

**Physical Infrastructure
Product Guide**
for Successful CORD Deployments

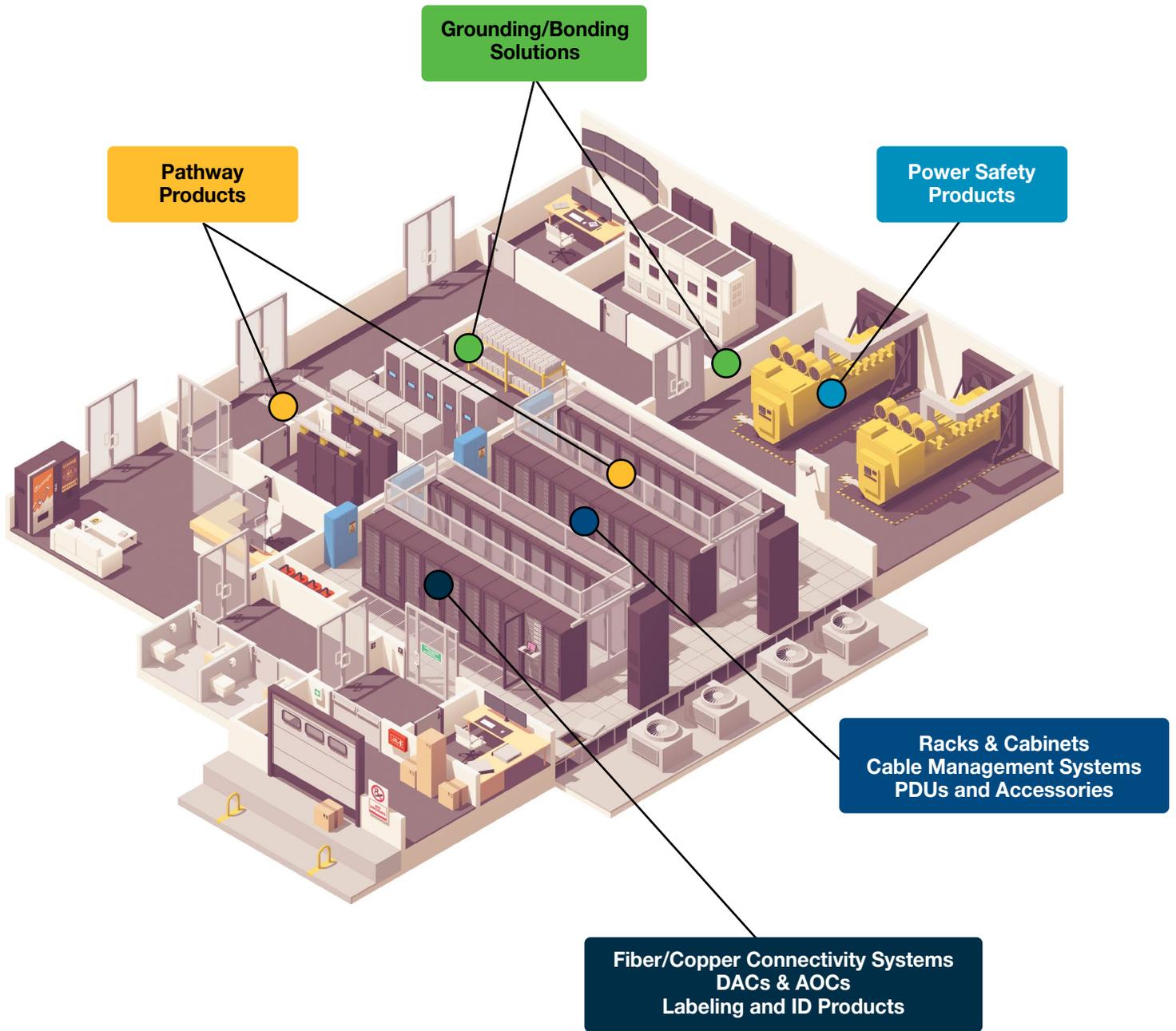
Table of Contents

Introduction	3
Panduit Products	4
Copper Systems	5
Fiber Systems	6
Cabinets, Thermal Management, Racks, Enclosures, and Cable Management	10
Grounding and Bonding	11
Power Distribution Units	12
Uninterruptible Power Supply	13
Power and Environmental Monitoring	14
Pathway Products	15
Labeling and Identification	16
Power Safety Products	17
Optical Distribution Frames	17
Prysmian Products	18
Category U/UTP Cables	19
Optical Fiber Cables	20
Industrial Cables	22
Rubber and Industrial Cord Products	24
Medium Voltage Cables	24
300V+ Power Cordage	25
Electronic Wire & Alarm Security Solutions	25
Power Monitoring Solutions PRY-CAM	26

Panduit and Prysmian Group have collaborated to clarify how to effectively deploy the physical infrastructure for Central Offices Re-architected as Data Centers (CORD). Both companies bring expertise in the enterprise, data center, and Telco marketplaces to contribute to the development of the CORD initiative. This paper is the third of a three-paper series on CORD deployments.

In our previous papers, we have addressed the challenges that Telco Operators need to consider as they transition from a Traditional CO (Central Office) to a CORD CO. Topics included the following transitions: from single use to a multi-tenant space, from Telco equipment and cabling to Enterprise style equipment and LAN cabling, and from CO to considerably more conditioned data center space. In addition, we discussed the challenges with connectivity and standards that can occur. This final paper in the series will examine the physical infrastructure products from Panduit and Prysmian Group that are essential to the adoption of a successful CORD solution. Below are some product descriptions and part numbers for these products.

Panduit Products

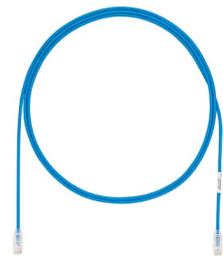


Copper Systems

Panduit offers a full-line of innovative copper products that support all of today's most common IP applications including PoE and Wireless technologies. Get the greatest value on the market, guarantee future reliability, and provide the foundation for your network's growth by choosing from our copper jack modules, patch cords, patch panels, punchdown systems, cable, and pre-terminated solutions.

Copper Patch Cords

UTP patch cords are constructed of solid copper cable with an enhanced performance modular plug on each end. Copper conductors in patch cable are twisted in pairs and separated by a quadrant separator. All four pairs are surrounded by solid foil tape and a flame retardant jacket. The tape suppresses alien crosstalk and allows 10 Gb/s transmission. Patch cord cables are offered in multiple colors and lengths for design flexibility with a strain relief boot on each modular plug. All patch cords are compatible with both T568A and T568B wiring schemes.



Jack Modules

Panduit manufactures a complete line of Category-rated RJ45 Jack Modules designed to terminate twisted pair cables. Each module is 100% factory tested to exceed industry-standard performance requirements.

Jacks are individually serialized for traceability and are compatible with Panduit Modular Patch Panels and Faceplates. Jack modules are available in various standard colors.

[Click here for a listing of Copper System Tools and Accessories](#)



Direct Attach Cable Assemblies (DAC)

High bandwidth interconnects are required for next-generation data centers. Panduit offers SFP28 Direct Attach Copper Cable Assemblies. These passive cables provide a cost-effective solution for interconnecting high-speed 25 GbE switches and servers.

