

Powered fiber solutions

Your network's smartest path to the edge





The future of your network is brightest at the edge.

From the core to the edge, your network is adding connected devices and new smart-building services all the time. The opportunities and efficiencies they offer speak for themselves—but, as they spread to locations both indoors and out, you're probably feeling the crunch caused by not having enough network access where it's needed.

You need a way to deliver higher bandwidth and greater wattage to reach those devices. CommScope solves these challenges with a complete range of powered fiber solutions designed for just the kind of high-demand powered devices that power smart networks in healthcare, hospitality, education, transportation and government environments, among others.

With CommScope powered fiber, you can drive more advanced devices closer to the network edge, indoors and out, so your facilities run smoothly and efficiently.



estimated to balloon nearly



Cisco Visual Networking Index: Forecast and Trends, 2017–2022



High-capacity data. High-wattage power.

CommScope's powered fiber solutions power your expanding network.

Network devices are popping up everywhere in buildings and across campuses—devices like small cell sites, Wi-Fi access points, IP cameras, building access and inventory controls, and countless others.

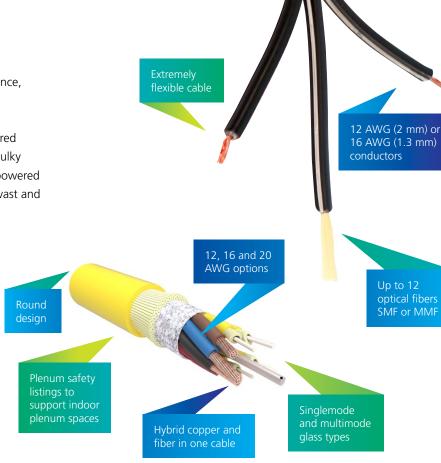
While these new applications that improve user connectivity, operational technology efficiency and property-wide safety and security, they also present you with a new and growing challenge: getting high-bandwidth data and power connectivity to every device in every location, indoors and out, with the low-latency performance needed to leverage edge network architecture.

CommScope's powered fiber solution makes it easy to meet those challenges in a single, easy-to-handle run, with options suited to weatherized outdoor deployments or plenum-rated indoor installations.

One cable run. Infinite possibilities.

The powered fiber solution combines high-performance, low-latency fiber-optic data connectivity with a copper low-voltage dc power connection. This enables the connection of any number of powered remote devices without the need for new conduit, bulky extra cable runs or expensive electricians. With the powered fiber cable solution, your network gains access to a vast and growing ecosystem of applications, including:

- · Optical LAN
- · Emergency Phones
- · HD security cameras
- · Digital signage
- · Wi-Fi access points
- · Small cells
- Or virtually any low-voltage dc powered device





PRACTICAL PERFORMANCE

CommScope's powered fiber solution combines singlemode or multimode fibers with electrical conductors in a single hybrid cable. This innovative solution delivers reliable fiberoptic signals to and from remote devices—along with low-voltage dc, which simultaneously powers them.



EASY DEPLOYMENTS

CommScope has merged flexible copper conductors with our high-performance, bend-tolerant fiber to make the cabling pliable and effortless to pull. Despite combining two cables into one, the powered system easily fits in standard conduit.



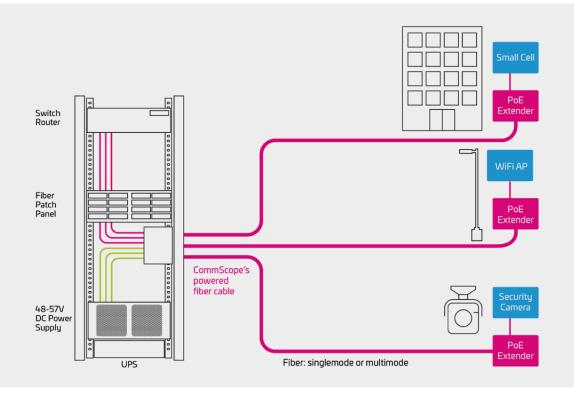
SIMPLE INSTALLATIONS

Used as part of a low-voltage SELV/NEC Class 2 circuit, CommScope's powered fiber solution simplifies the electrical design through use of the Powered Fiber Calculator. Installations will achieve cost reductions by eliminating the need for separate power distribution circuits.

