

TELECOMS PM FIBER



Telecoms PM Fiber (HB-T) is mode-matched to standard 'telecoms' fibers.

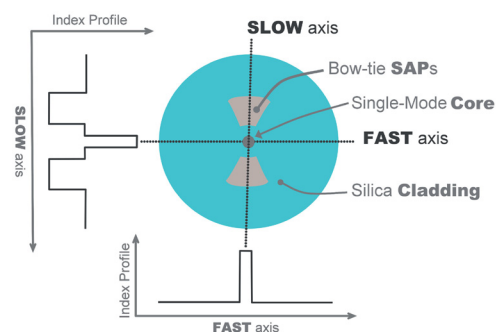
The result of this is that splice losses of less than 0.1dB can be achieved routinely, with Polarization Extinction Ratios (PERs) of better than -32dB. Similarly, HB-T's geometric precision makes it ideally suited for 45° splices across Polarization Maintaining (PM) axes for Lyot depolarizers. All Fibercore PM fibers are designed and tested to exceed all relevant Telcordia™ standards.

HB1250T, HB1480T and HB1500T are also available with a 400µm dual acrylate buffer for enhanced ruggedness and reduced PER degradation during packaging.

HB980T and HB1480T have been designed specifically for the polarization multiplexing and pigtailing of pump diodes.

HB14XXT, HB1250T(9/125) and HB980T(6.6/125) are short beat-length fibers suitable for Raman pump depolarizers, PM Pigtailed and applications requiring the shortest beat-length with a telecoms friendly core.

Fibercore's 'Bow-Tie' design is capable of creating more birefringence than any other stressed design. This is simply because it is based on two opposing wedges, the most simple and efficient means of applying stress to a point.



Typical bow-tie HiBi fiber geometry

FEATURES

Advantages

- Highly Birefringent (HB)
- Short Beat-Lengths (SB)
- Strong PER maintaining

Typical Applications:

- Telecoms
- Erbium Doped Fiber Amplifier (EDFA)
- Cable Television (CATV)
- Interferometric sensors
- Fiber lasers
- Current sensors
- Biomedical

Product Variants

- HB980T
PM pump fiber for use in telecoms style 980nm pumps
- HB1250T(245)
PM transmission fiber for use around 1310nm
- HB1250T(400)
Thick coating PM transmission fiber for use around 1310nm for improved micro-bend resistance
- HB1480T(245)
PM transmission fiber for 1480nm
- HB1480T(400)
Thick coating PM transmission fiber for use around 1480nm for improved micro-bend resistance
- HB1500T(245)
PM transmission and depolarizer fiber for use around 1550nm
- HB1500T(400)
Thick coating PM transmission fiber for use around 1550nm for improved micro-bend resistance
- HB980T(6.6/125)
Short-beat length PM fiber for 980nm telecoms applications
- HB1250T(9/125)
Short-beat length PM fiber for 1310nm telecoms applications
- HB14XXT
Short-beat length 14XXnm fiber for Raman depolarizers.

To find out more visit fibercore.com

22July2020_MD07/6

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SPECIFICATIONS

	HB980T	HB1250T (245)	HB1250T (400)	HB1480T (245)	HB1480T (400)	HB1500T (245)	HB1500T (400)
Operating Wavelength (nm)	980-1310	1300 - 1480		1480 - 1550		1520 - 1650	
Cut-Off Wavelength (nm)	870 - 970	1100 - 1290		1290 - 1450		1290 - 1520	
Numerical Aperture	0.13-0.15	0.11 - 0.13					
Mode Field Diameter (μm)	5.3 - 6.4 @980nm	8.1 - 9.9 @1310nm		9.1 - 10.8 @1480nm		9.6 - 11.7 @1550nm	
Attenuation (dB/km)	≤3 @980	≤2 @1310nm		≤2 @1480nm		≤2 @1550nm	
Beat-Length (mm)	≤2.0 @633nm						
Proof Test (%)	1 or 2 (100 or 200 kpsi)						
Cladding Diameter (μm)	125 ± 1						
Core Cladding Concentricity (μm)	≤0.6						
Coating Diameter (μm)	245 ± 7	400 ± 20	245 ± 7	400 ± 20	245 ± 7	400 ± 20	400 ± 20
Coating Type	Dual Layer Acrylate						
Operating Temperature (°C)	-55 to +85						

Specifications continued on next page.

To find out more visit [fibercore.com](https://www.fibercore.com)

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SPECIFICATIONS CONTINUED

	HB980T(6.6/125)	HB1250T(9/125)	HB14XXT
Operating Wavelength (nm)	980 - 1310	1260 - 1650	1300 - 1650
Cut-Off Wavelength (nm)	870 - 970	1100 - 1250	1100 - 1290
Numerical Aperture	0.11 - 0.13		
Mode Field Diameter (μm)	6.1 - 7.1 @980nm	8.1 - 9.9 @1310nm	9.5 - 11.5 @1465nm
Attenuation (dB/km)	≤ 2 @980	≤ 2 @1310nm	≤ 2 @1480nm
Beat-Length (mm)	≤ 1.2 @633nm		
Proof Test (%)	1 or 2 (100 or 200 kpsi)		
Cladding Diameter (μm)	125 \pm 1		
Core Cladding Concentricity (μm)	≤ 0.4		≤ 0.6
Coating Diameter (μm)	245 \pm 7		
Coating Type	Dual Layer Acrylate		
Operating Temperature ($^{\circ}\text{C}$)	-55 to +85		

RELATED PRODUCTS

- PM Erbium Doped Fiber
- Zing™ Polarizing Fiber
- Standard PM Fiber
- PM Coupler Fiber
- PM Gyro Fiber
- Polyimide Coated PM Fiber

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