This high-speed data transport capability is ideal as server virtualization becomes more prevalent. With multiple virtual machines, server I/O consolidation topology requires a 25 Gb/s interconnect between top-of-rack switches and servers. By incorporating SFP28 Passive DAC Cable Assemblies into the physical infrastructure, businesses can achieve 25 Gb performance port-to-port without additional signal processing or conversion, providing low power, and low latency server interconnects for top-of-rack switching applications.



Part Number	Length (m)	Length (Ft.)	Cable Gauge	Nominal Cable O.D.		Cable Jacket
				mm	In.	
PSF2PZA1MBL	1	3.3	30 AWG	4.1	0.161	PVC
PSF2PZA1.5MBL	1.5	4.9	30 AWG	4.1	0.161	PVC
PSF2PZA2MBL	2	6.6	30 AWG	4.1	0.161	PVC
PSF2PZA2.5MBL	2.5	8.2	26 AWG	4.1	0.161	PVC
PSF2PZA3MBL	3	9.8	30 AWG	4.1	0.161	PVC
PSF2PZC3.5MBL	3.5	11.5	26 AWG	4.9	0.193	PVC
PSF2PZC4MBL	4	13.1	26 AWG	4.9	0.193	PVC
PSF2PZC5MBL	5	16.4	26 AWG	4.9	0.193	PVC

Fiber Systems

OptiCam® LC Connectors

LC OptiCam® Pre-Polished Connectors with rear pivot latch shall be ANSI/TIA-604-FOCIS-10 compatible and contain a factory-terminated fiber, eliminating field polishing and adhesive. LC pre-polished connectors shall have an average insertion loss of 0.3dB per mated pair for multimode and singlemode fiber. LC pre-polished connectors shall captivate fiber and buffer in one action allowing for up to two re-terminations with no degradation in performance.



Part Number	Connector Type	Ferrule Finish	Fiber	Backbone Color	Boot Color
FLCSMCXAQY	Simplex	SPC	50/125µm OM4	Aqua	Aqua
FLCDMCXAQY	Duplex				Aqua
FLCSMC5BLY	Simplex	SPC	50/125µm OM2	Black	Black
FLCDMC5BLY	Duplex				Black
FLCSMC6BLY	Simplex	SPC	62.5/125µm OM1	Electric Ivory	Black
FLCDMC6BLY	Duplex				Black
FLCSCBUY	Simplex	UPC	9/125µm OS1/OS2	Blue	Blue
FLCDSCBUY	Duplex				Blue

OptiCam® Field 2 Termination Tool Kit

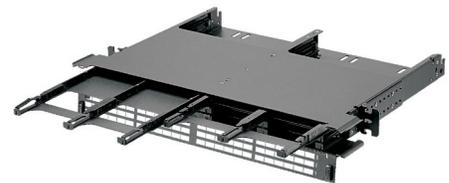
The OptiCam® Termination Tool offers a step-by-step visual guidance and insertion loss calculation to ensure the field fiber and fiber stub are in proper alignment before camming. This allows even the less experienced technicians to terminate fiber with confidence. A simple, ergonomic, and symmetrical design allows for left or right-handed termination in both handheld and benchtop orientations.

The OptiCam® 2 Termination Tool Kit includes the OptiCam® 2 tool and basic elements to terminate any OptiCam® singlemode or multimode connectors. Additional cleaning and cleaving implements are sold separately.



HD Flex™ Fiber Enclosures

HD Flex™ Fiber Optic Enclosures house, organize, manage, and protect fiber optic cable, terminations, splices, connectors, and patch cords. These enclosures accommodate all HD Flex™ cassettes, fiber adapter panels (FAP), trunk cables, connectors, and patch cords. They provide front access with drawers that slide out into two locked positions, regardless of how many enclosures are stacked together. In addition, they allow for half of the tray to operate independently, an ideal option for redundant networks. They also allow cassettes and FAPs to be installed by dropping them into the front of the enclosure tray or sliding them into the rear of the enclosure tray which allows each individual cassette/FAP to be removed with minimal disruption to other cassettes/FAPs. Enclosures are available in either 6-port or 12-port configurations. All enclosures are able to be adapted to accept either 6-port cassettes and 12-port cassettes.



[Click here for additional Panduit Fiber Optic Enclosure solutions](#)

Fiber Systems

HD Flex™ Fiber Optic Cassettes

Fiber Optic Cassettes provide MPO to multiple LC connections. They offer optimized IL and utilize universal polarity. Modular cassettes are available in either 6-port or extra wide 12-port configurations and are part of the system, and FAPs for deploying a fiber infrastructure as you migrate to higher network speeds.

HD Flex™ Fiber Optic Cassettes offer a wide array of deployment options to support both Ethernet and Fiber Channel networks. Cassette types are available with 1 MPO to 6 duplex LC connectors, (6-port) 1 MPO to 12 duplex LC connectors (12-port), 1 MPO to 4 duplex LC connectors for breaking out parallel optics applications (40G into four 10G channels), and 6-port duplex LC cassettes for splice terminations. Also, 6-port MPO and duplex LC fiber adapter panels (FAP) are available. All LC connectors contain integral shutters to help prevent contamination

[Click here for additional Panduit Fiber Optic Cassettes solutions](#)



Active Optical Cables (AOC)

As virtualization, consolidation, and convergence initiatives continue to grow, so do the demands placed on the physical infrastructure. To meet the needs for faster processing speeds, low-power server interconnects, and I/O consolidation deployments, Panduit offers 25 GB SFP28 Active Optical Cable Assemblies.

The SFP28 Active Optical Cable Assemblies are constructed with a 3.0mm 2-fiber round unitary cable available in PVC-rated jacket materials. These cords are available in OM3 multimode fiber type with high-performance insertion loss essential for today's high-speed systems requiring very low connector insertion loss.

These active SFP28 fiber cable assemblies contain low power circuitry in the connector to boost the signal and are driven from the port without additional power requirements. They provide a low-cost alternative to pluggable optical transceivers and are generally used for end-of-row or middle-of-row data center architectures.

End-to-end high-speed data transport systems from Panduit deliver enhanced availability, agility, and security.

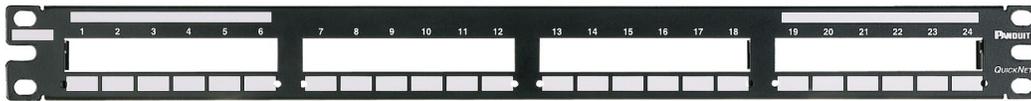


Part Number	Length (m)	Length (Ft.)	Fiber Type	Jacket
AX23NS2S2AQM001	1	3.3	OM3	PVC
AX23NS2S2AQM002	2	6.6	OM3	PVC
AX23NS2S2AQM003	3	9.8	OM3	PVC
AX23NS2S2AQM005	5	16.4	OM3	PVC
AX23NS2S2AQM007	7	23.0	OM3	PVC
AX23NS2S2AQM010	10	32.8	OM3	PVC
AX23NS2S2AQM015	15	49.2	OM3	PVC
AX23NS2S2AQM020	20	65.6	OM3	PVC
AX23NS2S2AQM025	25	82.0	OM3	PVC
AX23NS2S2AQM030	30	98.4	OM3	PVC

QuickNet™ Patch Panels

QuickNet™ Patch Panels accept QuickNet™ Pre-Terminated Cassettes and Patch Panel Adapters. These high-density patch panels conserve valuable rack space and mount to standard EIA 19-inch racks or 23-inch racks with optional extender brackets. These patch panels are available in 24 or 48 ports in 1 RU. They also are available in angled or flat panels.

