

80 μm Polarization Maintaining 980 nm Telecommunication Fibers



Coherent's Polarization Maintaining Telco fibers are designed for today's most advanced networks. Optimized for use at 980 nm, these fibers are used in all PM applications for data and telecom. Coherent has applied its unique manufacturing facility and capabilities to this product area and has established leading optical, mechanical and geometrical tolerances. The 80 μm version of our fiber offers low bend loss and extinction ratios at small bend diameters enabling our customers to reduce package sizes. Available with a 165 micron coating diameter and proof tested to 200 kpsi, Coherent's 80 μm PM fibers will meet the demands of all current and future applications.

Typical Applications

- Pump pigtails
- Grating stabilizers
- PM patchcords
- Polarization sensitive devices

Features & Benefits

- Smaller 80 μm form factor — Reduced component sizes
- Tight specifications — Highly deterministic results, highest product yield
- High fatigue failure resistance — Longest service life
- All fiber proof tested to > 200 kpsi — Critical for ensuring long term reliability

Optical Specifications

Operating Wavelength	960 – 1550 nm
Core NA	0.130
Mode Field Diameter	6.0 \pm 0.5 μm @ 980 nm
Cutoff	910 \pm 40 nm
Core Attenuation	\leq 2.0 dB/km @ 1060 nm \leq 2.5 dB/km @ 980 nm
Beat Length	\leq 2.6 mm @ 980 nm
Normalized Cross Talk	\leq - 40.0 dB at 4 m @ 980 nm \leq - 30.0 dB at 100 m @ 980 nm

PM980-XP-80

Geometrical & Mechanical Specifications

Cladding Diameter	80.0 \pm 1.0 μm
Core Diameter	5.0 μm
Coating Diameter	165.0 \pm 10.0 μm
Coating Concentricity	< 5.0 μm
Core/Clad Offset	\leq 0.50 μm
Coating Material	Acrylate
Operating Temperature Range	-40 to 85 $^{\circ}\text{C}$
Proof test Level	\geq 200 kpsi (1.4 GN/m ²)



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www.coherent.com ; www.shop.coherent.com • Coherent products are manufactured under an ISO 9001:2008 certified quality management system.



Custom developed fiber (FUD) specifications are subject to change without notice. Other configurations such as alternative form factors, optimized cut-off and UV cured color coating may be available. Let us know how Coherent can assist with your requirements.

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