

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).^[1] 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^[2];
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: ≤ 0.05 dB/km @ -76° to 185° F (-60° to 85° C);
Zero Dispersion Slope: 0.090 ps/(nm²·km);
Maximum PMD Link Design Value^[3]: 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 μm 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 or by calling 800-237-2041.

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

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