[Click here for additional Panduit Patch Panel solutions](#)



PanMPO™ Connector

The first connector to enable gender and polarity change just got better. The new and improved PanMPO™ Fiber Connector has been redesigned to include key new features for an even better and easier experience when using the connector in the field. Some of the new features for the PanMPO™ Connector include:

- Narrow connector body allows for higher density and is FOCIS compliant
- The only connector on the market that requires no additional tools to change gender or polarity
- Alignment pins permanently housed and protected inside the connector
- Available in multimode and singlemode

> www.panduit.com/panmpo



Fiber Systems

QuickNet™ MPO Trunk Cable Assemblies

QuickNet™ MPO Trunk Cable Assemblies allow for rapid deployment of high-density permanent links in a single assembly for data center applications requiring quick infrastructure deployment, such as main, horizontal, and zone distribution areas. These MPO trunk cable assemblies optimize cable routing requirements to ensure efficient use of pathway space and significantly reduce installation time and cost. In addition, these trunk cable assemblies are built with modular MPO connectivity and provide compatibility, flexibility, and system performance in all permanent link applications. All trunk cable assemblies are factory terminated and tested to deliver verified optical performance and reliability for improved network integrity at speeds of 10/25/40/50/100G and beyond.

[Click here for additional Panduit Optic Trunk Cable Assemblies solutions](#)



QuickNet™ MPO Interconnect Round Cable Assemblies

MPO Interconnect Round Cable Assemblies are pre-terminated 12-fiber cable assemblies that are used in high-density network applications. These interconnect round cable assemblies are used with pre-terminated cassettes in main and horizontal cabling distribution areas. The QuickNet™ System meets the demands of 10/25/40/50/100/400G Ethernet, and high-speed Fiber Channel systems while maintaining compatibility with Ethernet. The high-density modular design fits into rack mount fiber cassette enclosures to ensure efficient use of space and rapid network deployment.

[Click here for additional Panduit Interconnect solutions](#)



Fiber Optic Breakout Harnesses

PanMPO™ and MPO Round Harness Cable Assemblies are pre-terminated 8 or 12-fiber cable assemblies. The unique design of the PanMPO™ Connector allows for rapid gender and polarity change in the field and enables a seamless, standards-compliant migration from duplex-based applications (e.g., 10/25G Ethernet) to parallel optics-based applications (e.g., 40/100G Ethernet). LC push-pull connectors reduce cable density by 40% and allow easy removal in high-density installation. All cable assemblies are factory terminated and tested to deliver verified optical performance and reliability for improved network integrity.



Opti-Core® Patch Cords

The Opti-Core® patch cords support network applications in main, horizontal, and equipment distribution areas and are available in riser (OFNR) and low smoke zero halogen (LSZH) rated jacket materials. In addition, pre-terminated fiber optic pigtailed support fusion splice field termination applications. Both fiber optic patch cords and pigtailed are available in OM1, OM3, OM4, OM4+, OM5, and OS2 fiber types to meet the demands of 10/25/40/50/100/400G Ethernet, and high-speed Fiber Channel.

[Click here for additional Panduit Patch Cords solutions](#)



Cabinets, Thermal Management, Racks, Enclosures, and Cable Management

FlexFusion™ Cabinets

FlexFusion™ Cabinets offer a unique universal platform for all types of data centers and servicing needs including Hyperscale, Edge, and Multi-Tenant Data Center. Built with a best-in-class weight load of 3,500 lbs. and doors with a maximum airflow of 80%, FlexFusion™ can tackle your most challenging cabinet installations. Whether it's for server, network, or hybrid applications, FlexFusion™ Cabinets deliver performance to keep your networks running at optimal efficiency. Additional FlexFusion™ features include:

- [Configurator tool](#) to select a basic cabinet to a turn-key pre-configured cabinet
- Fully integral bonded without the use of grounding wires
- Adjustable front and rear cage nut equipment rails
- Several tool-less cable management options to choose from

> www.panduit.com/flexfusion



Cable Management Systems & Accessories

Panduit's comprehensive offering of vertical cable management, horizontal cable management, and rack solutions reduces the space required to route, manage, and protect high cable capacities, providing the lowest total cost of ownership. These product sets can be combined to provide an optimized solution for virtually any application.

Vertical Cable Managers with Vertical Patching are optimized to provide the maximum amount of capacity, flexibility, and accessibility for high-density switch and server applications.

Horizontal Cable Managers are designed to provide a best-in-class user experience for horizontal managers.

Enhanced [PatchRunner™ 2](#) Vertical and Horizontal Managers provide an unparalleled system solution for telecommunication rooms and data center applications.

[Click here for the Horizontal Cable Management Selection Guide](#)

[Click here for a full range of vertical managers and cable management accessories \(trays, fingers, brackets, shelves, waterfalls, etc.\)](#)



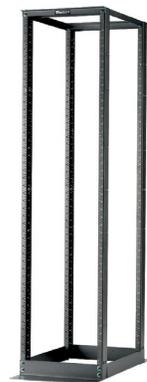
4 Post Rack

4 post racks are designed to be an effective solution for the telecommunications room or network row. Available in 7' or 8' tall, these racks allow maximum equipment utilization for areas with either low or high ceilings. The rack can be used to manage high-performance copper and fiber patch cables. This modular rack system is compatible with Panduit horizontal and vertical cable managers. The rack is UL listed for 2,500 pounds and is made of welded steel.

The open design allows for maximum airflow in and around the rack. This system is part of a complete rack and cable management system that manages, protects, and showcases your network investment.

Panduit offers a variety of grounding and bonding kits for four posts and two post racks with premium components engineered specifically to meet TIA-942 and TIA-607-B for reliable cabinet grounding.

> www.panduit.com/adjustablerack



Part Number	Description
R4P36	4 post EIA rack with #12-24 threaded rails. Dimensions: 84.0"H x 23.25"W x 36.0"D (2134mm x 591mm x 914mm).
R4P	4 post EIA rack with #12-24 threaded rails. Dimensions: 84.0"H x 23.25"W x 30.0"D (2134mm x 591mm x 762mm).
R4PCN	4 post EIA rack with cage nut rails. Dimensions: 84.0"H x 23.25"W x 30.0"D (2134mm x 591mm x 762mm).

Grounding and Bonding

[Grounding and bonding solutions](#) meet customer needs and today's critical application requirements for grounding data centers and telecommunication spaces.

Also, Panduit offers a wide variety of individual components and accessories to solve multiple grounding and bonding applications:

- Bonding Straps & Jumpers
- Grounding and ESD Hardware & Accessories
- Grounding Busbars & Strips
- Grounding Compression Connectors & Covers
- Grounding Mechanical Connectors



StructuredGround™ Grounding System

StructuredGround™ Grounding System provides high quality, visually verifiable, and dedicated grounding path to maintain system performance and protect network equipment and personnel. Panduit grounding and bonding components are designed for use on racks and cabinets which meet EIA-310.



