

# CRESFIBER8G-SM-P

## CresFiber® 8G Single-Mode Fiber Optic Cable, plenum

High-performance CresFiber® 8G SM is single-mode step-index fiber optic cable engineered by Crestron® to support long-distance DigitalMedia™ cable runs in large buildings, campuses, and municipalities. When used with DigitalMedia 8G™ Single-Mode Fiber (DM 8G® SMF) devices, CresFiber 8G SM guarantees consistent performance over cable runs up to 12 km (7.5 miles).<sup>[1]</sup> It is tested to wavelengths up to 1550 nm and meets the requirements of ITU-T G.652.D.

CresFiber 8G SM provides two individually jacketed fiber strands in a composite side-by-side “zip-cord” construction. This duplex configuration affords a complete DM 8G SMF solution with send and return channels in one cable. It is also ideal for individual DM 8G SMF wire runs where a spare backup fiber strand is desired. Zip-cord cable construction helps simplify termination, eliminating any need for a separate breakout assembly or intermediary splice.

CresFiber 8G SM is plenum-rated for use in an environmental air-handling space. It is sold in 2 km (6561 ft) spools. Meter markers are printed on the outer jacket making it easy to determine the exact length of each cable run when commissioning the installed system. Termination of CresFiber 8G SM cable can be accomplished using Crestron [CRESFIBER8G-SM-CONN-LC-12](#) connectors and the [CRESFIBER-TK](#) termination kit.



## SPECIFICATIONS

### Single-Mode Fiber Strands (x2)

**Fiber Core:** Type: Single-mode step-index<sup>[2]</sup>;  
Cladding Diameter: 125.0  $\mu\text{m}$   $\pm 0.7$   $\mu\text{m}$ ;  
Primary Coating Diameter: 245  $\mu\text{m}$   $\pm 7$   $\mu\text{m}$ ;  
Cable Cutoff Wavelength: <1260 nm;  
Mode Field Diameter: 9.0  $\mu\text{m}$   $\pm 0.4$   $\mu\text{m}$  @ 1310 nm, 10.1  $\mu\text{m}$   $\pm 0.5$   $\mu\text{m}$  @ 1550 nm;  
Maximum Attenuation: 0.40 dB/km @ 1310 nm, 0.30 dB/km @ 1550 nm;  
Temperature Dependence:  $\leq 0.05$  dB/km @ -76° to 185° F (-60° to 85° C);  
Zero Dispersion Slope: 0.090 ps/(nm<sup>2</sup>-km);  
Maximum PMD Link Design Value<sup>[3]</sup>: 0.06 ps/ $\sqrt{\text{km}}$ ;  
Group Refraction Index: 1.467 @ 1310 nm, 1.468 @ 1550 nm;  
Proof Test: 100 kpsi

**Buffer:** Type: Tight;  
Diameter: 900  $\mu\text{m}$  nominal;  
Colors: Blue, Orange

**Strength Member:** Material: Aramid yarns

### Outer Jacket

**Construction:** Parallel extruded “zip-cord” composite  
**Material:** Low-smoke PVC  
**Outer Diameter:** 0.114 x 0.235 inch (2.9 x 6.0 mm) nominal  
**Color:** Yellow w/black text

### Mechanical

**Maximum Tensile Load:** 225 lbf (1000 N) for installation, 112 lbf (500 N) long-term  
**Minimum Bend Radius:** 10x outer diameter, unloaded  
**Crush Resistance (EIA 455-41):** 100 N/cm  
**Impact Resistance (EIA 455-25):** 25 impacts minimum  
**Flexing,  $\pm 90^\circ$  (EIA 455-104):** 25 cycles minimum

### Environmental

**Operating Temperature:** -4° to +185°F (-20° to +85°C)  
**Installation Temperature:** +32° to +167°F (0° to +75°C)  
**Storage Temperature:** -40° to +185°F (-40° to +85°C)

### Weight

12 lb/1000 ft (18 kg/km) nominal

### Rating

OFNP C(ETL)US

## MODELS & ACCESSORIES

### Available Models

**CRESFIBER8G-SM-P-SP2KM:** CresFiber® 8G Single-Mode Fiber Optic Cable, plenum, 2 km spool

### Available Accessories

**CRESFIBER8G-SM-CONN-LC-12:** CresFiber® 8G Single-Mode Fiber Optic Cable Connector, LC, 12-Pack

**CRESFIBER-TK:** CresFiber® Termination Kit (AFL Telecommunications™)

### Notes:

1. Please consult the spec sheet for each product in your system to verify compatibility and wire distance limitations.
2. According to ITU-T G.652.D.
3. According to IEC 60797-3, Ed 3(Q+0.01%).
4. Must be the temperature of the cable.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at [www.crestron.com/salesreps](http://www.crestron.com/salesreps) or by calling 800-237-2041.

Specifications subject to change without notice. Crestron is not responsible for errors in typography or photography.

The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

CresFiber, Crestron, DigitalMedia, DigitalMedia 8G, DM 8G, and the Crestron logo are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. AFL Telecommunications is either a trademark or registered trademark of AFL Telecommunications LLC in the United States and/or other countries. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. ©2012 Crestron Electronics, Inc.