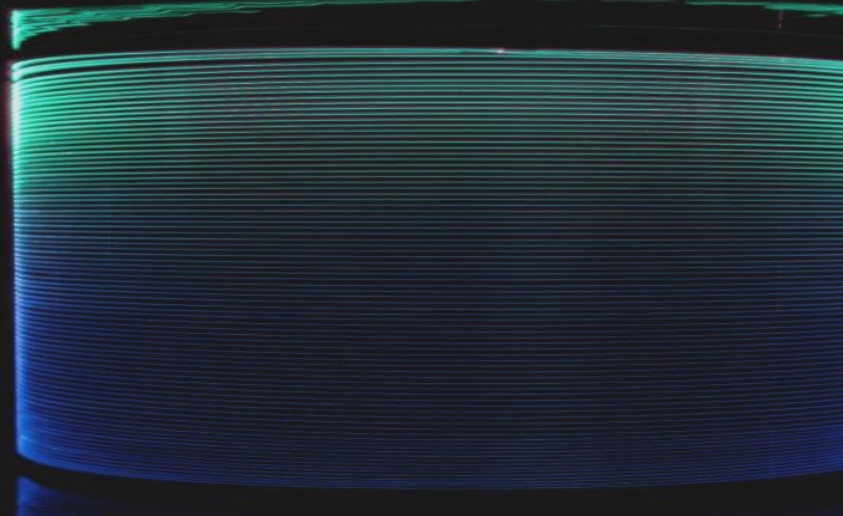


LIEKKI® Yb300-6/125 fibers are highly doped single mode single clad fibers for low power fiber laser and amplifier applications. Combining high core pump absorption, extremely high photodarkening resistivity and excellent, single-mode beam quality makes these fibers ideal for realizing, e.g., low average power femtosecond fiber lasers or preamplifiers in a fiber amplifier chain.

LIEKKI® Yb300-6/125 fibers are available as single clad (Yb300-6/125) and single clad polarization maintaining (Yb300-6/125-PM) fibers.



Features

- Industry leading fiber deposition process — Direct Nanoparticle Deposition
- Excellent single mode beam quality for 1 μm applications
- Extremely high photodarkening resistivity
- Proof tested to > 100 kpsi for long-term mechanical reliability
- Good spliceability and compatibility to standard single mode fibers (e.g. PM980, SM980); also matching nLIGHT passive fibers available

Applications

- Low average power femtosecond fiber lasers
- Low-power core pumped pre-amplifier for fiber amplifier chain
- IR sources for frequency doubling

Typical Fiber Specifications

Fiber		LIEKKI® Yb300-6/125	LIEKKI® Yb300-6/125-PM
Optical	Units		
Mode Field Diameter at 1060 nm ⁽¹⁾	μm	7.0 \pm 0.5	7.0 \pm 0.5
Peak Core Absorption at 976 nm (nominal)	dB/m	(300)	(300)
Peak Core Absorption at 920 nm	dB/m	75 \pm 10	75 \pm 10
Core Numerical Aperture		0.120 \pm 0.005	0.120 \pm 0.005
Cut-off wavelength ⁽²⁾	nm	860 \pm 70	860 \pm 70
Core background loss at 1200 nm, \leq	dB/km	25	25
Birefringence, \geq	1E-04	-	2.0
Geometrical and mechanical			
Core diameter (nominal)	μm	(5.5)	(5.5)
Core Concentricity Error, \leq	μm	1.0	1.0
Cladding Diameter (flat-to-flat)	μm	125 \pm 2	125 \pm 2
Cladding Geometry		Round	Round, PANDA
Coating Diameter		245 \pm 15	245 \pm 15
Coating Material		Dual coated high index acrylate	Dual coated high index acrylate
Proof Test, \geq	kpsi	100	100

⁽¹⁾ Far-field Mode Field Diameter

⁽²⁾ Calculated value