Power Distribution Units

Panduit power distribution units (PDUs), environmental, and connectivity hardware products improve availability, scalability, power, cooling efficiency, and product quality, which also minimizes network downtime and increases data center productivity.

Panduit PDU offerings present a wide variety of options to customize your power profile. There are basic rack PDUs, or you could opt for one of our intelligent rack PDUs, which are either network-enabled or gateway-enabled. In addition to the variety of PDU options, Panduit offers PDU accessories. Depending on which PDU you choose, there is the option of multiple accessories to complement and improve the PDU. This family of products includes PDU Sensors, Security Access & Control Devices, and component PDU Accessories.



SmartZone™ G5 iPDUs

SmartZone™ G5 iPDUs monitor the data center power and the environment by continuously scanning for electrical circuit overloads and physical environmental conditions that place critical IT equipment at risk. By monitoring physical access points, the PDUs increase cabinet security to protect your systems and data. With some of the highest outlet densities and the smallest form factors available in the market, your cabinets will be functioning at their most resourceful state.

[Click here for the SmartZone™ G5 Selection Guide](#)

Offerings:

[Monitored Input: Input power monitoring](#)

[Monitored Switch: Input power monitoring and outlet switching](#)

[Monitored per Outlet: Input and outlet level power monitoring](#)

[Monitored & Switched per Outlet: Input and outlet level power monitoring and outlet switching](#)

[Basic: Reliable power distribution \(non-network\)](#)

[Power Cords](#)

Accessories:

[Security Access & Control Devices](#)

[Miscellaneous Accessories](#)

> www.panduit.com/pdu

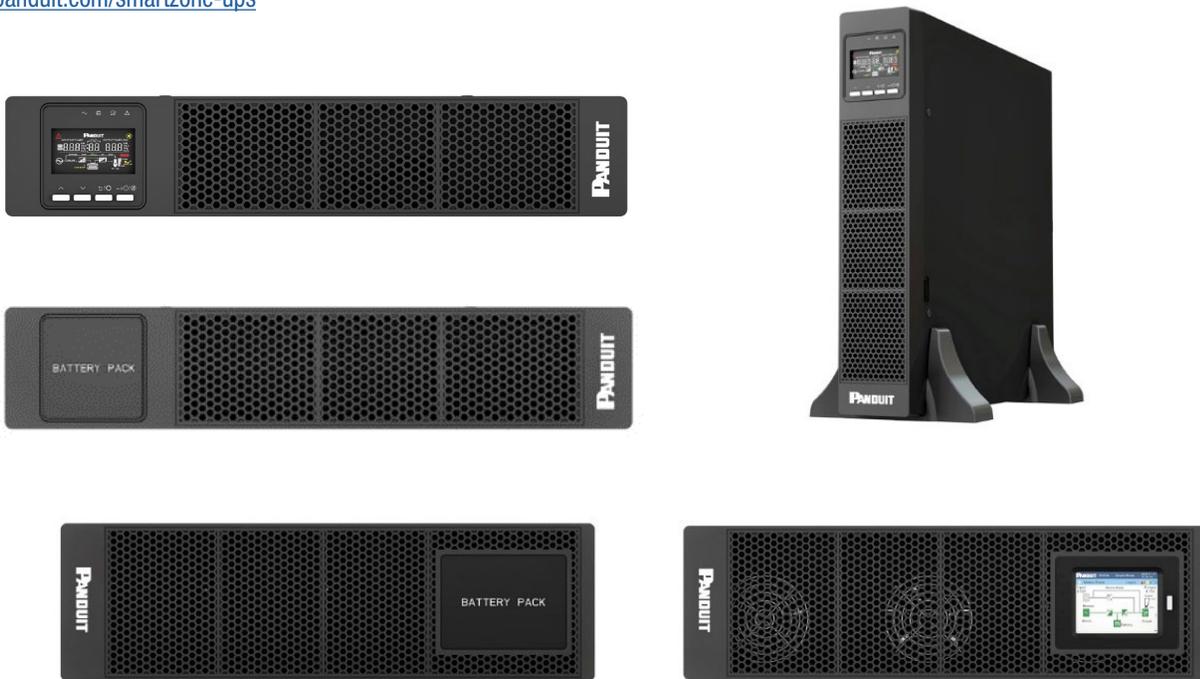
Uninterruptible Power Supply

SmartZone™ Uninterruptible Power Supply

The SmartZone™ Uninterruptible Power Supply delivers highly efficient and reliable power protection and backup power for your computer IT equipment. To continually meet the growing power demands of Data Center, Enterprise and Edge IT equipment, the SmartZone™ UPS provides excellent electrical performance, intelligent battery management, enhanced intelligent monitoring, secure network functions, and a long lifespan for lithium units. Additionally, they comply with ENERGY STAR® 2.0, EMC, and safety standards and has been integrated with the SmartZone™ Cloud Next Generation DCIM Solution.

- [Pocket Guide](#)
- [SmartZone™ UPS Online Catalog](#)
- [SmartZone™ UPS Replacement Batteries & Accessories](#)

> www.panduit.com/smartzone-ups



Power and Environmental Monitoring

SmartZone™ Cloud DCIM Software

SmartZone™ Cloud Software is Panduit's next generation DCIM solution. A true cloud-native platform, built from the ground up to take advantage of cloud flexibility and scalability as well as enhanced manageability, security, and operations ease of use and efficiency to manage Data Center, Enterprise, and Edge Infrastructures. Supports the management, monitoring, and alerting for power, cooling, environmental, IT, and connectivity.

Its secure cloud-based platform includes encryption on data at rest and in transit, two-factor authentication, fine-grained access control, security-focused development lifecycle, and harden with multiple industry-leading security scanning and assessment solutions designed to thoroughly analyze today's complex web applications and web services for security vulnerabilities.

Although SmartZone™ Cloud is agnostic and supports multiple vendor IT and facilities devices, it tightly aligns with Panduit [SmartZone™ G5 Intelligent PDU](#) and [SmartZone™ UPS](#) product lines, to visualize rack-level power, environment, and cabinet physical security access, enabling a single pane of glass to manage the entire data center infrastructure resources. In addition to floorplan layout and rack elevation, power path visualization enables operators to identify a single point of failure, reduce overprovisioning, and assess risk.

SmartZone™ Cloud is offered as a subscription base and it is licensed by the number of assets that are categorized between:

- [Power and Environmental Infrastructure Asset](#)
- [IT Infrastructure Asset](#)

> www.panduit.com/dcim

smartzone™ *cloud*



Pathway Products

The primary value of pathways in a data center is to provide functional, protective containment for the structured cabling infrastructure in an often-dense cabling environment. Pathways that are versatile and accessible accommodate data center growth and change and protect cables from physical damage. Well-designed cable pathways also strengthen the visual impact of your data center.

Panduit builds on years of experience as a leader in cable management, integrating best practices and application knowledge to develop highly reliable and efficient pathway solutions.

