

Telecom-Compatible Polarization-Maintaining Fiber: Panda Geometry (980, 1310, 1450, and 1550 nm)

Applications

- PMD Compensators, External Modulators
- Raman Gain Modules

Features and Benefits

- Tighter Optical and Geometrical Tolerances
- Proof Tested at 200 kpsi

PM980-XP, PM1300-HP, PM14XX-HP, and PM1550-HP Pricing

PRICE/m*	\$	£	€	RMB
1 to 9 m	\$ 24.50	£ 16.90	€ 21.80	¥ 206.80
10 to 49 m	\$ 19.60	£ 13.50	€ 17.45	¥ 165.50
50 to 249 m	\$ 17.75	£ 12.25	€ 15.80	¥ 149.90

*Call for Quantities Over 250 m.

This line of polarization-maintaining fiber is commonly used in all PM data and telecom applications. Designed for use at 980, 1310, 1450, and 1550 nm, these fibers offer high strength and fatigue failure resistance to achieve uniform product results.

Specifications				
ITEM#	PM980-XP	PM1300-HP	PM14XX-HP	PM1550-HP
Operating Wavelength	970 - 1550 nm	1270 - 1625 nm	1390 - 1625 nm	1440 - 1625 nm
2nd Cutoff Wavelength	920 ± 50 nm	1200 ± 70 nm	1320 ± 60 nm	1370 ± 70 nm
MFD @ Operating λ	6.6 ± 0.7 μm ^a	9.5 ± 1 μm ^b	9.8 ± 0.8 μm ^c	10.5 ± 0.8 μm ^d
Attenuation @ Operating λ	<2.5 dB/km ^a	<1.0 dB/km ^b	<1.0 dB/km ^c	<0.5 dB/km ^d
Beat Length @ Operating λ	≤2.7 mm ^a	≤4 mm ^b	4.7 mm ^c	≤5.0 mm ^d
Normalized Crosstalk	≤-40 dB (4 m)	≤-40 dB (4 m)	≤-40 dB (4 m)	≤-40 dB (4 m)
Normalized Crosstalk (Nom.)	≤-30 dB (100 m)	≤-30 dB (100 m)	≤-30 dB (100 m)	≤-30 dB (100 m)
Cladding Diameter	125 ± 1.0 μm	125 ± 1.0 μm	125 ± 1.0 μm	125 ± 1.0 μm
Core-Cladding Concentricity	<0.5 μm	≤0.5 μm	<0.5 μm	<0.5 μm
Core-Cladding Offset	≤5 μm	≤5 μm	5 μm	≤5 μm
Coating Style	Dual Acrylate UV Cured	Dual Acrylate UV Cured	Dual Coating (Acrylate/Acrylate)	Dual Coating (Acrylate/Acrylate)
Coating Diameter	245 ± 15 μm	245 ± 15 μm	245 ± 15 μm	245 ± 15 μm
Proof Testing	≥200 kpsi	≥200 kpsi	≥200 kpsi	≥200 kpsi
Operating Temperature Range	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C

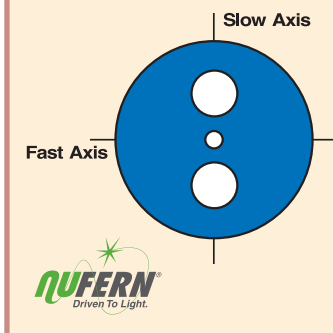
^a @ 980 nm

^b @ 1300 nm

^c @ 1450 nm

^d @ 1550 nm

Panda PM Fiber Cross Section



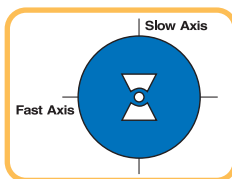
Telecom-Compatible Polarization-Maintaining Fiber: Bow-Tie Geometry (980, 1310, 1480, and 1550 nm)

The continued use of EDFAs and high cost of pump lasers has created a demand for a PM fiber that combines telecommunication compatibility with low cost. The HB-T series of PM fiber offers circularized modes that are matched to standard telecommunication fibers.

The HB980T and HB1480T fibers have been specifically designed for the polarization multiplexing of EDFA pump lasers. The HB1250T and HB1500T offer nominal MFDs of 9.0 μm and 10.5 μm, respectively, and together with a 400 μm dual-layer buffer, are ideally suited to both laser and integrated optic chip pigtailing.

- Low-Stress Bow-Tie Geometry Gives Improved Cleave Quality and Better than -32 dB Splice Extinction Ratio with Panda Fibers
- Dual-Layer Acrylate Coating Provides Enhanced Ruggedness
- <0.1 dB Splice Loss Achievable
- Low NA Reduces Results in Bend-Induced Packaging Loss
- Optional 0.5 μm Concentricity High Fusion Splice Yield

Specialty Fiber Manufactured by



Specifications				
ITEM#	HB980T	HB1250T	HB1480T	HB1500T
Design Wavelength ^a	980 nm	1310 nm	1480 nm	1550 nm
Cutoff Wavelength	870-970 nm	1100-1290 nm	1290-1450 nm	1290-1540 nm
MFD @ Operating λ	6.0 μm @ 980 nm 9.8 μm @ 1550 nm	9.0 μm @ 1310 nm	10.1 μm @ 1480 nm 10.5 μm @ 1550 nm	10.5 μm @ 1550 nm
Numerical Aperture	0.13-0.15			
Attenuation ^b	<3 dB/km		<2 dB/km	
Beat Length ^c	<2 mm			
Cladding Diameter	125 ± 1.0 μm			
Core-Cladding Offset	≤0.75 μm			
Coating Style	Dual UV Cure Acrylate			
Buffer Coating Diameter	245 μm ± 5%	400 μm ± 5%		
Proof Test	% @ 100 kpsi or 2% @ 200 kpsi			

^a Typically, the fiber will operate single mode for ~200 nm above the cutoff wavelength.

^b Measured over nominal operating wavelength of 870-1600 nm for HB980T, 1100-1600 nm for HB1250T, and 1290-1600 nm for HB1480T and HB1500T

^c Measured at 633 nm

ITEM#	PRICE/m*	\$	£	€	RMB
HB980T	1-9 m	\$ 18.80	£ 12.95	€ 16.75	¥ 158.70
	10-49 m	\$ 16.00	£ 11.05	€ 14.25	¥ 135.10
	50-249 m	\$ 13.15	£ 9.05	€ 11.70	¥ 111.00
HB1250T	1-9 m	\$ 18.80	£ 12.95	€ 16.75	¥ 158.70
	10-49 m	\$ 16.00	£ 11.05	€ 14.25	¥ 135.10
	50-249 m	\$ 13.15	£ 9.05	€ 11.70	¥ 111.00
HB1480T	1-9 m	\$ 18.80	£ 12.95	€ 16.75	¥ 158.70
	10-49 m	\$ 16.00	£ 11.05	€ 14.25	¥ 135.10
	50-249 m	\$ 13.15	£ 9.05	€ 11.70	¥ 111.00
HB1500T	1-9 m	\$ 18.80	£ 12.95	€ 16.75	¥ 158.70
	10-49 m	\$ 16.00	£ 11.05	€ 14.25	¥ 135.10
	50-249 m	\$ 13.15	£ 9.05	€ 11.70	¥ 111.00

*Call For Quantities Over 500 m.