Yellow), EOR (Orange), FDB (Dark Blue), GVL (Violet), HAQ (Aqua), JRO (Rose), KIG (Slate), LLB (Brown), PWT (White), QCG (Charcoal), RLV (Lavender), SPE (Peach), TSB (Steel Blue), VMA (Maroon) or WMI (Mint).

Each color represents a different keyed configuration.

FAP6WBRDDLCZ

# Keyed LC QuickNet<sup>™</sup> Multimode MTP\* Fiber Optic Cassettes



FC2XN-24-KDAS

Part Number	Description	Color+++
FC2XN-24-KDAS	OM3 24-fiber Total, Standard Loss, (Keyed D- Yellow) LC Duplex Adapters, Std Method A.	Keyed D – Yellow
KB (Red), KC (Greer KL (Brown), KP (Whi or KW (Mint). Each color represent *MTP is a registered Keyed MTP* cassette	brs and keyed configuration other than Yellow, replace KD suffix h), KE (Orange), KF (Dark Blue), KG (Violet), KH (Aqua), KJ (Ro te), KQ (Charcoal), KR (Lavender), KS (Peach), KT (Steel Blue) s a different keyed configuration. trademark of US Conec Ltd. es are also available in optimized versions (add an "O" after the and 12 fiber versions (change the 24 to 12, ex: FCX-12-KDAS)	se), KK (Slate), , KV (Maroon) X,

#### **Tamper Resistant Faceplates**



**CFPTR4IW** 

UICFPRTR4IW

Part Number		Description
CFPTR4	W	Single gang, vertical tamper resistant faceplate accepts four Mini-Com <sup>®</sup> Modules.
UICFPR	rr4IW	Tamper resistant faceplate kit includes faceplate frame, two recessed modular inserts, faceplate cover with additional outlet station identifier and tamper resistant screw. Accepts up to four Mini-Com <sup>®</sup> Modules.

For colors other than IW (Off White), replace suffix IW with EI (Electric Ivory), WH (White), IG (International Gray), BL (Black), CIG (International Gray base with Clear cover) or CL (Clear base and cover). Part number UICFPRTR4IW only available in IW (Off White), EI (Electric Ivory) or WH (White).



# **Network Security Devices**

Network security devices block unauthorized access to existing network infrastructure in the data center, at the workstation, in the industrial automation panel, and more. These devices save time and money associated with network downtime, data security breaches, infrastructure repair, and hardware replacement due to theft. The innovative design of the blockout device snaps into modules and is released with the removal tool, ensuring the safety and security of the network infrastructure. The versatile design of the lock-in device is compatible with most existing patch cords, faceplates, patch panels, IP cameras, and other IP devices. It is also compatible with VoIP phones to help prevent unauthorized tampering with connectivity to ensure E911 continuity.

#### **Blockout and Lock-In Devices**



PSL-DCJB



PSL-USBA\*\*



PSL-DCPLX, PSL-DCPLRX, and PSL-DCPLS



**FLCCLIW-X** 



PSL-LCAB

PSL-USBB

# **RJ45 Plug Latch Guard**



Part Number	Description	Color
PLGUARD-X*	Prevents accidental removal of modular plugs in high density areas; package of 10 pieces.	Milky white

\*Add RD (Red) or YL (Yellow) before dash for other colors; replace -X with -C for a package of 100 pieces

#### Patch Cord Color Bands



Part Number	Description	Color
PCBANDWH-Q	Snaps onto individual copper patch cable for additional color-coding.	White

For standard colors other than White, replace WH suffix with BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), OR (Orange), VL (Violet), WH (White), EI (Electric Ivory), or IG (International Gray). 25/package.

Part Number	Description	Color
Blockout Devices		
PSL-DCJB‡‡	Ten RJ45 jack module blockout devices and one removal tool.	Red
PSL-LCAB*	Ten LC duplex adapter blockout devices and one removal tool.	Red
PSL-USBA**	Five USB Type 'A' blockout devices and one removal tool.	Red
PSL-PERM-USBA	Ten permanent USB Type 'A' blockout devices. No removal tool available.	Red
PSL-USBB	Ten USB Type 'B' blockout devices and one removal tool.	Red
PSL-PERM-USBB	Ten permanent USB Type 'B' blockout devices. No removal tool available.	Red
Lock-In Devices		
PSL-DCPLX‡‡	Ten RJ45 plug lock-in devices, one installation/removal tool.	Red
PSL-DCPLRX‡‡	Ten recessed RJ45 plug lock-in devices, one installation/removal tool.	Red
PSL-DCPLS‡‡	Ten super recessed RJ45 plug lock-in devices, one installation/removal tool.	Red
FLCCLIW-X	LC duplex lock-in clip and removal tool.	White
QPPLD6-X	QuickNet <sup>™</sup> 6-pack Plug Pack lock-in device.	Red
QPPLD8-X	QuickNet <sup>™</sup> 8-pack Plug Pack lock-in device.	Red

+‡For colors other than Red, add -BL (Black), -BU (Blue), -GR (Green), -YL (Yellow), -OR (Orange),
-VL (Violet), -IW (International White), or -IG (International Gray) to the end of the part number.
\*For colors other than Red, add -AQ (Aqua), -BL (Black), -BU (Blue), -EI (Electric Ivory), or OR (Orange) to the end of the part number.

±For colors other than Red, add -AQ (Aqua), -BL (Black), -BU (Blue), -EI (Electric Ivory), or -GR (Green) to the end of the part number.

Replace -X in part number with -C or add -C to end of part number for bulk packages of 100 devices (does not apply to removable or permanent USB blockout devices).

\*\*Add -L to end of part number for bulk packages of 50 devices with 5 removal tools.

6

# Complementary Network Infrastructure Security Products



# J-Pro™ Cable Support System

The J-Pro<sup>™</sup> Cable Support System routes cables throughout the physical infrastructure, providing complete bend radius control and is UL listed for use in air handling spaces. Available in four sizes, multiple colors, and numerous mounting options for any application.



# Surface Mount Raceway Systems

Surface mount raceway systems are available in a variety of materials in single and multi-channel designs to route power, low voltage, copper, or fiber optic cabling. Panduit offers a full complement of fittings that are designed to maintain proper bend radius control, channel capacity, and separation in applications requiring both data cabling and power wiring. Tamper-resistant Panduit surface raceway products offer increased safety benefits, discourages unauthorized access, and protect against accidental damage and physical contact with electrical wiring.



### Turn-Tell® Labels

Turn-Tell<sup>®</sup> Labels attach easily and can be rotated for visibility without twisting the cable. Properly identifying the cable plant not only meets communication labeling standards, but also makes moves, adds, and changes easier and more secure. Technicians know they're moving the correct cable before it is moved, protecting the security of the network.



#### Work Area Outlets

Mini-Com<sup>®</sup> Modular Patch Panels, Faceplates, and Surface Mount Boxes accept all Mini-Com<sup>®</sup> Keyed Modules for copper/fiber installations, providing a broad range of options that are easily installed and offer absolute modularity.



#### Zone Cabling

Panduit provides a complete line of lockable zone cabling products for open office architecture applications, telecommunication enclosures, data centers, wireless deployments, and network integration of Building Automation Systems. Utilizing a distributed network and a Zone Cabling Topology for your physical infrastructure can solve telecommunication room congestion.

7



# PANDUIT

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