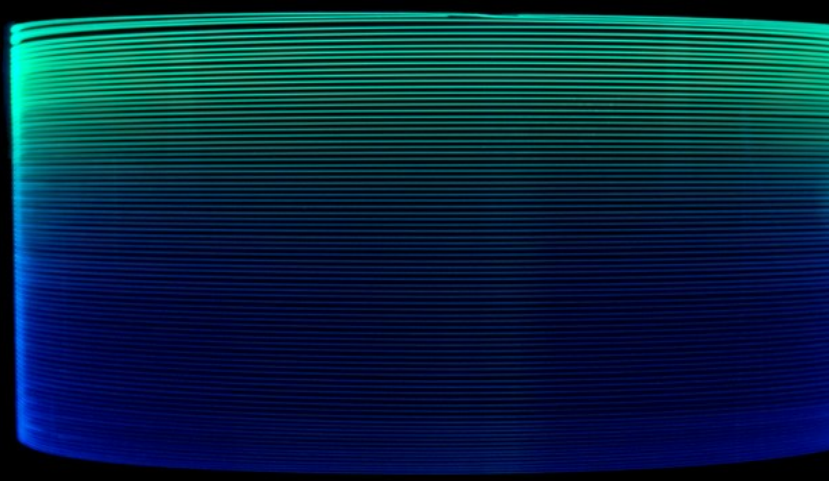
LIEKKI®

Yb1200-10/125 – Large Mode Area Ytterbium Doped Fiber

LIEKKI® Yb1200-10/125 fibers are very highly doped large mode area fibers for medium power fiber laser and amplifier applications. The combination of high cladding absorption, low photodarkening loss and high beam quality makes them ideal for compact fiber based power amplifiers.

LIEKKI® Yb1200-10/125 fibers are available as double-clad (Yb1200-10/125DC) and double-clad polarization maintaining (Yb1200-10/125DC-PM) fibers.



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
- Acrylate coating enables fiber applications in extreme environmental conditions: Proven to operate up to 120˚C and in extreme humidity.
- Matching passive fibers available with optimized design for minimal splice loss

Applications

- Medium power amplifiers and lasers
- Pulsed and CW applications
- IR source for frequency doubling
- Industrial, medical and scientific applications

Typical Fiber Specifications

Fiber		LIEKKI® Yb1200-10/125DC	LIEKKI® Yb1200-10/125DC-PM
Optical	Units		
Peak Cladding Absorption at 976 nm (nominal)	dB/m	(7.4)	(7.4)
Cladding Absorption at 920 nm	dB/m	1.7 ± 0.3	1.7 ± 0.3
Mode Field Diameter [1] (nominal)	μm	(11.1)	(11.1)
Core Numerical Aperture (*real*NA)		0.080 ± 0.005	0.080 ± 0.005
Cladding Numerical Aperture, ≥		0.48	0.48
Core background loss at 1200 nm, ≤	dB/km	25	25
Birefringence, ≥	1E-04	-	1.4
Geometrical and mechanical			
Core Diameter	μm	10.0 ± 1.0	10.0 ± 1.0
Core Concentricity Error, ≤	μm	1.0	1.0
Cladding Diameter (flat-to-flat)	μm	125 ± 2	125 ± 2
Cladding Geometry		Octagonal	Round, PANDA
Coating Diameter		245 ± 15	245 ± 15
Coating Material		Dual coated low index acrylate	Dual coated low index acrylate
Proof Test, ≥	kpsi	100	100

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

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