Optran® UV, Optran® WF
Silica / silica fiber

Superior performance and fiber optic properties from UV to IR wavelengths: CeramOptec®’s Optran® UV / WF fibers are available in a range of core diameters and assemblies, tailored to your specific application needs.

### Technical data

<table>
<thead>
<tr>
<th>Wavelength / spectral range</th>
<th>Optran® UV: 190 – 1200 nm</th>
<th>Optran® WF: 300 – 2400 nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerical aperture (NA)</td>
<td>Low: 0.12 ± 0.02</td>
<td>Standard: 0.22 ± 0.02</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-190 to +350 °C</td>
<td></td>
</tr>
<tr>
<td>Core diameter</td>
<td>Available from 25 to 2000 µm</td>
<td></td>
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<tr>
<td>Standard core / cladding ratios</td>
<td>1:1.04</td>
<td>1:1.06</td>
</tr>
<tr>
<td>OH content</td>
<td>Optran® UV: high (&gt; 700 ppm)</td>
<td>Optran® WF: low (&lt; 1 ppm)</td>
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<tr>
<td></td>
<td>Fibers with OH contents &lt; 0.25 and &lt; 0.1 ppm are available upon request</td>
<td></td>
</tr>
<tr>
<td>Standard proofest</td>
<td>100 kpsi (nylon, ETFE, acrylate jacket)</td>
<td>70 kpsi (polyimide jacket)</td>
</tr>
<tr>
<td>Minimum bending radius</td>
<td>50 x cladding diameter (short-term mechanical stress)</td>
<td>150 x core diameter (during use with high laser power)</td>
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<tr>
<td>Product code</td>
<td>See reverse side</td>
<td></td>
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</tbody>
</table>

### Advantages
- Pure synthetic, fused silica glass core
- High resistance against laser damage
- Step-index profile
- Special jackets available for high temperatures, high vacuum and harsh chemicals
- Very low NA expansion
- Biocompatible material
- Sterilisable using ETO and other methods

### Production sites
- CeramOptec® GmbH Brühler Straße 30, 53119 Bonn, Germany
- CeramOptec® SIA Domes iela 1a, 5316 Livani, Latvia
Attenuation values
The following diagrams provide an overview of attenuation values relative to the wavelengths:

Applications
First choice for applications including spectroscopy, medical diagnostics, medical technology, laser delivery systems and many more.

Product code key using the example of WF 300/330 (H)(B)N (28)

1 Fiber type
   UV = Optran® UV | WF = Optran® WF | WFGE = Optran® WFGE | HUV = Optran® HUV
   HWF = Optran® HWF

2 Standard core / cladding ratios
   Core ø (µm) / Cladding ø (µm)

3 Buffer
   H = hard polymer buffer | No information = silicone buffer
   No information = transparent

4 Colour
   B = black | BL = blue | W = white | Y = yellow | R = red | G = green

5 Jacket material
   A = acrylate jacket (no buffer) | N = nylon jacket (silicone or hard polymer jacket)
   T= ETFE jacket (silicone or hard polymer buffer) | P = polyimide jacket (no buffer)

6 Numerical aperture (NA)
   12 = 0,12 | 28 = 0,28 | No information = 0,22 (standard)

Your advantages
- Over 500 Optran® UV and Optran® WF fibers in stock
- Non-standard diameters and NA values available
- Option of fully customised fiber production
- A complete solution for all your performance needs
- ISO 9001 compliant manufacturing environment
- CE mark

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