

# Optran® UV, Optran® WF

## Silica / silica fiber with optional buffers

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.

### Wavelength

Optran® UV	190–1200 nm
Optran® WF	300–2400 nm

### Numerical aperture (NA)

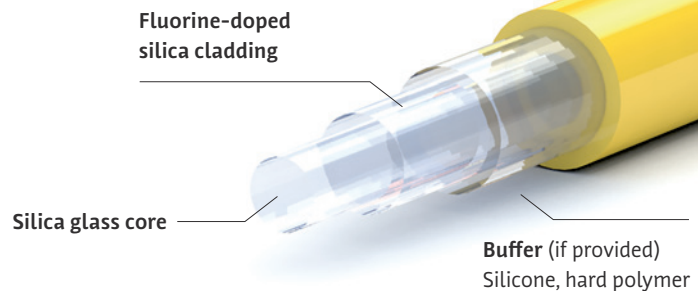
Low	0,12 ± 0,02
Standard	0,22 ± 0,02
High	0,28 ± 0,02

### Jacket

Polyimide: -190 to +350 °C  
 ETFE: -40 to +150 °C  
 Nylon: -40 to +100 °C  
 Acrylate: -40 to +85 °C

### 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



### Technical data

Wavelength / spectral range	Optran® UV: 190 – 1200 nm Optran® WF: 300–2400 nm
Numerical aperture (NA)	0,12 ± 0,02   0,22 ± 0,02   0,28 ± 0,02 or customised
Operating temperature	-190 to +350 °C
Core diameter	Available from 25 to 2000 µm
Standard core / cladding ratios	1:1,04   1:1,06   1:1,1   1:1,15   1:1,2   1:1,25   1:1,4 or customised
OH content	Optran® UV: high (> 700 ppm) Optran® WF: low (< 1 ppm) Fibers with OH contents < 0,25 and < 0,1 ppm are available upon request
Standard proof test	100 kpsi (nylon, ETFE, acrylate jacket)   70 kpsi (polyimide jacket)
Minimum bending radius	50 × cladding diameter (short-term mechanical stress) 300 × core diameter (during use with high laser power)
Product code	See glossary, p. 22

### Applications

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