

Yb800-34/460/530DC

Large Mode Area Triple Cladding Ytterbium Doped Fiber



Features

- Direct Nanoparticle Deposition: Industry leading fiber deposition process
- New LIEKKI[®] fiber design for high power CW fiber amplifiers: Triple cladding fiber structure for highest reliability Very low photodarkening losses for long-term power stability up to 5kW Designed for high-efficiency multi-kW CW fiber amplifier laser architecture
- Reliability: Reduced pump power at coating interface for improved thermal resistance. Most experienced high power Yb-doped triple cladding fiber manufacturer Coating proven to operate up to 150°C and in extreme humidity
- Compatibility: nLIGHT passive fibers matched for minimal splice loss.
- Support: Detailed application material available on request.

Typical Fiber Specifications

Fiber		LIEKKI [®] Yb800-34/460/530DC
Optical	Units	
Peak Inner Cladding Absorption at 976 nm (nominal)	dB/m	(4.3)
Inner Cladding Absorption at 920 nm	dB/m	1.00 ± 0.15
Cladding Absorption at 920 nm (nominal)	dB/m	0.77
Core Numerical Aperture (realNA)		0.100 ± 0.010
Inner Cladding Numerical Aperture, ≥		0.200
Cladding Numerical Aperture, ≥		0.48
Core background loss at 1200 nm, ≤	dB/km	15
Geometrical and mechanical		
Core Diameter	μm	34.0 ± 2.5
Inner Cladding Diameter (flat-to-flat)	μm	460 ± 15
Cladding Diameter	μm	530 ± 10
(Inner) Cladding Geometry		(Octagonal) Round
Coating Diameter		650 ± 30
Coating Material		Dual coated low index acrylate
Proof Test, ≥	kpsi	85

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Applications

- 2 to 5 kW CW fiber power amplifiers with multimoded beam output
- Industrial applications