FiberRunner® Cable Routing System

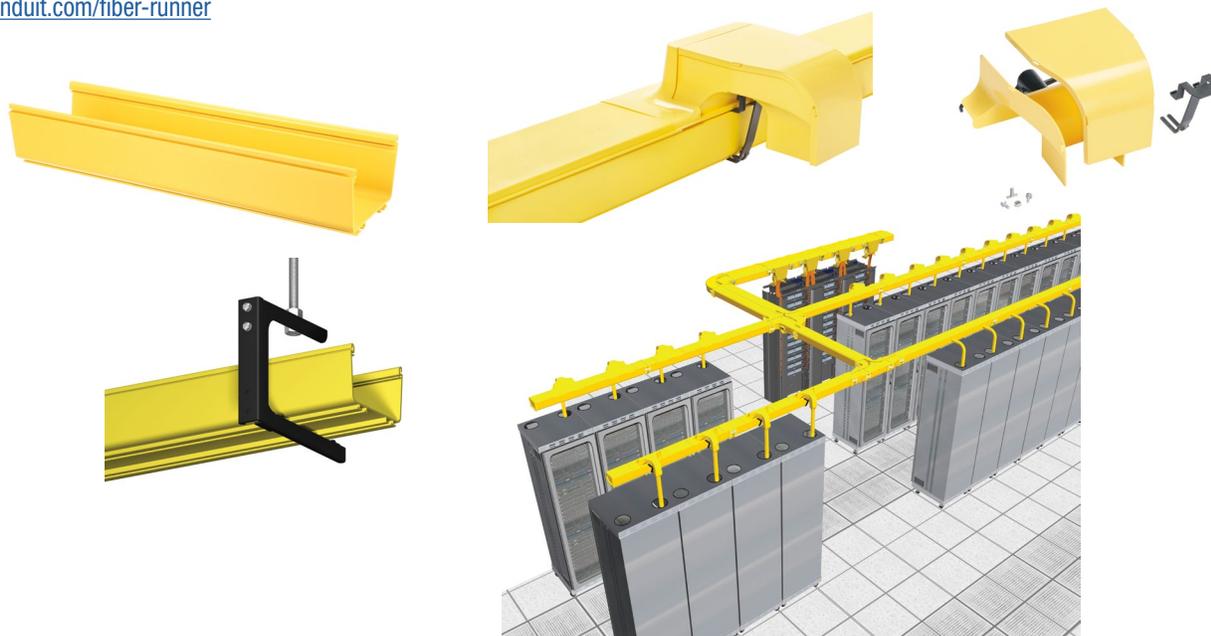
The FiberRunner® Cable Routing System is a system of channel, fittings, and brackets designed to segregate, route, and protect fiber optic and high-performance copper cabling. It is suited for data center applications where the cable is routed from distribution areas to equipment cabinets or racks. It is used in Telco Central Offices to route fiber optic jumper cables between fiber distribution frames and equipment bays. It can be deployed over the racks or in approved underfloor applications.

The FiberRunner® Cable Routing System integrates with a complete offering of Panduit Racks and Cable Management Systems to help manage higher cable densities as well as StructuredGround™ Systems designed to protect all elements of the data center.

The System is modular and includes the following product classes:

- Channels and Covers
- Fittings, Split Covers and Spillouts
- Mounting Brackets

> www.panduit.com/fiber-runner



Labeling and Identification

Panduit offers a complete solution for labeling and identification for infrastructure (cables, panels, racks, cabinets, and pathways); labels for active equipment (switches, servers, storage); labels for cooling pipe, electrical, and grounding systems; and floor grid markers, voltage markers, firestops, and other safety signage. Panduit enables users to follow the TIA/EIA-606-A standard for labeling and administration of structured cabling, and TIA-942 Annex B, which provides supplemental recommendations for data centers.

Panduit offers a variety of labeling systems (handheld printers and consumables) specifically to meet TIA-606 and TIA-942-B for easy field deployment of identification.

Panduit has full line printers to assist you with your labeling requirements and offers [a handheld selection guide](#) featuring:

- Labels, Markers & Printers
- Pre-Printed and Self-Laminating Write on Marker Books
- Safety & Identification Tape
- Signs & Accessories
- Sign & Label Printing Software

> www.panduit.com/signs-and-id



RapidID™ Network Mapping System

Keeping track of patch cord connections can be time-consuming and labor-intensive. Labeling, tracing, and troubleshooting are tedious, repetitive, and notoriously prone to human error. All this leads to wasted time, effort, and money.

The available solutions to address these issues are neither practical nor cost-efficient, until now. *RapidID* is a software-enabled network mapping system from Panduit, the leading provider of network infrastructure for smart, scalable, and efficient connectivity solutions.

For network engineers and data center managers, *RapidID* is a practical, affordable alternative to traditional manual approaches. It does not require special panels or cabling and is ideal for building a new telecom room, locating installed cabling, or replacing a network switch.

> www.panduit.com/rapidid



Power Safety Products

VeriSafe™ Absence of Voltage Tester (AVT)

VeriSafe™ is the first-of-its-kind voltage tester that determines the absence of voltage with just a push of a button. This 2021 NFPA 70E and CSA-Z462 compliant product automates the required six-step testing process in about ten seconds, enabling your plant to operate faster, safer, and more efficiently.

