PRODUCT DESCRIPTION

CorActive UV-Sensitive optical fibers are specifically designed to meet the photosensitivity requirements for the manufacturing of Bragg gratings and dispersion compensators. The quality of Bragg gratings depend heavily on the UV-sensitive fiber used to write the grating. CorActive’s forefront technology and expertise allow us to recommend the perfect fiber design for your application. CorActive’s Cladding Mode Suppression products have been engineered to write Bragg gratings without the cladding modes in the shorter wavelength range. This results from a tight balance of photosensitivity in both the cladding and core of the fiber.

AVAILABLE MODELS

UVS-INT Series

CorActive’s Cladding Mode Suppression UV-INT series have been engineered to write Bragg gratings without the cladding modes in the shorter wavelength range. This results from a tight balance of photosensitivity in both the cladding and core of the fiber.

For applications requiring extremely low PMD levels, UVS-INT-ULTRA version featuring the lowest PMD on the market is optionally available.

APPLICATIONS

- Fiber Bragg Gratings
- Dispersion Compensators
- Fiber Sensors
- DWDM Filters
- EDFA Gain Equalizing Filters

ADVANTAGES

- Tight balance of photosensitivity in both the cladding and core of the fiber ensures cladding mode suppression in the short wavelength range
- Optimized splice recipes provided ensures low splice losses to standard telecom fiber (<0.1db)
- Consistent reproducibility reduces manufacturing costs and increases production yield
- World lowest PMD (UVS-INT-ULTRA)

PERFORMANCES

-35 dB Grating

Cladding Modes < 0.05dB
### SPECIFICATIONS

#### Optical

<table>
<thead>
<tr>
<th></th>
<th>UVS-INT-A</th>
<th>UVS-INT-PREMIUM</th>
<th>UVS-INT-ULTRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode Field Diameter (um)</td>
<td>6.6 ± 0.6</td>
<td>6.6 ± 0.6</td>
<td>6.6 ± 0.6</td>
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<tr>
<td>Effective Numerical Aperture (typ)</td>
<td>0.20</td>
<td>0.20</td>
<td>0.20</td>
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<tr>
<td>Theoretical Cut-off Wavelength (nm)</td>
<td>1350 ± 50</td>
<td>1350 ± 50</td>
<td>1350 ± 50</td>
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<tr>
<td>Birefringence (x10^-6)</td>
<td>≤ 1.6</td>
<td>≤ 0.9</td>
<td>≤ 0.5</td>
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#### Geometrical & Mechanical

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<tbody>
<tr>
<td>Cladding Diameter (um)</td>
<td>125 ± 0.5</td>
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<tr>
<td>Coating Diameter (um)</td>
<td>245 ± 10</td>
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<tr>
<td>Core/clad Concentricity Error (um)</td>
<td>≤ 0.5</td>
<td></td>
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<tr>
<td>Proof Test (kpsi)</td>
<td></td>
<td>≥ 150</td>
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#### UVS ORDERING INFORMATION

- **Options**
  - A = Low PMD version
  - Premium = Very low PMD version
  - Ultra = Ultra low PMD version
  - 200K = ≥ 200kpsi proof test

Other options are available upon request.

The quality of Bragg gratings depends heavily on the UV-sensitive fiber used to write the grating. CorActive’s forefront technology and expertise allow us to recommend the perfect fiber design for your application. CorActive’s Cladding Mode Suppression UV-Sensitive (UVS) products have been engineered to write Bragg gratings without the cladding modes in the shorter wavelength range.

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CorActive High-Tech, Inc.
2700 Jean-Perrin, Suite 121
Quebec City, QC
Canada G2C 1S9
Phone: 1-866-845-2466
E-mail: sales@coractive.com
www.coractive.com