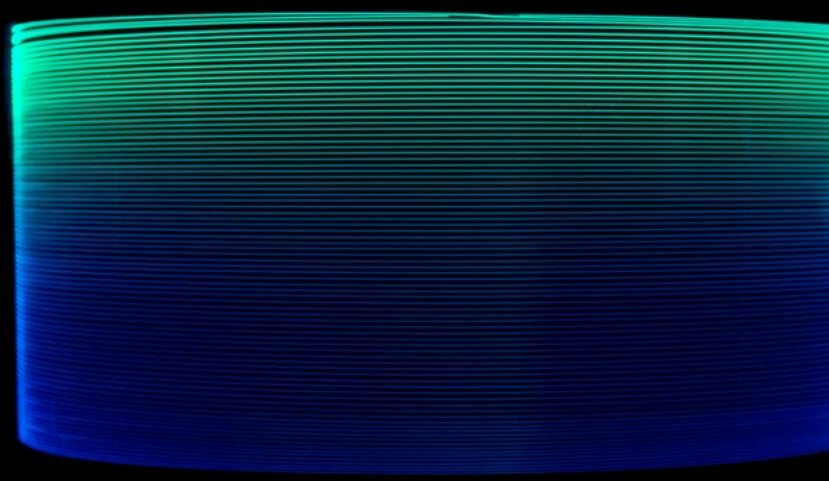
LIEKKI®

Yb1200-14/250 – Large Mode Area Ytterbium Doped Fiber

LIEKKI® Yb1200-14/250DC fiber is a highly doped fiber with low photodarkening loss suitable for both medium and high power fiber laser applications. The fiber design is optimized to offer a large mode field diameter while still easily enabling single-mode operation to meet highest beam quality demands. The larger core compared to LIEKKI® Yb1200-12/250DC fiber extends the application range for compact fiber laser resonators up to 1 kW CW output powers.



Features

- Industry leading fiber deposition process — Direct Nanoparticle Deposition
- *real*NA — most accurate fiber core NA to enable superior predictability of fiber performance and minimal splice loss
- Large, low-NA core for low nonlinearity and high beam quality applications
- Combining high pump absorption with low photodarkening loss
- Low intrinsic loss for highest efficiency
- Acrylate coating enables fiber applications in extreme environmental conditions: Proven to operate up to 120˚C and in extreme humidity.
- Matching passive fibers available for minimal splice loss

Applications

- Medium to high power CW lasers up to 1 kW
- Industrial, medical and scientific applications

Typical Fiber Specifications

Fiber		LIEKKI® Yb1200-14/250DC
Optical	Units	
Peak Cladding Absorption at 976 nm (nominal)	dB/m	(3.25)
Cladding Absorption at 920 nm	dB/m	0.75 ± 0.2
Mode Field Diameter [1] (nominal)	μm	(13.5)
Core Numerical Aperture (*real*NA)		0.070 ± 0.005
Cladding Numerical Aperture, ≥		0.48
Core background loss at 1200 nm, ≤	dB/km	15
Geometrical and mechanical		
Core Diameter	μm	14.0 ± 1.0
Core Concentricity Error, ≤	μm	1.0
Cladding Diameter (flat-to-flat)	μm	250 ± 5
Cladding Geometry		Octagonal
Coating Diameter		350 ± 15
Coating Material		Dual coated low index acrylate
Proof Test, ≥	kpsi	100

[1] Far-field Mode Field Diameter at 1060nm

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