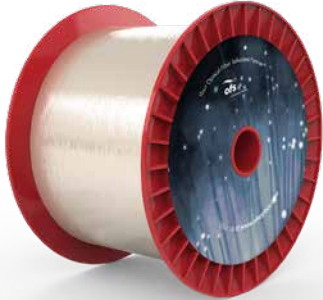




## Polarization-Maintaining Highly Non-Linear Optical Fiber

P/N: HNLF-PM



### Overview

OFS Highly-Non-Linear Optical Fiber (HNLF) combines a high non-linear coefficient with a small dispersion slope. The fiber design includes a high delta core, doped with GeO<sub>2</sub>, surrounded by a deeply depressed ring doped with fluorine.

HNLF is available in five versions: HNLF Standard with a dispersion slope of 0.019 ps/(nm<sup>2</sup>·km), HNLF Zero-slope with a dispersion slope of 0.006 ps/(nm<sup>2</sup>·km), HNLF-PM which is polarization maintaining, HNLF Al-Doped with an aluminum doped core for increased SBS threshold, and HNLF-SPINE (Stable Phase-matching for Improved Nonlinear Efficiency) with a zero dispersion wavelength that is very stable along the fiber length. All are available with wide range dispersion values.

### Typical Applications

- Non-Linear Loop Mirror
- Optical Regeneration
- Optical Sampling
- Parametric Amplification
- Photosensitive Fiber for Writing of UV-Gratings
- Pulse Compression
- Supercontinuum Generation
- Wavelength Conversion



# Polarization-Maintaining Highly Non-Linear Optical Fiber

P/N: HNLF-PM

Product Specifications	
Product Description	PM Highly-Non-Linear Optical Fiber
Optical Characteristics	
Type	Non-Standard
Fiber Length	50 to 500 m
Fiber Length Tolerance	± 3 m
Cutoff Wavelength	< 1500 nm
Effective Area (Typical)	12.5 $\mu\text{m}^2$
Dispersion	-1.5 to +2.0 ps/(nm·km)
Dispersion Slope (Typical)	0.025 ps/(nm <sup>2</sup> ·km)
Attenuation	≤ 0.90 dB/km
Attenuation (Typical)	0.8 dB/km
Splice Loss to PM Pigtail	≤ 0.50 dB
Splice Loss to PM Pigtail (Typical)	0.3 dB
Polarization Extinction Ratio (min)	> 18 dB
PM or non-PM	PM
Non-Linear Coefficient (Typical)	10.7 W <sup>-1</sup> ·km <sup>-1</sup>
Ordering Information for HNLF-PM Fiber	
Item Number	Dispersion at 1550 nm ps/(nm·km)
<b>80414p2</b>	2.0 ± 1.0
<b>80414p3</b>	3.0 ± 1.0
<b>80414p4</b>	4.0 ± 1.0
<b>80414p5</b>	5.0 ± 1.0



For additional information please contact your sales representative.

You can also visit our website at [www.ofsoptics.com](http://www.ofsoptics.com)  
or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.



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