

SPECIALTY SINGLE-MODE FIBER

Specification Sheet

ClearLite Specialty Coated Photonic Fibers

CL POLY 1310 21 and CL POLY 1550 17



Leading Optical Innovations

Product Description

Designed for performance in exceptional environments, OFS offers two PYROCOAT polyimide coated, high NA fibers, one operating at 1550 nm and the other at both 1310 and 1550 nm.

PYROCOAT polyimide allows wide temperature performance of -65 to +300°C. Polyimide is a thin coating and is applied to a thickness of only 15 µm on a 125 µm cladding. This gives a coated fiber outer diameter (OD) of 155 µm, as opposed to a standard 250 µm OD for dual acrylate coatings. The thin coating coupled with the high NAs of 0.17 and 0.21 allow these fibers to have excellent bend performance.

Typical Applications

- Military applications
- Oil and gas applications
- High-temperature environments
- High application stress and tight coil applications

Features and Benefits

- Temperature performance of -65 to +300°C continuous operation
- Thin-coated fiber diameter (155 µm) for smaller packages

Related Products & Capabilities

- Also available with a base carbon coating in 80 µm cladding . . . See ClearLite Micro photonic fibers.
- See other available ClearLite fibers for use at 1310 and/or 1550 nm.

Ask us about options available for these fibers:

- Cabling**
- Connectorization**
- Metalization**
- Additional Coatings**
- Other Upgrades**

To order items on this spec sheet, please contact our facility in:

- Avon, Connecticut
1-860-678-0371
1-888-438-9936 toll free
(USA and Canada only)
Fax 1-860-674-8818
- or by email inquiry to:
Info@SpecialtyPhotonics.com

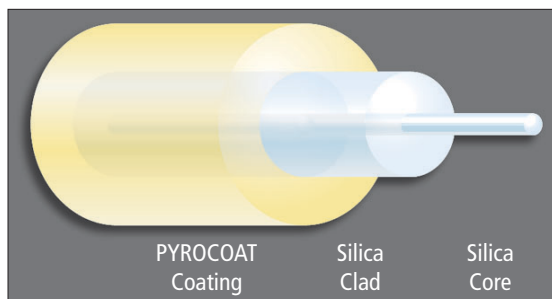


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OFS Specialty Photonics Division

55 Darling Drive, Avon, CT 06001
25 Schoolhouse Road, Somerset, NJ 08873
Priorparken 680 DK-2605 Broendby, Denmark

www.SpecialtyPhotonics.com



Drawing not to scale

Fiber Specifications

Optical Properties	CL POLY 1310 21	CL POLY 1550 17
Operating wavelength	1310/1550 nm	1550 nm
Cutoff wavelength	≤1290 nm	≤1500 nm
Mode field diameter @ 1310 nm	5.1 ± 0.5 μm	n/a
Mode field diameter @ 1550 nm	5.8 ± 0.5 μm	7.5 ± 0.5 μm
Attenuation @ primary operating wavelength	≤0.70 dB/km	≤0.70 dB/km
Numerical aperture (nominal)	0.21	0.17
Dimensions/Geometric Properties		
Core diameter (nominal)	4.6 μm	6.5 μm
Clad diameter	125 ± 2 μm	125 ± 2 μm
Coating/buffer diameter	155 ± 5 μm	155 ± 5 μm
Clad non-circularity	≤2.0%	≤2.0%
Core/clad concentricity	≤1.0 μm	≤1.0 μm
Coating/Buffer Descriptions		
Coating material	PYROCOAT	PYROCOAT
Operating temperature	-65 to +300°C	-65 to +300°C
Mechanical and Testing Data		
Short-term bend radius	≥10 mm	≥10 mm
Long-term bend radius	≥17 mm	≥17 mm
Proof test level	≥100 kpsi (1.38 GPa)	≥100 kpsi (1.38 GPa)
Product Description Code	SMB-G1310H	SMB-E1550H
Order by Part Number	BF06160-02	BF06158-02

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