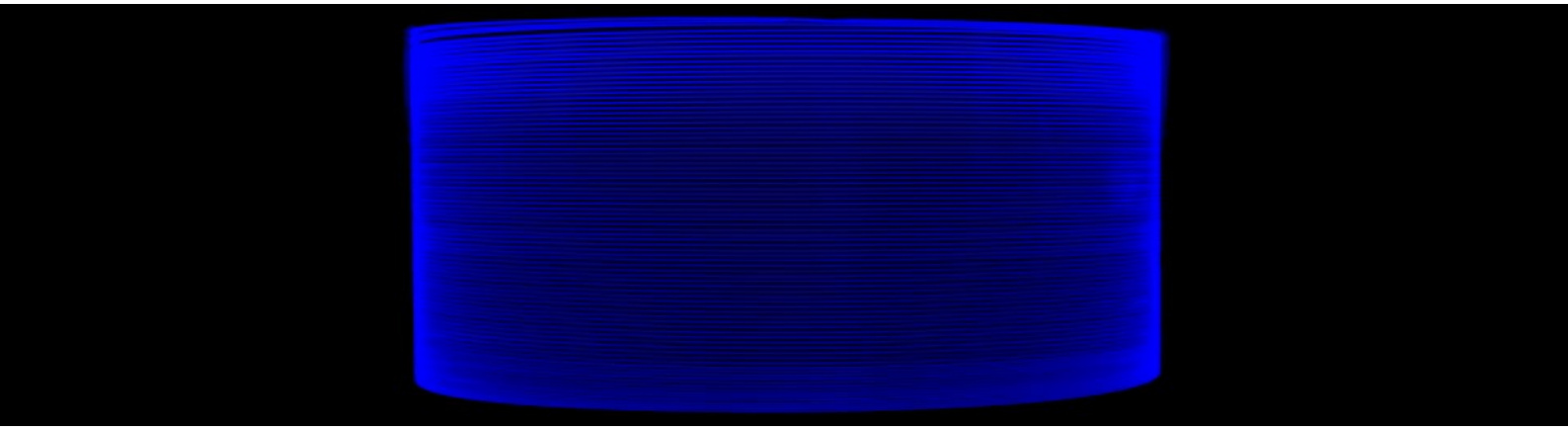
LIEKKI®

Yb800-20/125DC-PM

Large Mode Area Double Cladding Ytterbium Doped Fiber



Features

- **Direct Nanoparticle Deposition**: Industry leading fiber deposition process
- **New LIEKKI® fiber design for ultrafast, medium power amplifiers**:
  Fiber designed for robust, near diffraction limited beam quality
  High pump absorption for short application lengths
  Tightened PM fiber cladding geometries for better connectivity
- **Reliability**:
  Improved composition for long term reliability in power and beam quality
  Coating proven to operate up to 150˚C and in extreme humidity
- **Compatibility**: nLIGHT passive fibers matched for minimal splice loss.

Applications

- Medium power cladding pumped fiber amplifiers
- Ultrafast lasers for marking and material processing
- IR sources for frequency doubling

Typical Fiber Specifications

Fiber		LIEKKI® Yb800-20/125DC-PM
Optical	**Units**	
Peak Cladding Absorption at 976 nm (nominal)	dB/m	(21.9)
Cladding Absorption at 920 nm	dB/m	5.1 ± 0.75
Mode Field Diameter at 1060 nm (1)	µm	15.0 ± 1.0
Core Numerical Aperture		0.063 ± 0.004
Cladding Numerical Aperture, ≥		0.48
Core background loss at 1200 nm, ≤	dB/km	25
Birefringence, ≥	1E-04	0.8
Geometrical and mechanical		
Core Diameter (nominal)	µm	20.0 ± 1.5
Core Concentricity Error, ≤	µm	1.0
Cladding Diameter	µm	125 ± 1.0
Cladding Geometry		Round, PANDA
Coating Diameter		245 ± 15
Coating Material		Dual coated low index acrylate
Proof Test, ≥	kpsi	100

(1) Near-field Mode Field Diameter

+358 19 357391 | fibers@nlight.net | www.nlight.net

nLIGHT