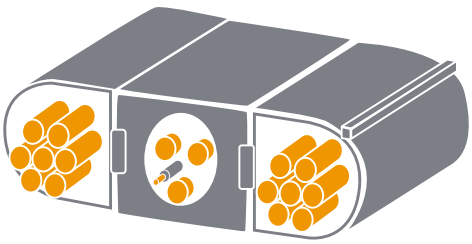


POWERED FIBER CABLE SYSTEM

COMPLETE “RACK TO DEVICE” SOLUTION FOR POWERING AND COMMUNICATING WITH HD CAMERAS, WI-FI HOTSPOTS, SMALL CELL AND OTHER NETWORK DEVICES.

TE connectivity

POWER & COMMUNICATE WITH NETWORK DEVICES SIMULTANEOUSLY

IDEAL FOR WI-FI ACCESS POINTS, HD CAMERAS, ONT'S AND SMALL CELL DEVICES

- **30X THE DISTANCE OF POE**
- **REDUCE LANDLORD/UTILITY NEGOTIATIONS**
- **ELIMINATE LOCAL POWER SOURCES**
- **CENTRALLY LOCATED UPS**
- **SELV AND NEC CLASS II COMPLIANT**

POWERED FIBER CABLE SYSTEM WITH INTEGRATED POWER MANAGEMENT AND MEDIA CONVERSION

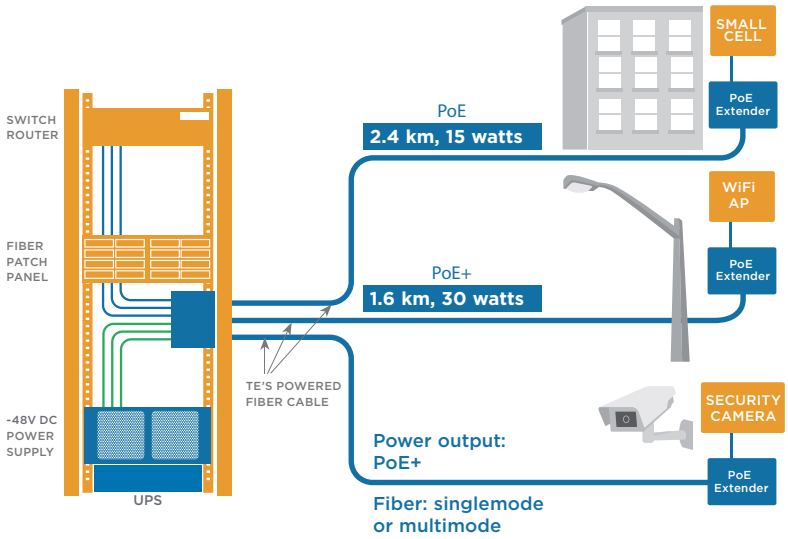
Applications include a variety of devices requiring optical communications & DC power

- HD surveillance cameras
- Wi-Fi access points
- Small cells
- PoLAN
- PoE or PoE+ extension
- Digital signage

DATA RATE AND POWER LIMITATIONS OF POWER OVER ETHERNET (PoE, PoE+)

TE's powered fiber cable systems can deliver Power over Ethernet at up to 30 times the distance of a CAT cable system.

SYSTEM OVERVIEW



POWERED FIBER CABLE SYSTEM

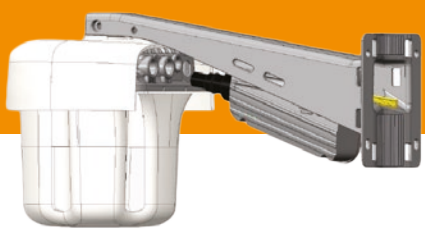
- Greatly speeds up planning by eliminating DC electrical calculations for voltage/power drop over varying distances
- Up to 32 devices simultaneously from one power supply
- Carrier grade electrical protection
- NEC Class II and SELV compliant
- Allows for placing devices exactly where they are needed to maximize coverage

GOAL

A hybrid copper/fiber system that installs like a “long extension cord”

SYSTEM ELEMENTS

- Hybrid Cable
- PoE Extender
- Safety & Overload Protection
- Cable/Fiber Management
- Power Transmission Management
- Power Supply (PSU)



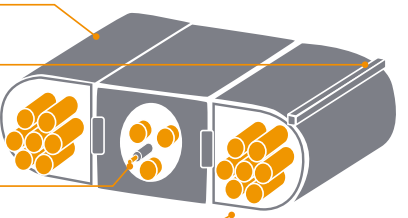
SYSTEM PARTNERSHIPS

The PoE Extender can power and communicate with any PoE+ device, however it has been designed to integrate seamlessly with specific network access device brackets. Contact your account representative for additional information.