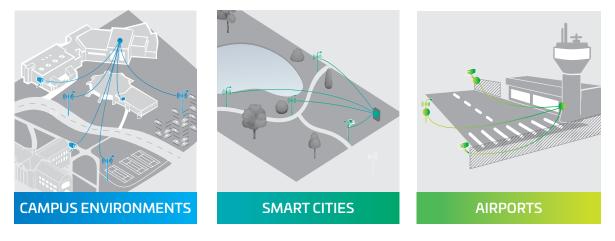
CommScope's powered fiber also reduces material costs for separate fiber and electrical cables, and slashes conduit costs in half, because the solution can be installed anywhere Category cables are installed.

Application overview

- · Complete power and data solution platform for IP devices
- · Low-voltage power provided by centralized source/backup UPS
- $\cdot\,$ One power supply can drive up to 32 devices simultaneously
- · Extends PoE distance up to three kilometers (at 15 watts)
- \cdot Low-cost installation and setup
- · Supports passive optical network (PON) applications
- Ideally suited to campus environments, airports, parking areas, stadiums, small cell base stations, fiber to the room and more



APPLICATION EXAMPLES

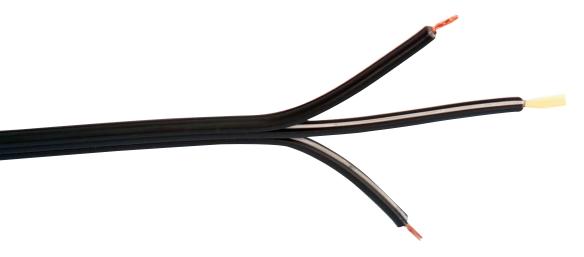


Ordering information

POWERED FIBER CABLE SYSTEM

- Outdoor and riser/LSZH, indoor/outdoor rated versions
- SELV and NEC Class 2 compliant
- Fast "banana peel" style cable access
- Utilizes globally existing, proven and inexpensive FTTH-style flat cable hardware

Part Number/ MID	Description
PFC-S02L12	Powered Fiber Cable, Indoor/Outdoor, OS2, 2 Fibers, 2 x 12 AWG Conductors
PFC-S02L16	Powered Fiber Cable, Indoor/Outdoor, OS2, 2 Fibers, 2 x 16 AWG Conductors
PFC-S02O12	Powered Fiber Cable, Outdoor, OS2, 2 Fibers, 2 x 12 AWG Conductors
PFC-S02O16	Powered Fiber Cable, Outdoor, OS2, 2 Fibers, 2 x 16 AWG Conductors
PFC-S04L12	Powered Fiber Cable, Indoor/Outdoor, OS2, 4 Fibers, 2 x 12 AWG Conductors
PFC-S04L16	Powered Fiber Cable, Indoor/Outdoor, OS2, 4 Fibers, 2 x 16 AWG Conductors
PFC-S04O12	Powered Fiber Cable, Outdoor, OS2, 4 Fibers, 2 x 12 AWG Conductors
PFC-S04O16	Powered Fiber Cable, Outdoor, OS2, 4 Fibers, 2 x 16 AWG Conductors
PFC-S12L12	Powered Fiber Cable, Indoor/Outdoor, OS2, 12 Fibers, 2 x 12 AWG Conductors
PFC-S12L16	Powered Fiber Cable, Indoor/Outdoor, OS2, 2 Fibers, 12 x 16 AWG Conductors
PFC-S12O12	Powered Fiber Cable, Outdoor, OS2, 12 Fibers, 2 x 12 AWG Conductors
PFC-S12O16	Powered Fiber Cable, Outdoor, OS2, 12 Fibers, 2 x 16 AWG Conductors
PFC-302L12	Powered Fiber Cable, Indoor/Outdoor, OM3, 2 Fibers, 2 x 12 AWG Conductors
PFC-302L16	Powered Fiber Cable, Indoor/Outdoor, OM3, 2 Fibers, 2 x 16 AWG Conductors
PFC-302012	Powered Fiber Cable, Outdoor, OM3, 2 Fibers, 2 x 12 AWG Conductors
PFC-302016	Powered Fiber Cable, Outdoor, OM3, 2 Fibers, 2 x 16 AWG Conductors
PFC-304L12	Powered Fiber Cable, Indoor/Outdoor, OM3, 4 Fibers, 2 x 12 AWG Conductors
PFC-304L16	Powered Fiber Cable, Indoor/Outdoor, OM3, 4 Fibers, 2 x 16 AWG Conductors
PFC-304O12	Powered Fiber Cable, Outdoor, OM3, 4 Fibers, 2 x 12 AWG Conductors
PFC-304O16	Powered Fiber Cable, Outdoor, OM3, 4 Fibers, 2 x 16 AWG Conductors



