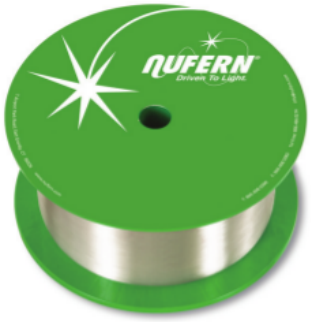
Polarization Maintaining Telecommunication Fibers



The breadth of Nufern's range of Polarization Maintaining fibers is unrivaled. Designed for use from 980 to 1620 nm, these fibers are used in all PM applications for data and telecom. Nufern has applied its unique manufacturing facility and capabilities to this product area and has made substantial optical, mechanical and geometrical tolerance improvements. Furthermore, higher strength and fatigue failure resistance allows customers to achieve more uniform product results and to attain the highest possible manufacturing yields.

Typical Applications

- Lithium niobate modulators, PMD compensators
- Raman gain modules
- Pigtailing

Features & Benefits

- Tight specifications — Highly deterministic results, highest product yield
- High proof test — Low risk of mechanical handling failure
- High fatigue failure resistance — Longest service life

Optical Specifications	**PM14XX-HP**	**PM1550-HP**
Operating Wavelength	1390 – 1625 nm	1440 – 1625 nm
Core NA	0.125	0.125
Mode Field Diameter	9.8 ± 0.8 µm @ 1450 nm 10.4 ± 0.8 µm @ 1550 nm	10.5 ± 0.8 µm @ 1550 nm
Cutoff	1320 ± 60 nm	1370 ± 70 nm
Core Attenuation	≤ 1.0 dB/km @ 1450 nm ≤ 1.0 dB/km @ 1550 nm	≤ 1.0 dB/km @ 1550 nm
Beat Length	≤ 4.7 mm @ 1450 nm	≤ 5.0 mm @ 1550 nm
Normalized Cross Talk	≤ - 40.0 dB at 4 m @ 1550 nm ≤ - 30.0 dB at 100 m @ 1550 nm	≤ - 40.0 dB at 4 m @ 1550 nm
Geometrical & Mechanical Specifications		
Cladding Diameter	125.0 ± 1.0 µm	125.0 ± 1.0 µm
Core Diameter	8.0 µm	8.5 µm
Coating Diameter	245.0 ± 15.0 µm	245.0 ± 15.0 µm
Coating Concentricity	< 5.0 µm	< 5.0 µm
Core/Clad Offset	≤ 0.50 µm	≤ 0.50 µm
Coating Material	UV Cured, Dual Acrylate	UV Cured, Dual Acrylate
Operating Temperature Range	-40 to 85 °C	-40 to 85 °C
Prooftest Level	≥ 200 kpsi (1.4 GN/m²)	≥ 200 kpsi (1.4 GN/m²)

7 Airport Park Road, East Granby, CT 06026 • 860.408.5000 • Toll-free 866.466.0214 • Fax 860.844.0210 E-mail info @ nufern.com • www.nufern.com Nufern products are manufactured under an ISO 9001:2008 certified quality management system.

RoHS

Standard specifications and design parameters are listed above. 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 Nufern can assist with your requirements.