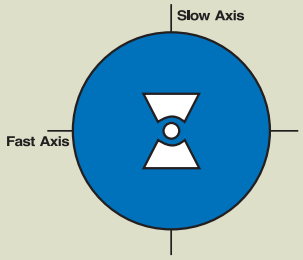
Polarization Maintaining Fiber, 830nm to 1.6µm

Bend Insensitive Low-Temp Fibers

Fibercore has designed a series of polarization maintaining fibers for fiber optic gyro (FOG) applications. These fibers have been designed for optimal performance over a wide temperature range and small coil radius. As opposed to conventional PM fibers that use a polymer coating that stiffens and degrades performance at lower temperatures, these PM fibers integrate a dual-layer acrylic coating that increases the low temperature performance. Extinction ratios of -30dB at -40°C and -27dB at -60°C are typical for these fibers.

FIBERCORE LIMITED

Bow-Tie PM Fiber Cross Section

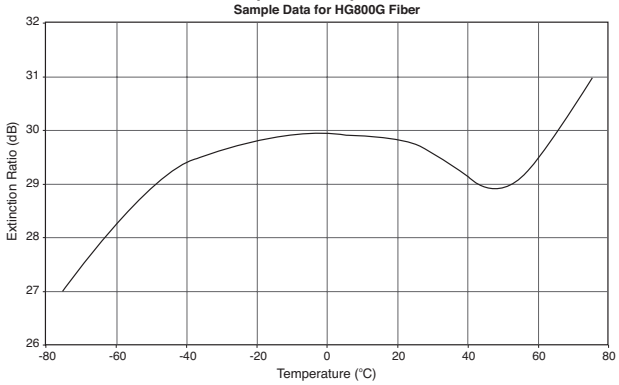


High Performance, Low Temperature, IR PM Fiber

ITEM#	PRICE/m	$	£	€	RMB
HB800G	1 to 9m	$ 18.40	£ 11.60	€17,10	¥ 175.70
	10 to 49m	$ 16.05	£ 10.10	€14,95	¥ 153.30
	50 to 249m	$ 13.10	£ 8.25	€12,20	¥ 125.10
	250 to 999m	CALL	CALL	CALL	CALL
HB1250G	1 to 9m	$ 18.40	£ 11.60	€17,10	¥ 175.70
	10 to 49m	$ 16.05	£ 10.10	€14,95	¥ 153.30
	50 to 249m	$ 13.10	£ 8.25	€12,20	¥ 125.10
	250 to 999m	CALL	CALL	CALL	CALL
HB1500G	1 to 9m	$ 18.40	£ 11.60	€17,10	¥ 175.70
	10 to 49m	$ 16.05	£ 10.10	€14,95	¥ 153.30
	50 to 249m	$ 13.10	£ 8.25	€12,20	¥ 125.10
	250 to 999m	CALL	CALL	CALL	CALL

Temperature Dependance

Sample Data for HG800G Fiber



Polarization Maintaining Fiber; High Performance, Low Temperature

ITEM#	OPERATING WAVELENGTH[1]	MODE FIELD DIAMETER[2]	CUT-OFF WAVELENGTH	BEAT LENGTH[3]	ATTENUATION	NA	CLADDING ±1µm	COATING ±9µm	STRIPPER TOOL
HB800G	830nm	4.2µm	680-780nm	<1.5mm	<5dB/km	0.14-0.18	80µm	175µm	T04S10
HB1250G	1300nm	6.6µm	1030-1270nm	<1.5mm	<2dB/km	0.14-0.18	80µm	175µm	T04S10
HB1500G	1550nm	7.9µm	1230-1520nm	<1.5mm	<2dB/km	0.14-0.18	80µm	175µm	T04S10

1) Typical operating wavelengths - The single mode operating window is ~200nm above the cutoff wavelength if dual mode effects are minimized near the cutoff wavelength and bend losses are minimized at long wavelengths.
2) Mean value calculated from the relative specifications
3) Measured at 633nm

Polarization Maintaining Fiber: 980nm, 1450nm, and 1550nm

Applications

- PMD Compensators, External Modulators
- Raman Gain Modules

Features and Benefits

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

Price Schedule

PRICE/m	$	£	€	RMB
1 to 9m	$ 24.00	£ 15.10	€ 22,30	¥ 229.20
10 to 49m	$ 19.00	£ 11.95	€ 17,65	¥ 181.45
50 to 249m	$ 17.40	£ 10.95	€ 16,20	¥ 166.15

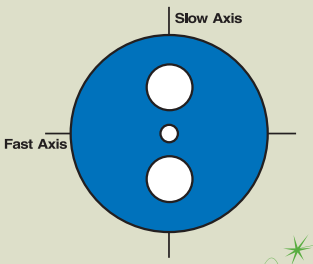
Call For Quantities Over 250m

This line of polarization maintaining fibers meets the optical performance specifications necessary for current industry standard PM fibers. Designed for use at 980nm, 1450nm, and 1550nm, these fibers are typically used in telecom applications that require PM Fibers.

SPECIFICATIONS			
	PM980-HP	PM14XX-HP	PM1550-HP
Operating Wavelength	980nm	1400-1490nm	1490-1620nm
2nd Cutoff Wavelength	900 ± 70nm	1320 ± 60nm	1370 ± 7nm
MFD @λ-operating	6.6 ± 1.0µm[1]	9.8 ± 0.8µm[2]	10.5 ± 0.8µm[3]
Attenuation @λ-operating	<3.0dB/km[1]	<1.0dB/km[2]	<0.5dB/km[3]
Beat Length @λ-operating	≤3.3mm[1]	≤4.7mm[2]	≤5.0mm[3]
Normalized Crosstalk	≤–40dB (4m)	≤–40dB (4 m)	≤–40dB (4m)
Normalized Crosstalk (Nom.)	≤–30dB (100m)	≤–30dB (100m)	≤–30dB (100m)
Cladding Diameter	125 ± 1.0µm	125 ± 1.0µm	125 ± 1.0µm
Core-Cladding Concentricity	<0.5µm	<0.5µm	<0.5µm
Core-Cladding Offset	≤5µm	≤5µm	≤5µm
Coating Style	Dual Acrylate UV Cured	Dual Coating (Acrylate/Acrylate)	Dual Coating (Acrylate/Acrylate)
Coating Diameter	250 ± 20µm	245 ± 15µm	245 ± 15µm
Proof Testing	≥200kpsi	≥200kpsi	≥200kpsi
Operating Temperature Range	–40 to 85°C	–40 to 85°C	–40 to 85°C

1) @ 980nm 2) @ 1450nm 3) @ 1550nm

Panda PM Fiber Cross Section



NUFERN Driven To Light.