

Optran® Ultra WFGE

Ge-doped silica / silica fiber

The CeramOptec® Optran® Ultra WFGE fibers stand out through maximum numerical aperture values, unmatched performance and a broad spectral range. There is a large choice of core diameters and solutions tailored to your specific needs are available upon request.

Wavelength

Optran® Ultra WFGE 400–2400 nm

Numerical aperture (NA)

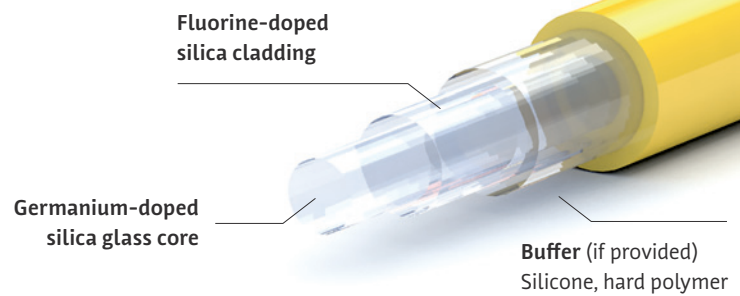
Standard	0,37 ± 0,02
Hight	0,48 ± 0,02
Very high	0,53 ± 0,02

Advantages

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

Jacket

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



Technical data

Wavelength / spectral range	Optran® Ultra WFGE: 400–2400 nm
Numerical aperture (NA)	0,37 ± 0,02 0,48 ± 0,02 0,53 ± 0,02 or customised
Operating temperature	-190 to +350 °C
Core diameter	Available from 50 to 1000 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
Standard proof test	100 kpsi (nylon, ETFE, acrylate jacket) 70 kpsi (polyimide jacket)
Minimum bending radius	50 × cladding diameter (short-term mechanical stress) 150 × core diameter (during use with high laser power)

Applications

First choice for applications including spectroscopy, laser technology, research, photodynamic therapy and many more.