

LIEKKI® Yb1200-12/125 fibers are very highly doped large mode area fibers for medium power fiber laser and amplifier applications, where high beam quality and compact design are essential.

LIEKKI® Yb1200-12/125 fibers are available as double-clad (Yb1200-12/125DC) and double-clad polarization maintaining (Yb1200-12/125DC-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® Yb1200-12/125DC	LIEKKI® Yb1200-12/125DC-PM
Optical	Units		
Peak Cladding Absorption at 976 nm (nominal)	dB/m	(11.1)	(11.1)
Cladding Absorption at 920 nm	dB/m	2.6 ± 0.4	2.6 ± 0.4
Mode Field Diameter ⁽¹⁾ (nominal)	μm	(11.9)	(11.9)
Core Numerical Aperture (<i>real</i> 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	-	1.6
Geometrical and mechanical			
Core Diameter	μm	12.5 ± 1.0	12.5 ± 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