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	1450 – 1600 nm
Core NA	0.180
Mode Field Diameter	6.5 ± 1.0 µm @ 1550 nm
Cutoff	1400 ± 50 nm
Cladding Mode Suppression	< 0.05 dB for a 35 dB Grating
Geometrical & Mechanical Specifications	
Cladding Diameter	125.0 ± 1.0 µm
Core Diameter	6.5 µm
Coating Diameter	245.0 ± 15.0 µm
Coating Concentricity	< 5.0 µm
Core/Clad Offset	≤ 0.50 µm
Coating Material	UV Cured, Dual Acrylate
Operating Temperature Range	-55 to 85 °C
Short Term Bend Radius	≥ 6 mm
Long Term Bend Radius	≥ 13 mm
Prooftest Level	≥ 200 kpsi (1.4 GN/m²)

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7 Airport Park Road, East Granby, CT 06026 • 860.408.5000 • Toll-free 866.466.0214 • Fax 860.844.0210 E-mail info @ nufern.com • www.nufern.com Nufern products are manufactured under an ISO 9001:2008 certified quality management system.

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.