> www.panduit.com/verisafe

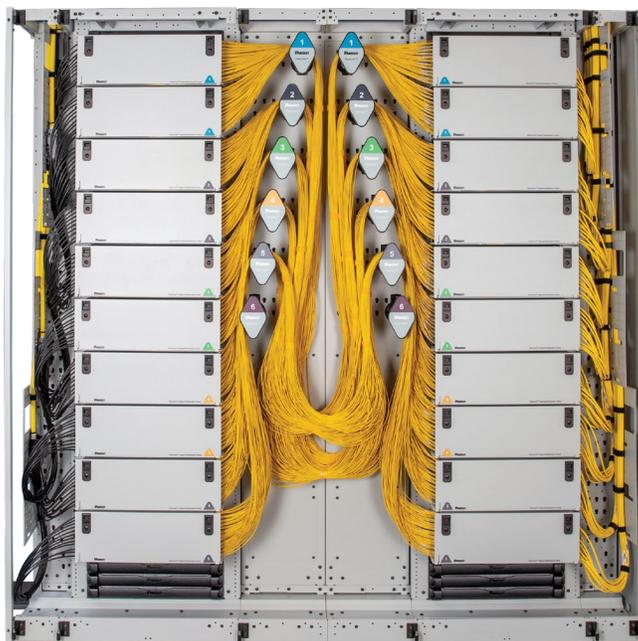


Optical Distribution Frames

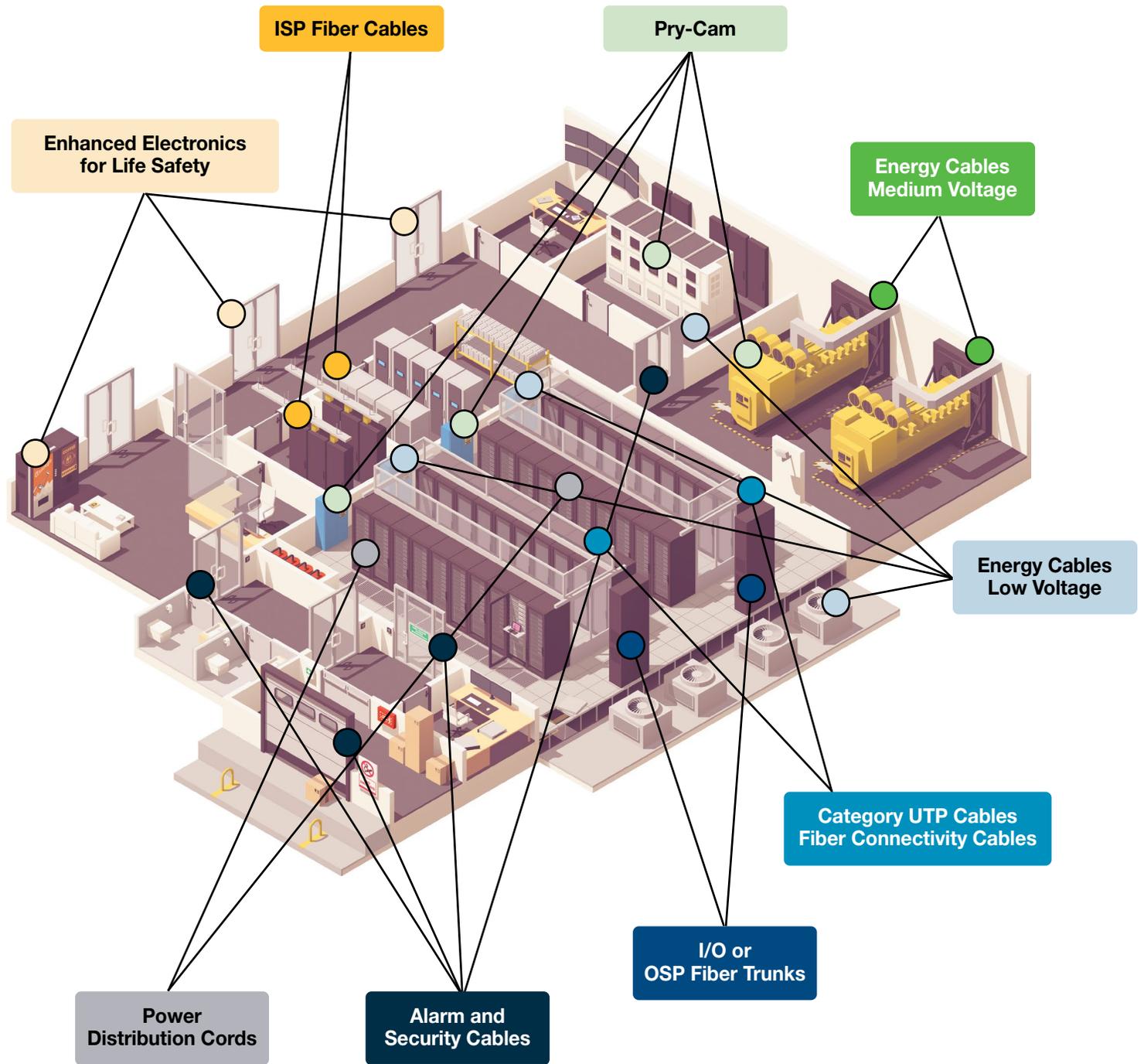
FlexCore™ Optical Distribution Frame

The FlexCore™ Optical Distribution Frame is a versatile front-access cabling system that provides the necessary protection for critical connections. Utilizing innovative cable management and simple, intuitive cable routing, the FlexCore™ ODF simplifies and reduces the time for moves, adds, and changes. With standard doors with locks and optional locks for each enclosure, the FlexCore™ ODF solution enables multi-tiered security that is important for multiple client access.

> www.panduit.com/flexcore



Prysmian Products



Category U/UTP Cables

Prysmian Group GenSPEED® Category Cables are robust, high-performance copper 4 pair cable, designed to meet and exceed the ANSI/TIA 568-D standards. The Prysmian Group's wide range of GenSPEED Category 6A and 6 copper cables will meet the most stringent demands and offer guaranteed performance. All products are designed to provide an optimized cabling infrastructure that exceeds all electrical parameters, delivering versatility to support the latest technologies.

GenSPEED® 10 MTP™ Gen 5 Category 6A Cable

GenSPEED 10 MTP unshielded twisted-pair (UTP), utilizes a variable laser cut tape to provide industry-leading protection from alien crosstalk with a guaranteed +8 dB of headroom over the ANSI/TIA 568.2-D standard. The smaller cable diameter allows for greater cable density, reducing cable management costs. Rated to 105°C GenSPEED 10 MTP is UL Listed CMP-LP (0.7A) and able to support up to 140 watts using 50 volts over all four pairs suitable for PoE applications.



GenSPEED® 10 UTP Indoor/Outdoor Plenum Category 6A Cable

This Category 6A product is intended for installation in below-grade conduit, duct, and other wet environments. Rated to 125°C GenSPEED 10 Indoor/Outdoor is UL Listed CMP-LP (0.8A) and able to support up to 160 watts using 50 volts over all four pairs suitable for PoE applications.



GenSPEED® 6000 Enhanced Category 6 Cable

Optimally balanced, GenSPEED 6000 utilizes an innovative cross-web design allowing for maximum pair separation. With performance guaranteed to 350 MHz, this product provides +5 dB of headroom over the ANSI/TIA 568.2-D standard for internal crosstalk. Rated to 105°C for greater protection against increased operating temperatures, GenSPEED 6000 is UL Listed CMP-LP (0.6A) and able to support PoE applications up to 120 watts using 50 volts over four pairs.



GenSPEED® 6 Category 6 Outside Plant Cable

This Category 6 cable has a gel-filled construction to prevent moisture migration in underground and wet applications. The cable features a wide operating temperature range of -45°C to +80°C for extreme weather environments.



Optical Fiber Cables

Prysmian Group offers a vast range of fiber cables in both Inside Plant (ISP) and Outside Plant (OSP) for a wide variety of applications.

Fiber Cables ISP – OSP

Prysmian Group's line of fiber optic cables is designed for voice, video and data for LAN, WAN, FTTx. The MassLink™ Fiber Cables are engineered for Data Center and Telecom Indoor and Outdoor applications with strand counts from 12 fiber to 6912 with our patented FlexRibbon™ fiber in industry-leading compact cable designs.



MassLink™ with FlexRibbon™ Technology

MassLink™ with FlexRibbon™ Technology provides an ultra-compact outside plant cable design that contains up to 1728 bend-insensitive fibers.



GenSPEED® Indoor Ribbon Central Tube Ribbon (RICT)

Central tube high count indoor ribbon cable is available with strand counts from 12 to 432f for riser rated, and 12 to 144f for plenum rated.



GenSPEED® Tight Buffered Indoor Riser-Plenum

Prysmian's GenSPEED Distribution cable family packages up to 144 color-coded 900µm tight-buffered fibers into a single flame-retardant cable. This cable design is available in both riser-rated and plenum-rated versions for deployment in any inside plant fire-code application.



Dry FusionLink™ Armored RICT Cable

Armored ribbon central tube (dry) cable has a compact design, dry water-blocking technology, ezPrep corrugated steel armor, flexible buffer tube and easily removable ribbon matrix.



