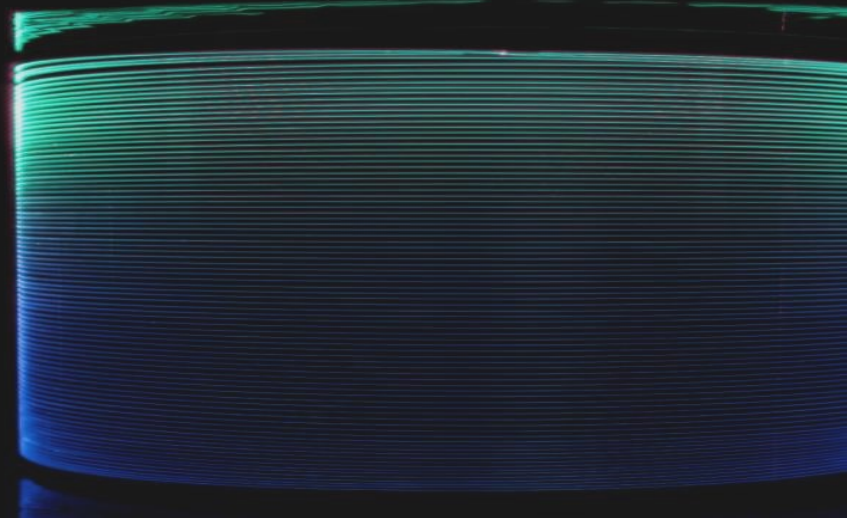


LIEKKI® Yb1200-30/250 fibers are very highly doped fibers which feature very high cladding absorption at low photodarkening loss, high efficiency per application length and very high beam quality. These fibers are ideal for high power pulsed fiber amplifiers where short application lengths are crucial to avoid nonlinear effects.

LIEKKI® Yb1200-30/250 fibers are available as double-clad (Yb1200-30/250DC) and double-clad polarization maintaining (Yb1200-30/250DC-PM) fibers.



Features

- Industry leading fiber deposition process — Direct Nanoparticle Deposition
- Large, low-NA core for very high beam quality
- Very high pump absorption enables short application lengths for compact designs and avoidance of nonlinear effects
- Low photodarkening loss
- Proof tested to > 100 kpsi for long-term mechanical reliability
- 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

- High peak and average power pulsed amplifiers
- IR source for frequency doubling
- Materials processing
- LIDAR
- Range finding

Typical Fiber Specifications

Fiber		LIEKKI® Yb1200-30/250DC	LIEKKI® Yb1200-30/250DC-PM
Optical	Units		
Peak Cladding Absorption at 976 nm (nominal)	dB/m	(14.2)	(14.6)
Cladding Absorption at 920 nm	dB/m	3.3 ± 0.6	3.4 ± 0.6
Core Numerical Aperture		0.070 ± 0.005	0.070 ± 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	30.0 ± 2.0	30.0 ± 2.0
Core Concentricity Error, ≤	µm	1.5	1.5
Cladding Diameter (flat-to-flat)	µm	250 ± 10	250 ± 10
Cladding Geometry		Octagonal	Round, PANDA
Coating Diameter		350 ± 15	350 ± 15
Coating Material		Dual coated low index acrylate	Dual coated low index acrylate
Proof Test, ≥	kpsi	100	100