THIS ALLOWS FOR “HIDING” THE PoE EXTENDER FOR DEMANDING AESTHETIC SITUATIONS

POWERED FIBER OPTIC CABLE

- 12 AWG OR 16 AWG CONDUCTORS
- PHYSICALLY IDENTIFIABLE POLARITY
- UP TO 12 OPTICAL FIBERS
  SMF OR MMF
- EXTREMELY FLEXIBLE CABLE DUE TO THE
  USE OF SPECIAL STRANDED CONDUCTORS



ONE CABLE, MANY OPTIONS

Single hybrid copper/fiber cable design for simplified cable field access.

- Designed for “easy peel” cable access – the cable can be accessed much faster than traditional hybrid cables
- No special tools needed – one ordinary wire strip tool accesses both the optical fiber and conductor elements
- Utilizes globally existing, proven and inexpensive FTTH style flat cable hardware
- Outdoor and Riser/LZSH indoor/outdoor rated versions

PoE EXTENDER

SOLVES POWER & COMMUNICATION CHALLENGES

- Termination for hybrid cable input
- Environmentally sealed closure
- Circuit protection electronics
- Electrical power management
- Media conversion
- 1 PoE+ output
- Fits in one hand

3 LEVELS OF ELECTRICAL PROTECTION

1 PRIMARY

GDT component rated to 40kA surge protection

2 SECONDARY

MOV components rated to 4.5kA

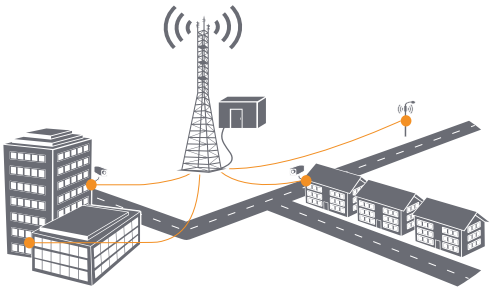
3 TERTIARY

TVS prevents the voltage from rising above 80-100V

POWER MANAGEMENT

- Reduces the need for electrical “system design” by automatically correcting for voltage drop over distance
- Optical signal and power in is converted to CAT5 PoE+ compliant jack

APPLICATION EXAMPLES



CELL SITE BASE STATION

REACH TYPICAL DEVICES SUCH AS CAMERAS, OUTDOOR WI-FI HOTSPOTS, SMALL CELLS

- Security camera(s) on street corners and in commercial areas
- Wi-Fi for data offload
- Small cell for poor coverage areas

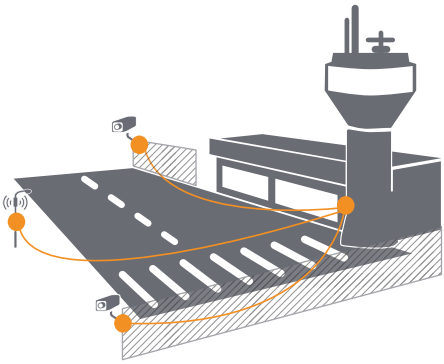
PSU CO-LOCATED AT BASE STATION WHERE POWER AND FIBER NETWORK ARE AVAILABLE

CAMPUS ENVIRONMENT

INDOOR/OUTDOOR CABLE CAN BE ROUTED INSIDE BUILDINGS AND THEN TRANSITION TO OUTSIDE AND UNDERGROUND APPLICATIONS

- Security camera(s) on lamp posts and in parking areas
- Wi-Fi hotspots for data offload
- Small cells for poor coverage areas

PSU LOCATED IN TELECOM CLOSET OR DATA CENTER, WHERE POWER AND FIBER NETWORK ARE AVAILABLE



AIRPORT SURVEILLANCE CAMERAS

SYSTEM CAN ALSO SUPPORT OUTDOOR HOTSPOTS FOR AIRPORT EMPLOYEE PROPRIETARY DEVICE APPLICATIONS (SECURITY, DATA COLLECTION, ETC.)

- PE outdoor rated cable can be direct buried, duct installed, etc.

PSU LOCATED IN TELECOM CLOSET OR DATA CENTER, WHERE POWER AND FIBER NETWORK ARE AVAILABLE

TE CONNECTIVITY BROADBAND NETWORK SOLUTIONS
REGIONAL SALES HEADQUARTERS:

North America
Greensboro, NC, USA
Ph: +1-800-553-0938
Fx: +1-717-986-7406

Latin America
Buenos Aires, Argentina
Ph: +54-11-4733-2200
Fx: +54-11-4733-2282

Europe
Kessel-Lo, Belgium
Ph: +32-16-35-1321
Fx: +32-16-35-2188

Mid East & Africa
Cergy-Pontoise, France
Ph: +33-1-3420-2122
Fx: +33-1-3420-2268

Asia
Hong Kong, China
Ph: +852-2735-1628
Fx: +852-2735-1625

Pacific
Sydney, Australia
Ph: +61-2-9554-2600
Fx: +61-2-9554-2519

Additional Information

For more information on TE Connectivity's Powered Fiber Cable Systems visit
www.te.com/PoweredFiber

te.com

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