FusionLink™ Armored RICT (Gel) Cable

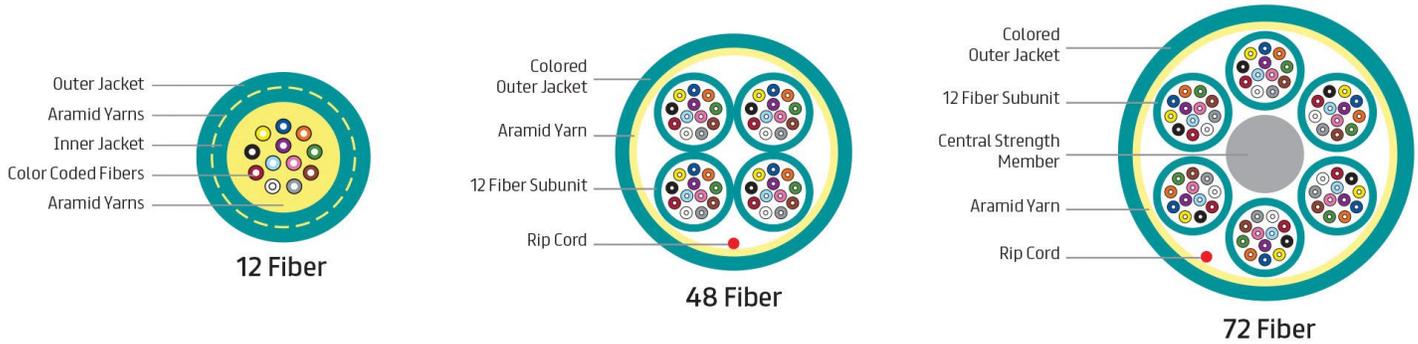
Ribbon central tube (gel) armored cable has a compact design, flexible buffer tube, all-dielectric strength elements and easily removable ribbon matrix.



Optical Fiber Cables

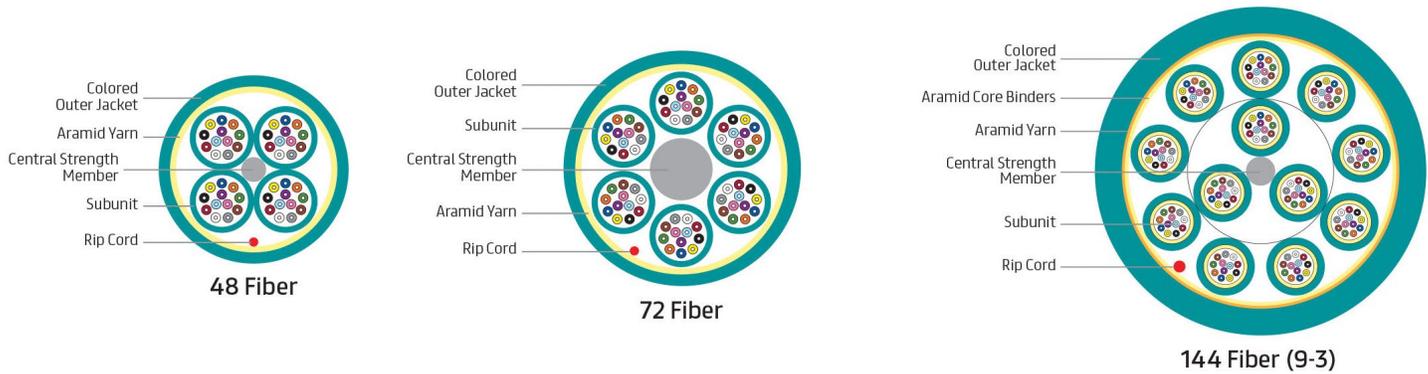
GenSPEED® Micro Fiber Cable (MFC) 3mm Plenum-Riser

Small diameter, highly flexible micro cable with 3mm units, available in 12 to 24f per subunit, with total count up to 72f.



GenSPEED® Micro Fiber Cable (MFC) 2mm Plenum

Small diameter, highly flexible micro cable with 2mm units, available in 8 or 12f per subunit, with total count up to 216f.



Industrial Cables

Prysmian Group is recognized worldwide for its leadership and breadth in power, control, and instrumentation cable products. These cabling solutions span a very broad range of manufacturing and industrial distribution applications. From 600V to 35kV, Prysmian Group offers the largest selection of constructions to meet your Industrial Cable needs.

Instrumentation Cable

Types TC Individual and Overall Shielded Pairs or Triads for 600 V applications.

[CVTC® XLPE/PVC, 600V Instrumentation, UL Type TC, POS - SPEC 2350](#)

[CVTC® XLPE/PVC, 600V Instrumentation, UL Type TC, SPOS - SPEC 2400](#)



Multi-Conductor Control & Power Cable

Type TC-ER cable to address stringent requirements in industrial operations. These constructions can be shielded or unshielded.

[VNTC® PVC/Nylon/PVC, 600V Control, UL Type TC-ER \(18-16 AWG\), E2CC - SPEC 4600](#)

[VNTC® PVC/Nylon/PVC, 600V Control, UL Type TC-ER \(14-10 AWG\), E2CC - SPEC 4650](#)

[VNTC® PVC/Nylon/PVC, 600V Control, UL Type TC-ER, Shielded E2CC - SPEC 4700](#)

[VNTC® - PVC/Nylon/PVC, 600V Power, UL Type TC-ER, M4CC - SPEC 4750](#)

[CVTC® XLPE/PVC, 600V Control, UL Type TC-ER, E2CC - SPEC 4500](#)

[CVTC® XLPE/PVC, 600V Power, UL Type TC-ER, M4CC - SPEC 4550](#)



Industrial Cables

Electrical Cables AC & DC

Prysmian Group provides high-quality copper and aluminum conductor electrical and battery cables for both commercial and industrial uses. These 600V and 2kV building wires consist of Types DLO, XHHW-2, THHN/THWN-2, and TFFN along with Canadian constructions such as RW90, RWU90, and T90. The offering includes high-quality Copper or Aluminum MC products, Canadian AC products & 48DC Battery Plant distribution using Locomotive products.

Prysmian's high-quality copper and aluminum building wire is manufactured in the U.S.

[STABILOY® Brand THHN/THWN-2 High Speed \(HS\) - SPEC 5290A](#)

[STABILOY® Brand XHHW-2 High Speed - SPEC 5180A](#)

[NUAL® Brand RW90 High Speed \(HS\) - SPEC 5500A](#)

[NUAL® Brand RWU90 High Speed \(HS\) - SPEC 5600A](#)



[THHN-THWN-2 High Speed - SPEC 5290](#)

[XHHW-2 CT High Speed - SPEC 5175](#)

[T90 High Speed \(HS\) - SPEC 5490](#)

[RW90 High Speed \(HS\) - SPEC 5510](#)

[RWU90 High Speed \(HS\) - SPEC 5610](#)



[Diesel Locomotive Cable \(DLO\) 2000 Volts \(EPR-XL-CPE\) - SPEC 5310](#)



[STABILOY® Brand MC \(Metal Clad\) Cable - SPEC 7500A](#)

[STABILOY® Brand MC \(Metal Clad\) Cable with PVC Jacket - SPEC 7510A](#)

[NUAL® Brand AC90 Cable - SPEC 8780A](#)

[NUAL® Brand ACWU90 Cable - SPEC 8790A](#)



Rubber and Industrial Cord Products

Prysmian Group is recognized worldwide for its leadership and breadth in power, control, and instrumentation cable products. These cabling solutions span a very broad range of manufacturing and industrial distribution applications. From 600V to 35kV, Prysmian Group offers the largest selection of constructions to meet your Industrial Cable needs.

