Powered Fiber Optic Cable
Component of CommScope’s Powered Fiber Cable System

The powered fiber optic cable is a component of CommScope’s powered fiber cable system, a hybrid optical fiber/copper cable system for remote powering of network access devices. The cable combines electrical power conductors and optical fiber into one convenient package to speed installations and simplify power and communications delivery to devices.

When used along with the PoE extender, the powered fiber optic cable can supply optical fiber communications and PoE+ power at distances greater than 1km for network access and other low voltage DC devices such as small cells, ONT’s, digital signage, HD security cameras, etc. This can be achieved with the full system while staying within NEC Class II and SELV requirements. Because these devices can be powered from remote locations, the need for negotiations between installers and local land owners, such as landlords, is greatly reduced. See the powered fiber cable system application note and PoE Extender product sheet for more details.

The cable may also be used as a “standalone” hybrid cable for delivering power and fiber communications for a variety of applications where both power and optical fiber communications is required. Higher power and longer distances may also be supported by the cable. Please consult your CommScope representative for assistance in utilizing the cable for such applications.

Features:

- 250µm coated reduced bend radius fiber
- Singlemode (G657 A2)
- Easy peel, stranded conductors for maximum cable flexibility and rapid access
- Riser/LSZH jacket for indoor/outdoor application or Polyethylene for duct or direct buried applications
- “Polarization” indentation along one side of the cable for polarity identification
- No special tools or mounting hardware required - utilizes standard “FTTH” pressure clamp style hardware for aerial installation.
- One standard wire stripper is the only tool needed to access the cable – both fiber and conductor elements
- Cable can easily split into three separate sections for separate routing in closures, as needed for installation

For more information, visit commscope.com
## Powered Fiber Optic Cable
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### Ordering Information

<table>
<thead>
<tr>
<th>Optical Fiber Type</th>
<th>PFC - X X X X X X - X X X X M</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Singlemode (RBR) G657.A2/B2</td>
</tr>
<tr>
<td>3</td>
<td>Multimode OM3 (RBR)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 02</td>
<td>1000 meters</td>
</tr>
<tr>
<td>04 04</td>
<td>2000 meters</td>
</tr>
<tr>
<td>12 12</td>
<td>4000 meters</td>
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</table>

<table>
<thead>
<tr>
<th>Jacket Type</th>
<th>Conductor Gauge in AWG</th>
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</thead>
<tbody>
<tr>
<td>L Indoor/outdoor application rated Riser/LSZH</td>
<td>12</td>
</tr>
<tr>
<td>O Outdoor application only Polyethylene</td>
<td>16</td>
</tr>
</tbody>
</table>

### Specifications

#### Environmental Characteristics

- **Storage Temperature:** -40° to 70°C
- **Operating Temperature:** -40° to 70°C
- **Installation Temperature:** -10° to 60°C

#### Tensile Load

- **Short Term:** 440 N
- **Long Term:** 132 N

#### Preferred Axis Bend Radius mm (in.)

- **Installed:** 30 mm (1.2 inches)
- **Loaded:** 50 mm (2.0 inches)

#### Impact (N-m)

- **EIA/FOTP-25C:** 4.4 N-m

#### Crush (N/mm)

- **EIA/FOTP-41A:** 2200 N/mm

#### Optical Performance (db/km)

- **Singlemode Reduced Bend Radius Fiber:** 0.35/0.25 (1310/1550 nm)

### Compliances

- RoHS (2002/95/EC)
- REACH SVHC, 53 6/20/11
- California Prop 65 for safe drinking water and toxic enforcement act
- Telcordia GR-20-CORE Issue 3 May 2008, EIA/TIA FOTPS
- EIA/TIA 568-B
- DecaBDE free
- Power limited circuit cable UL 13 (CL2R-OF AND CL3R-OF)
- Communication cable per UL 444 (CMR-OF)
- UL 1666 standard for test for flame propagation · Edition 5 · Revision date 2012/06/27
- IEC 60332-1-1, -2, 60332-3-24 Cat. C, 61034 60745-2

### Table: Dimensions and Weight

<table>
<thead>
<tr>
<th>Conductor Size (AWG)</th>
<th>Width</th>
<th>Height</th>
<th>Weight (Nominal)</th>
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<tbody>
<tr>
<td>16</td>
<td>10.9</td>
<td>4</td>
<td>70</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>4.5</td>
<td>110</td>
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</table>

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