PLENUM ROUND POWERED FIBER CABLE

- Hybrid copper and fiber in one cable simplifies installation, saving material, labor costs, space and time
- Plenum safety listings to support indoor plenum spaces in hospitality, education, and campus installs within the building
- · Round design is installer friendly, and able to easily navigate pathways and tight spaces in the building
- Offered in 12, 16 and 20 AWG options to support specific distance and budget demands
- Both singlemode and multimode glass types are available; OS2, OM3 and OM4 to tailor the system to meet various customer applications









P-004-DS-HY-8W-F29Y-4x12AWG

P-002-DS-HY-5L or 5K-F29AQ-2x12AWG

P-002-DS-HY-8W-F29YL-2x12AWG

P-004-DS-HY-5L or 5K-F29AQ-4x12AWG

MID	Part Number	Description
12 AWG		
760250282	P-002-DS-HY-8W-F29YL/2X12AWG	Powered Fiber Cable, Plenum Indoor, OS2, 2 Fibers, 2 x12AWG Conductors
760250283	P-002-DS-HY-5L-F29AQ/2X12AWG	Powered Fiber Cable, Plenum Indoor, OM3, 2 Fibers, 2 x12AWG Conductors
760250284	P-002-DS-HY-5K-F29AQ/2X12AWG	Powered Fiber Cable, Plenum Indoor, OM4, 2 Fibers, 2 x12AWG Conductors
760250285	P-004-DS-HY-8W-F29YL/2X12AWG	Powered Fiber Cable, Plenum Indoor, OS2, 4 Fibers, 2 x12AWG Conductors
760250286	P-004-DS-HY-5L-F29AQ/2X12AWG	Powered Fiber Cable, Plenum Indoor, OM3, 4 Fibers, 2 x12AWG Conductors
760250287	P-004-DS-HY-5K-F29AQ/2X12AWG	Powered Fiber Cable, Plenum Indoor, OM4, 4 Fibers, 2 x12AWG Conductors
760250288	P-002-DS-HY-8W-F29YL/4X12AWG	Powered Fiber Cable, Plenum Indoor, OS2, 2 Fibers, 4 x12AWG Conductors
760250289	P-002-DS-HY-5L-F29AQ/4X12AWG	Powered Fiber Cable, Plenum Indoor, OM3, 2 Fibers, 4 x12AWG Conductors
760250290	P-002-DS-HY-5K-F29AQ/4X12AWG	Powered Fiber Cable, Plenum Indoor, OM4, 2 Fibers, 4 x12AWG Conductors