[Carolprene® Jacketed Type SOOW UL-CSA](#)

[Super Vu-Tron® Multi-Conductor Type W Round](#)



Medium Voltage Cables

With a long history of manufacturing high-quality and reliable medium voltage cables, Prysmian Group has a large range of cable selections. Cable offerings include 5kV up to 35kV medium voltage cables in 1C or 3C constructions. Capabilities also include MV-105 cables with PVC, CPE or LSZH jackets. If needed, the medium voltage 3C cables can be armored. The MV-105 cable is offered with a copper or an aluminum conductor.

[Uniblend® PVC High Speed - SPEC 6355 15kV 133% Copper Conductor](#)

[Uniblend® PVC High Speed - SPEC 6555 35kV 100% Copper Conductor](#)

[Uniblend® PVC High Speed - SPEC 6655 35kV 133% Copper Conductor](#)



[Uniblend® PVC High Speed - SPEC 6360 15kV 133% Aluminum Conductor](#)

[Uniblend® PVC High Speed - SPEC 6560 35kV 100% Aluminum Conductor](#)

[Uniblend® PVC High Speed - SPEC 6660 35kV 133% Aluminum Conductor](#)



300V+ Power Cordage

Carolprene SJOOW UL Listed and CSA Certified for indoor and outdoor use featuring rubber jacket, excellent resistance to oil and moisture, high flexibility, good tensile strength, elongation and aging characteristics, high flexibility, excellent abrasion resistance, and TRU-Mark® sequential footage marking.



Electronic Wire & Cable Alarm & Security Solutions

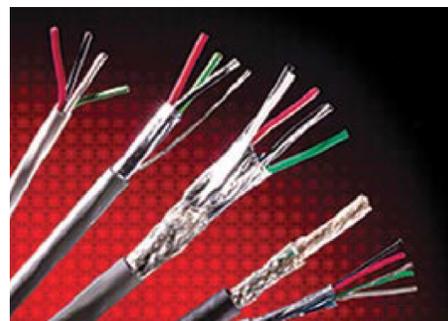
Electronic Wire & Cable Alarm & Security Solutions

Applications: Door Controllers, Prox Sensors, Key Pads, Card Readers, Gate Access, Annunciator Panels



105 C Enhanced Classics Electronics

With a full line available for signal & data transmission, security, fire alarm & life safety and communication & control, CAROL® wire & cable is the right solution for Electronics Applications. This enhancement will translate to the most durable, reliable and versatile products in the market.



Power Monitoring Solutions PRY-CAM

[PRY-CAM](#) is a breakthrough technology that allows online, accurate and reliable measurements of key parameters, diagnosis, and defect localization from remote. The data that we can gather are manifold: conditions of use, malfunctioning, overheating. All in real-time and with no specific expertise.

- REMOTE MONITORING
- DATA STORAGE AND PROTECTION
- REAL-TIME DATA PROCESSING & ANALYSIS

Prysmian Groups' two revolutionary technological platforms, PRY-CAM, and Multipurpose Monitoring System, offer the latest in-service capabilities for all electrical components including but not limited to cables, joints, terminations, etc.

Providing real-time feedback of all electrical assets from 3kV to 600kV, [PRY-CAM can analyze](#) a component's temperature profile, partial discharge, possible hot spots and load-increase capabilities. It also monitors and alerts you of other potential issues, including the possible presence of moisture inside the cable screen, strain, torsion, flooding, smoke and/or fire.





About Prysmian Group

Prysmian Group is world leader in the energy and telecom cable systems industry. With almost 140 years of experience, sales of over €11.5 billion, about 29,000 employees in over 50 countries and 112 plants, the Group is strongly positioned in high-tech markets and offers the widest possible range of products, services, technologies and know how. It operates in the businesses of underground and submarine cables and systems for power transmission and distribution, of special cables for applications in many different industries and of medium and low voltage cables for the construction and infrastructure sectors. For the telecommunications industry, the Group manufactures cables and accessories for voice, video and data transmission, offering a comprehensive range of optical fibers, optical and copper cables and connectivity systems.

Prysmian is a public company, listed on the Italian Stock Exchange in the FTSE MIB index. Additional information is available at prysmiangroup.com.

PRYSMIAN US/CANADA
na.prysmiangroup.com
Phone: +1.859.572.8000

PRYSMIAN HQ/EUROPE
Milan, Italy
prysmiangroup.com
Phone: +39.02.6449.1

PRYSMIAN ASIA
cn.prysmiangroup.com
Phone: +86.400.1011.831

PRYSMIAN APAC
prysmiancable.com.au
Phone: +61.1300.300.304

PRYSMIAN LATIN AMERICA
br.prysmiangroup.com
Phone: +55.15.3235.9000

For more information

Visit us at www.prysmiangroup.com

About Panduit

Since 1955, Panduit's culture of curiosity and passion for problem solving have enabled more meaningful connections between companies' business goals and their marketplace success. Panduit creates leading-edge physical, electrical, and network infrastructure solutions for enterprise-wide environments, from the data center to the telecom room, from the desktop to the plant floor. Headquartered in Tinley Park, IL, USA and operating in 112 global locations, Panduit's proven reputation for quality and technology leadership, coupled with a robust partner ecosystem, help support, sustain, and empower business growth in a connected world.

PANDUIT US/CANADA
Phone: 800.777.3300

PANDUIT EUROPE LTD.
London, UK
cs-emea@panduit.com
Phone: +44.20.8601.7200

PANDUIT SINGAPORE PTE. LTD.
Republic of Singapore
cs-ap@panduit.com
Phone: +65.6305.7575

PANDUIT JAPAN
Tokyo, Japan
cs-japan@panduit.com
Phone: +81.3.6863.6000

PANDUIT LATIN AMERICA
Guadalajara, Mexico
cs-la@panduit.com
Phone: +52.33.3777.6000

PANDUIT AUSTRALIA PTY. LTD.
Victoria, Australia
cs-aus@panduit.com
Phone: +61.3.9794.9020

For more information

Visit us at www.panduit.com

Contact Panduit North America Customer Service by email: cs@panduit.com
or by phone: 800.777.3300

THE INFORMATION CONTAINED IN THIS ARTICLE IS INTENDED AS A GUIDE FOR USE BY PERSONS HAVING TECHNICAL SKILL AT THEIR OWN DISCRETION AND RISK. BEFORE USING ANY PANDUIT OR PRYSMIAN PRODUCT, THE BUYER MUST DETERMINE THE SUITABILITY OF THE PRODUCT FOR HIS/HER INTENDED USE AND BUYER ASSUMES ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH. PANDUIT AND PRYSMIAN DISCLAIM ANY LIABILITY ARISING FROM ANY INFORMATION CONTAINED HEREIN OR FOR ABSENCE OF THE SAME.

All Panduit and Prysmian products are subject to the terms, conditions, and limitations of its then current Limited Product Warranty, which can be found at www.panduit.com/warranty and <https://na.prysmiangroup.com/media/information-center>

Prysmian
Group

©2022 Panduit Corp. ALL RIGHTS RESERVED. CPAG37--SA-ENG 7/2022
Prysmian Group ALL RIGHTS RESERVED PG Literature Form number: PNG-0016-B-0821

PANDUIT[®]

*All trademarks, service marks, trade names, product names, and logos appearing in this document are the property of their respective owners.