

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.

Wavelength

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

Numerical aperture (NA)

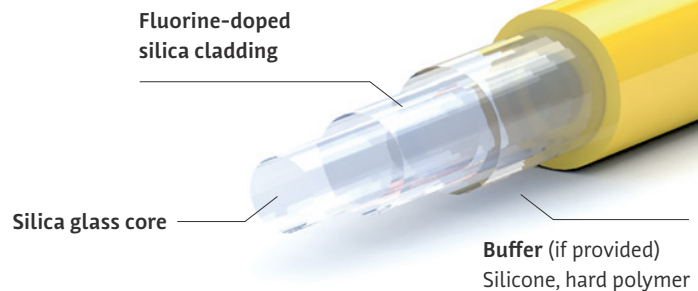
Low	0,12 ± 0,02
Standard	0,22 ± 0,02

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 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) 150 × core diameter (during use with high laser power)
Product code	See reverse side

US FIBEROPTEC TECHNOLOGY INC
 175 Bernal Road Suite 15
 San Jose CA 95119
 Phone: +1 408 834 7420
 Fax: +1 408 834 7430
 www.usfiberoptec.com

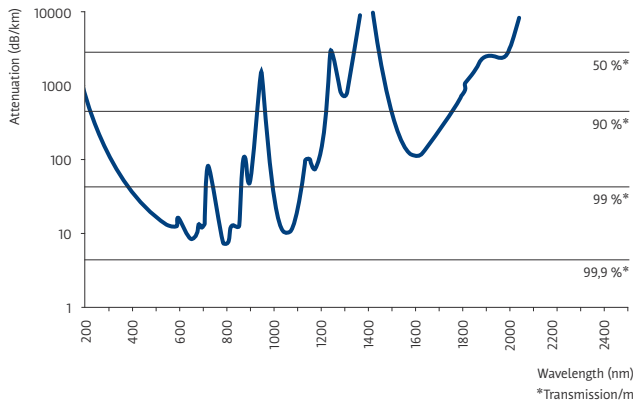
Production sites

CeramOptec® GmbH Brühler Straße 30, 53119 Bonn, Germany
 CeramOptec® SIA Domes iela 1a, 5316 Livani, Latvia

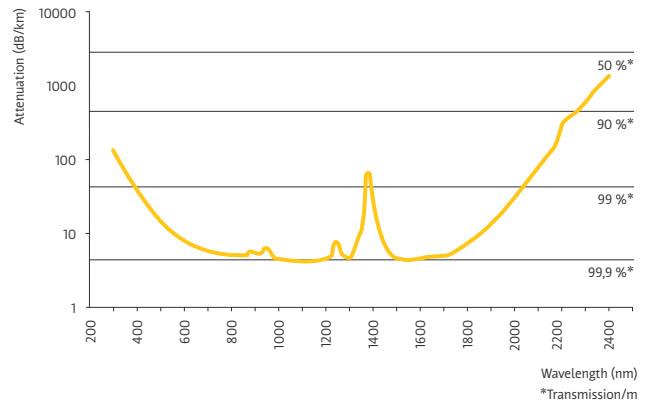
Attenuation values

The following diagrams provide an overview of attenuation values relative to the wavelengths:

Optran® UV



Optran® WF



Applications

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

1 2 3 4 5 6

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 \varnothing (μm) / Cladding \varnothing (μm)
3 Buffer	H = hard polymer buffer No information = silicone buffer
4 Colour	B = black BL = blue W = white Y = yellow R = red G = green No information = transparent
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

US FIBEROPTEC TECHNOLOGY INC
175 Bernal Road Suite 15
San Jose CA 95119
Phone: +1 408 834 7420
Fax: +1 408 834 7430
www.usfiberoptec.com

Production sites

CeramOptec® GmbH Brühler Straße 30, 53119 Bonn, Germany
CeramOptec® SIA Domes iela 1a, 5316 Livani, Latvia