

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 numerical small group velocity dispersion. The fiber design includes a high delta core, surrounded by a deeply depressed ring and is doped with Fluorine.

HNLF is available in four versions: a version with a slope of 0.019 ps/(nm2·km), a zero dispersion slope version, a PM version, and a version with aluminum-doped core for increased SBS threshold. 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



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Product Specifications	
Product Description	PM Highly-Non-Linear Optical Fiber
Optical Characteristics	
Туре	Non-Standard
Fiber Length	50 to 500 m
Fiber Length Tolerance	± 3
Cutoff Wavelength	< 1500 nm
Effective Area (Typical)	12.5 µm²
Dispersion	-1.5 to +2.0 ps/(nm·km)
Dispersion Slope (Typical)	0.025 ps/(nm ² ·km)
Attenuation	≤ 0.90 dB/km
Typical Attenuation	0.8
Splice Loss to SSMF Pigtail	≤ 0.50 dB
Splice Loss to SSMF Pigtail (Typical)	0.3 dB
Polarization Extinction Ratio (min)	> 18 dB
PM or non-PM	PM
Non-Linear Coefficient (Typical)	10.7 W ⁻¹ ·km ⁻¹

Ordering Information for HNLF-PM Module		
Short (1-2 meter) Standard Single-Mode (SSMF) pigtails with connectors are spliced to the HNLF. The fiber with pigtails is delivered on a 29 x 175 mm spool covered with a protective layer of silicone glue.		
Ordering Code: HNLF-PM-LLLL-P-M-DD		
Length Code (LLLL)	Length in step of 50 meters (0050, 0100, 0150, 2000)	
	Pigtail Type SSMF with FC/APC Connectors SSMF with FC/PC Connectors	
Mechanical Option (M) 1 = 2 =	Mechanical Package 29x175 mm spool with silicone glue 29x175 mm spool without silicone glue	
p1 = p2 = p3 = p4 =	Dispersion at 1550 nm (ps/nm*km) 0.0 ± 1.0 1.0 ± 1.0 2.0 ± 1.0 3.0 ± 1.0 4.0 ± 1.0 5.0 ± 1.0	

Ordering Information for HNLF-PM Fiber

The HNLF fiber can also be delivered without pigtails on a 105 x 265 mm spool without any silicone. However, please note that splice loss of about 1 dB from HNLF to SSMF must be expected when using standard fusion splicers.

Item Number	Dispersion at 1550 nm (ps/nm*km)
80414z0	0.0 ± 1.0
80414p1	1.0 ± 1.0
80414p2	2.0 ± 1.0
80414p3	3.0 ± 1.0
80414p4	4.0 ± 1.0
80414p5	5.0 ± 1.0

For additional information please contact your sales representative.

You can also visit our website at 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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