CeramOptec’s high quality Optran UV and Optran WF fiber exhibits exceptional performance and transmission from the deep UV to the IR. With a wide range of core sizes and NA’s, Optran UV and Optran WF are ideal for applications including spectroscopy, medical diagnostics and devices, laser delivery and instrumentation. We offer a variety of jacket types – as well as custom-designed products and sizes to meet your specifications.

**Features**

- Broad UV / VIS / NIR spectral range
  - Optran UV: 190 – 1200 nm
  - Optran WF: 300 – 2400 nm
- High laser damage resistance
- Broad temperature range (-190° to +350°C)
- Core diameters available from 50 μm to 2000 μm
- Specialty coatings available for high temperatures, high vacuum and harsh chemicals
- Superior Focal Ratio Degradation Characteristics
- Biocompatible materials
- Sterilizable by ETO and other methods
- Manufactured at GMP and ISO 9001 compliant facility
- RoHS compliant

**Properties**

- Step index profile
- Pure synthetic fused silica core
  - Optran UV: high OH- content > 700 ppm
  - Optran WF: low OH- content < 1 ppm
  - OH- content < 0.25 ppm and < 0.1 ppm available upon request
- Available NA:
  - Low NA: 0.12 ± 0.02
  - Standard NA: 0.22 ± 0.02
  - High NA: 0.30 ± 0.02 (Optran Plus®)
- Standard prooftests:
  - 100 kpsi (Nylon, ETFE, Acrylate jackets)
  - 70 kpsi (Polyimide jacket)
- Core/clad ratios available:
  - 1:1.04, 1:1.06, 1:1.1, 1:1.15, 1:1.2, 1:1.25, 1:1.4
- Minimum bend radius:
  - 50 x clad diameter (momentary mechanical stress)
  - 150 x clad diameter (during usage with high laser powers)

**Note**

CeramOptec strives to ensure the accuracy of all information provided; however, we imply no warranties and disclaim any liability in connection with the use of this information.
Selection of Fiber Diameters

<table>
<thead>
<tr>
<th>Core Ø [μm]</th>
<th>Cladding Ø [μm]</th>
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<tr>
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<td>1500</td>
<td>1650</td>
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<td>1800</td>
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</tbody>
</table>

note: other sizes available

Product Code Nomenclature

- **Fiber type**
  - UV = Optran UV
  - WF = Optran WF

- **Core Ø [μm] / Cladding Ø [μm]**
  - WF 300/330 (H)(B)N (28)

- **Color**
  - B = black
  - Y = yellow
  - BL = blue
  - R = red
  - W = white
  - G = green

- **Buffer**
  - H = hard polymer buffer
  - no indication = silicone buffer

- **Jacket material**
  - A = Acrylate jacket (no buffer)
  - N = Nylon Jacket (silicone or hard polymer buffer)
  - T = ETFE jacket (silicone or hard polymer buffer)
  - P = Polyimide jacket (no buffer)

Applications

- Spectroscopy
- Sensors
- UV photolithography
- Laser welding/soldering/marking
- Laser delivery
- Nuclear plasma diagnostics
- Analytical Instruments
- Laser diode pigtailting
- Pyrometry
- Semiconductor capital equipment
- Thomson scattering
- Medical diagnostics

Note

NA is measured at the 95% intensity angle. Fibers with a thin cladding may not support transmission for long wavelengths. Higher NA available – see Optran Plus and Optran Ultra data sheets for more information. CeramOptec strives to ensure the accuracy of all information provided; however, we imply no warranties and disclaim any liability in connection with the use of this information.