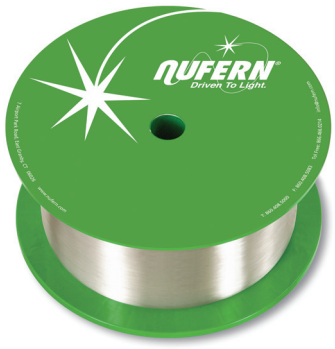


15/130 Ytterbium-Doped LMA Double Clad Fiber

Nufern's polarization maintaining, Large Mode Area (LMA), Ytterbium-doped double clad fiber is ideal for linearly polarized high power fiber lasers and amplifiers used in military, industrial, and medical applications. LMA Yb-doped fibers enable efficient, compact, diode pumped fiber sources that are an attractive alternative to traditional solid-state lasers. This fiber features a large core/cladding ratio with a low NA (0.08) and is ideally suited for pulsed laser applications.

Typical Applications

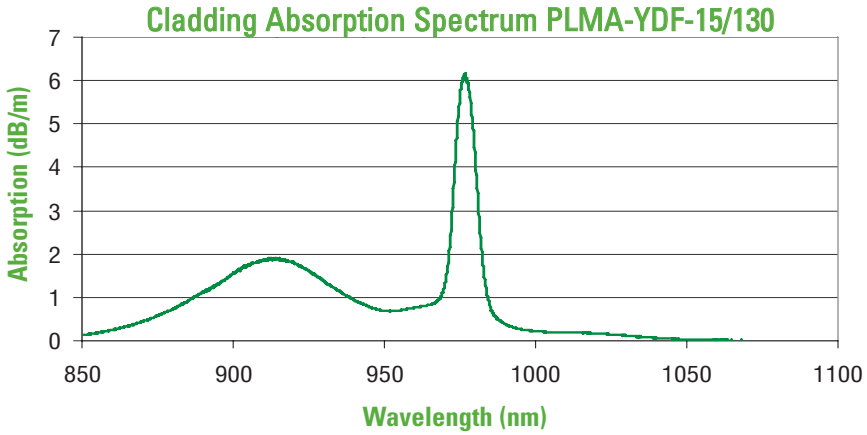
- Pulsed fiber lasers and amplifiers
- Material processing
- LIDAR
- Non-linear optics / frequency doubling

Features & Benefits

- LMA core design and short amplifier length — Useful for generating high peak powers
- "Few" moded core design — Easy to maintain single mode LP01 beam through fiber & components
- PANDA-style stress structure for increased birefringence — Superior optical performance and uniformity
- All fiber proof tested to ≥ 100 kpsi — Critical for ensuring long term reliability when coiling

Optical Specifications	**PLMA-YDF-15/130**	**LMA-YDF-15/130**
Operating Wavelength (nominal)	1060-1115 nm	1060-1115nm
Cladding Absorption @ 915 nm	1.8 ± 0.3 dB/m	1.8 ± 0.3 dB/m
Cladding Absorption @ 975nm (nominal)	6.0 dB/m	6.0 dB/m
Core Numerical Aperture	0.08 ± 0.01	0.08 ± 0.01
Cladding Numerical Aperture (nominal)	0.46	0.46
Birefringence	$\geq 2.0 \times 10^{-4}$	N/A
Geometrical & Mechanical Specifications		
Core Diameter	15 ± 2 µm	15 ± 2 µm
Clad Diameter	130 ± 5 µm	130 ± 5 µm
Coating Diameter	245 ± 15 µm	245 ± 15 µm
Outer Cladding Material	Low Index Polymer	Low Index Polymer
Proof Test Level (radius bend method)	≥ 100 kpsi (0.7 GN/m²)	≥ 100 kpsi (0.7 GN/m²)

Note: *The passive version of this fiber is also available.*



NUFERN Driven To Light.

RoHS

7 Airport Park Road, East Granby, CT 06026 • 860.408.5000 • Toll-free 866.466.0214 • Fax 860.844.0210 E-mail info @ nufern.com • **www.nufern.com**