Optran® Yb 20/400TC

Fibers for High Power generation

Optran® Yb fibers are designed for high-performance laser applications with optimized core and cladding geometry. The triple-clad structure ensures efficient pump light absorption, improved mode control, and enhanced beam quality at high power levels.

Manufactured with advanced technologies, these fibers provide outstanding laser conversion efficiency and excellent resistance to photo-darkening. All CeramOptec® Yb fibers feature robust coatings for long-term reliability and are rigorously tested to guarantee stability and consistency in demanding environments.

Corresponding passive fibers are available.

Technical Data

Operating Wavelength	1,015 - 1,115 nm
Core Diameter	20 ± 1.5 µm
Core Numerical Aperture (NA)	0.07 ± 0.01
Core Contricity	<2 µm
1st Cladding Size (flat to flat)	400 µm
1st Cladding Shape	octagonal
Cladding Numerical Aperture (NA)	>0.46
Total Silica Diameter	480 ± 10 µm
Coating Diameter	630 µm
Primary Coating Material	Low index acrylate
Outer Coating Material	Secondary acrylate
Core Absorption (@976 nm)	800 ± 50 dB/m
Proof Test Level	≥ 100 kpsi

Typical Applications

- CW or pulsed fiber lasers and amplifiers
- High Power and amplifiers
- Material processing, e. g. welding, cutting