760250291	P-004-DS-HY-8W-F29YL/4X12AWG	Powered Fiber Cable, Plenum Indoor, OS2, 4 Fibers, 4 x12AWG Conductors
760250292	P-004-DS-HY-5L-F29AQ/4X12AWG	Powered Fiber Cable, Plenum Indoor, OM3, 4 Fibers, 4 x12AWG Conductors
760250293	P-004-DS-HY-5K-F29AQ/4X12AWG	Powered Fiber Cable, Plenum Indoor, OM4, 4 Fibers, 4 x12AWG Conductors
16 AWG		
760250294	P-002-DS-HY-8W-F18YL/2X16AWG	Powered Fiber Cable, Plenum Indoor, OS2, 2 Fibers, 2 x16AWG Conductors
760250295	P-002-DS-HY-5L-F18AQ/2X16AWG	Powered Fiber Cable, Plenum Indoor, OM3, 2 Fibers, 2 x16AWG Conductors
760250296	P-002-DS-HY-5K-F18AQ/2X16AWG	Powered Fiber Cable, Plenum Indoor, OM4, 2 Fibers, 2 x16AWG Conductors
760250297	P-004-DS-HY-8W-F18YL/2X16AWG	Powered Fiber Cable, Plenum Indoor, OS2, 4 Fibers, 2 x16AWG Conductors
760250298	P-004-DS-HY-5L-F18AQ/2X16AWG	Powered Fiber Cable, Plenum Indoor, OM3, 4 Fibers, 2 x16AWG Conductors
760250299	P-004-DS-HY-5K-F18AQ/2X16AWG	Powered Fiber Cable, Plenum Indoor, OM4, 4 Fibers, 2 x16AWG Conductors
760250300	P-002-DS-HY-8W-F18YL/4X16AWG	Powered Fiber Cable, Plenum Indoor, OS2, 2 Fibers, 4 x16AWG Conductors
760250301	P-002-DS-HY-5L-F18AQ/4X16AWG	Powered Fiber Cable, Plenum Indoor, OM3, 2 Fibers, 4 x16AWG Conductors
760250302	P-002-DS-HY-5K-F18AQ/4X16AWG	Powered Fiber Cable, Plenum Indoor, OM4, 2 Fibers, 4 x16AWG Conductors
760250303	P-004-DS-HY-8W-F18YL/4X16AWG	Powered Fiber Cable, Plenum Indoor, OS2, 4 Fibers, 4 x16AWG Conductors
760250304	P-004-DS-HY-5L-F18AQ/4X16AWG	Powered Fiber Cable, Plenum Indoor, OM3, 4 Fibers, 4 x16AWG Conductors
760250305	P-004-DS-HY-5K-F18AQ/4X16AWG	Powered Fiber Cable, Plenum Indoor, OM4, 4 Fibers, 4 x16AWG Conductors

