



Description

Thorlabs' polarization-maintaining fibers, designed for use from 1440 to 1625 nm, are optimized for data and telecoms applications where ultra-low attenuation over long distances, resistance to radiation-induced damage, and color center formation are critical.

PM1550-HP

Specifications

Geometrical & Mechanical	
Core Diameter	8.5 μm
Cladding Diameter	125 \pm 2 μm
Coating Diameter	245 \pm 15 μm
Core-Clad Offset	<0.5 μm
Coating Concentricity	\leq 5 μm
Coating Material	UV Cured, Dual Acrylate
Operating Temperature	-40 to 85 $^{\circ}\text{C}$
Proof Test Level	200 kpsi (1.4 GN/m ²)



Optical	
Numerical Aperture	0.13
Attenuation	<1 dB/km @ 1550 nm
Operating Wavelength	1440 - 1625 nm
Second Mode Cut-off	1370 \pm 70 nm
Mode Field Diameter (1/e ² fit - near field)	10.5 \pm 0.8 μm @ 1550 nm
Beat Length	\leq 5 mm @ 1550 nm
Normalized Cross Talk	\leq -40 dB @ 4 m \leq -30 dB @ 100 m (nominal)