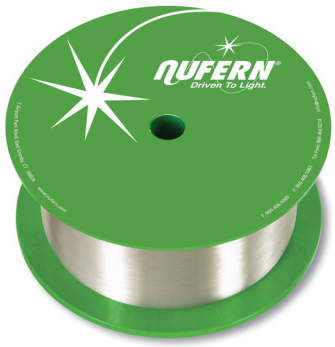

Cladding Mode Suppressed Photosensitive Single-Mode Fiber

Nufern CMS-HP fiber is a photosensitive single-mode fiber designed for the production of complex Bragg grating structures, such as those with high channel count, wherein cladding mode suppression is a fundamental requirement. This fiber sets a new standard for photosensitive telecom fibers, with its excellent cladding mode suppression, high intrinsic photosensitivity, low birefringence, and low polarization mode dispersion (PMD). It allows easy, uniform grating writing; tighter channel spacing; and low splice loss to standard transmission fibers.

Typical Applications

- Dispersion compensators
- DWDM gain flattening filters

Features & Benefits

- Excellent cladding mode suppression — Allows for tighter channel spacing
- Mode matched to conventional transmission fibers — Low splice loss
- Designed to achieve low PMD — Enables the development of low PDL devices

Optical Specifications	**CMS-HP**
Operating Wavelength (nominal)	1450 - 1600 nm
Mode Field Diameter	6.5 ± 1.0 µm @ 1550 nm
Second Mode Cut-Off	1400 ± 50 nm
Cladding Mode Supression (nominal)	< 0.05 dB for a 35 dB Grating
Numerical Aperture (nominal)	0.18
Bend Loss @ 1550 nm (100 turns, 25 mm radius)	< 0.10 dB
Bend Radius for 0.05 dB per 100 Turns @ 1550 nm	26 mm
Geometrical & Mechanical Specifications	
Clad Diameter	125 ± 1 µm
Coating Diameter	245 ± 15 µm
Core-Clad Concentricity	< 0.5 µm
Coating/Clad Offset	≤ 5 µm
Proof Test Level	≥ 200 kpsi (1.4 GN/m^2)
Coating Material	UV Cured, Dual Acrylate
Operating Temperature	- 55 to +85° C
Short-Term Bend Radius	≥ 6 mm
Long-Term Bend Radius	≥ 13 mm

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RoHS

Standard specifications and design parameters are listed above. Specifications are subject to change without notice. Other configurations such as alternative form factors, optimized cut-off and UV cured color coating may be available. Let us know how Nufern can assist with your requirements.

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