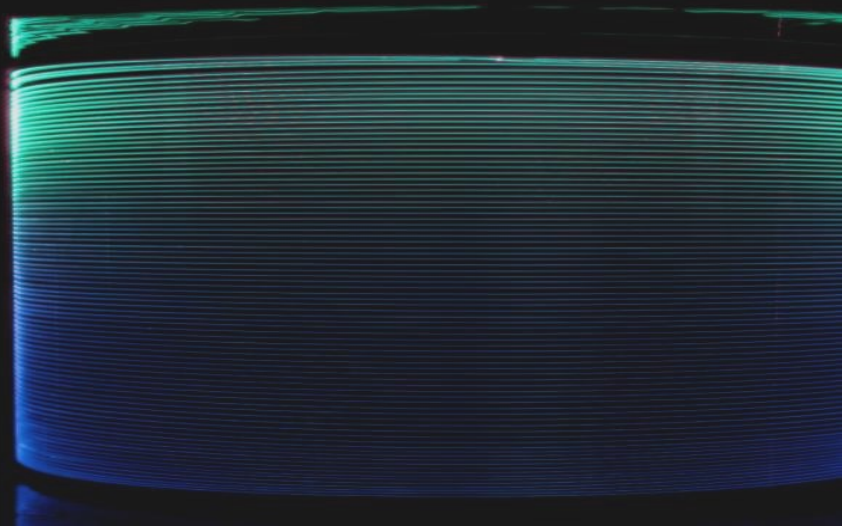


LIEKKI® Yb1200-6/125 fibers are very highly doped single mode fibers for low power fiber laser and amplifier applications. The fibers offer excellent single-mode beam quality for 1 μm applications and combine high pump absorption with low photodarkening loss. They are ideal fibers for low-cost marking lasers and pumping sources.

LIEKKI® Yb1200-6/125 fibers are available as double cladding (Yb1200-6/125DC) and double cladding polarization maintaining (Yb1200-6/125DC-PM) fibers.



Features

- Industry leading fiber deposition process — Direct Nanoparticle Deposition
- Excellent single mode beam quality for 1 μm applications
- Combining high pump absorption with low photodarkening loss
- Low intrinsic loss for highest efficiency
- Matching nLIGHT passive fibers available
- Acrylate coating enables fiber applications in extreme environmental conditions: Proven to operate up to 120°C and in extreme humidity.

Applications

- Low power lasers and amplifiers
- Pulsed and CW applications
- Laser marking
- High brightness pump sources
- IR sources for frequency doubling

Typical Fiber Specifications

Fiber		LIEKKI® Yb1200-6/125DC	LIEKKI® Yb1200-6/125DC-PM
Optical	Units		
Mode Field Diameter at 1060 nm ⁽¹⁾	μm	7.0 ± 0.5	7.0 ± 0.5
Peak Cladding Absorption at 976 nm (nominal)	dB/m	(2.4)	(2.4)
Cladding Absorption at 920 nm	dB/m	0.55 ± 0.1	0.55 ± 0.1
Core Numerical Aperture (nominal)		0.12	0.12
Cut-off wavelength ⁽²⁾	nm	860 ± 70	860 ± 70
Cladding Numerical Aperture, ≥		0.48	0.48
Core background loss at 1200 nm, ≤	dB/km	15	25
Birefringence, ≥	1E-04	-	2.0
Geometrical and mechanical			
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

⁽²⁾ Calculated value