

Optran® NCC UV, Optran® NCC WF

Silica / silica non-circular core fiber

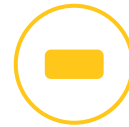
These fibers are ideal for laser applications, among others, where the geometry of the output beam is decisive. CeramOptec® offers these fibers in rectangular, square, octagonal and other core / cladding geometries for additional advantages compared to our UV / WV range.

Wavelength

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

Numerical aperture (NA)

Low	0,16 ± 0,02
Standard	0,22 ± 0,02
High	0,28 ± 0,02



Sample rectangular core fiber

Advantages

- Wide range of core and cladding geometries, e.g. square, rectangular or octagonal
- Homogeneous power distribution
- Very low NA expansion
- Excellent image scrambling characteristics
- No need for laser beam-shaping optics
- High resistance against laser damage
- Step-index profile
- Biocompatible material
- Sterilisable using ETO and other methods



Sample octagonal core fiber



Sample square core fiber

Technical data

Wavelength / spectral range	Optran® NCC UV: 190–1200 nm Optran® NCC WF: 300–2400 nm
Numerical aperture (NA)	0,16 ± 0,02 0,22 ± 0,02 0,28 ± 0,02 or customised
Operating temperature	-190 to +350 °C
Core diameter	Geometries and diameters upon request
OH content	Optran® NCC UV: high (> 1000 ppm) Optran® NCC 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 cladding) 70 kpsi (polyimide cladding)
Minimum bending radius	50 × cladding diameter (short-term mechanical stress) 150 × core diameter (during use with high laser power)

Headquarter

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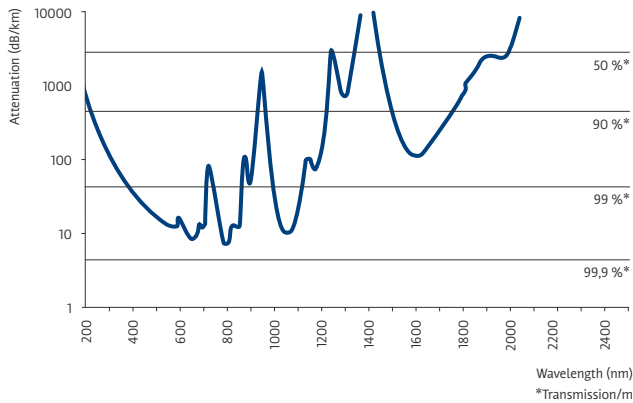
Production sites

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

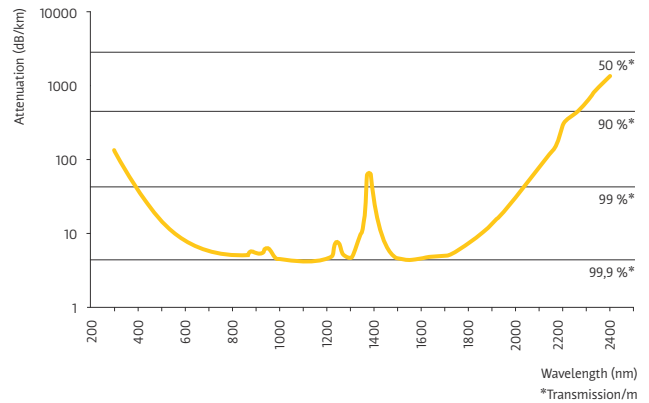
Attenuation values

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

Optran® NCC UV



Optran® NCC WF



Applications

First choice for applications including laser surface treatments, astronomy applications and many more.

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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