PLENUM ROUND PFC CABLE CONTINUED

MID	Part Number	Description
20 AWG		
760250306	P-002-DS-HY-8W-F16YL/2X20AWG	Powered Fiber Cable, Plenum Indoor, OS2, 2 Fibers, 2 x20AWG Conductors
760250307	P-002-DS-HY-5L-F16AQ/2X20AWG	Powered Fiber Cable, Plenum Indoor, OM3, 2 Fibers, 2 x20AWG Conductors
760250308	P-002-DS-HY-5K-F16AQ/2X20AWG	Powered Fiber Cable, Plenum Indoor, OM4, 2 Fibers, 2 x20AWG Conductors
760250309	P-004-DS-HY-8W-F16YL/2X20AWG	Powered Fiber Cable, Plenum Indoor, OS2, 4 Fibers, 2 x20AWG Conductors
760250310	P-004-DS-HY-5L-F16AQ/2X20AWG	Powered Fiber Cable, Plenum Indoor, OM3, 4 Fibers, 2 x20AWG Conductors
760250311	P-004-DS-HY-5K-F16AQ/2X20AWG	Powered Fiber Cable, Plenum Indoor, OM4, 4 Fibers, 2 x20AWG Conductors
760250312	P-002-DS-HY-8W-F16YL/4X20AWG	Powered Fiber Cable, Plenum Indoor, OS2, 2 Fibers, 4 x20AWG Conductors
760250313	P-002-DS-HY-5L-F16AQ/4X20AWG	Powered Fiber Cable, Plenum Indoor, OM3, 2 Fibers, 4 x20AWG Conductors
760250314	P-002-DS-HY-5K-F16AQ/4X20AWG	Powered Fiber Cable, Plenum Indoor, OM4, 2 Fibers, 4 x20AWG Conductors
760250315	P-004-DS-HY-8W-F16YL/4X20AWG	Powered Fiber Cable, Plenum Indoor, OS2, 4 Fibers, 4 x20AWG Conductors
760250316	P-004-DS-HY-5L-F16AQ/4X20AWG	Powered Fiber Cable, Plenum Indoor, OM3, 4 Fibers, 4 x20AWG Conductors
760250317	P-004-DS-HY-5K-F16AQ/4X20AWG	Powered Fiber Cable, Plenum Indoor, OM4, 4 Fibers, 4 x20AWG Conductors

SURFACE MOUNT BOXES

- Supports structured cabling labeling and administration
- Protects your powered fiber cable and connections
- Provides a clean end point to terminate new indoor plenum powered fiber cables.
- Supports multigig Wi-Fi access points.
- Supports new and existing powered fiber cables

MID	Description
760248944	Kit, SMB, 1 Fiber Port, 1 Power Port, Beige
760248943	Kit, SMB, 1 Fiber Port, 1 Power Port, White
760248942	Kit, SMB, 1 Fiber Port, 1 Power Port, Black
760249095	Kit, SMB, 2 Fiber Ports, 2 Power Ports, Beige
760249094	Kit, SMB, 2 Fiber Ports, 2 Power Ports, White
760249093	Kit, SMB, 2 Fiber Ports, 2 Power Ports, Black





1 AND 2-PORT POE EXTENDERS

- IP68 sealing—Enclosures are designed for outdoor installations with protection from moisture and the environment
- Automatically corrects for distance voltage drop in the hybrid cable
- Integrated Electrical Protection
- 60W 2-port variant enables 2 PoE or PoE+ devices to be connected via one hybrid cable.
- 60W single port variation supports 802.3bt, Class 6 power levels.
 It can be equipped with SPF+ transceivers, and deliver 5 Gbps Ethernet over the copper port.

Part Number/MID	Description
PFU-P-C-O-060-02	60W, 2 Port PoE Extender*
PFU-P-E-O-060-01	60W, 1 Port 5 Gbps PoE Extender

*The 60W, 2-port PoE Extender provides a maximum of 30W on each port.

POWER EXTENDERS/FIBER PASS-THRU

- Provide the same power management and electrical protection benefits of the PoE Extenders.
- Designed to handle devices which require direct fiber input and DC power.
- IP68 sealing—Enclosures are designed for outdoor installations with protection from moisture and the environment

Part Number/MID	Description
PFU-48-C-O-060-01	Power extender fibre pass through 48VDC
PFU-12-C-O-060-01	Power extender fibre pass through 12VDC





PFU-48-C-O-060-01

POWER SUPPLIES

• 57VDC Power Supply for use with Powered Fiber Cable System

Part Number/MID	Description
PFP-PX-S1	Power Express Distribution shelf with alarm module
PFP-PX-8M	Power Express Distribution module supports max. 8 Devices
PFP-PX-SF	Power Express Blank Slot Panel
PFP-SPS-S1	SPS Rectifier Power Distribution Shelf
PFP-SPS-1600M	1600W SPS Power Rectifier module
PFP-SPS-C1	SPS Rectifier Controller Display
PFP-SPS-SF	SPS Rectifier Blank Slot Panel





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