



15/130 Precision Matched Ytterbium-Doped LMA Double Clad Fiber

Nufern's precision matched Large Mode Area (LMA), Ytterbium-doped double clad fiber is ideal for 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. This precision matched active fiber is optimized to match Nufern's precision matched passive 15/130 fiber for superior splicing and loss performance.

Typical Applications

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

Features & Benefits

- Precision matched fiber series — ensure splice compatibility across the 15/130 LMA fibers
- NuCOAT™ fluoroacrylate coating — Greater fiber durability in extreme environmental operating & storage condition
- 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
- All fiber proof tested to > 100 kpsi — Critical for ensuring long term reliability when coiling

Optical Specifications

Operating Wavelength	1060 – 1115 nm
Core NA	0.080 ± 0.005
First Cladding NA (5%)	≥ 0.46
Cladding Attenuation	≤ 15.0 dB/km @ 1095 nm
Cladding Absorption	1.80 ± 0.20 dB/m at 915 nm 5.40 dB/m near 976 nm

LMA-YDF-15/130-M

Geometrical & Mechanical Specifications

Cladding Diameter (flat-to-flat)	130.0 ± 1.5 µm
Core Diameter	15.0 ± 1.5 µm
Coating Diameter	245.0 ± 10.0 µm
Coating Concentricity	< 5.0 µm
Core/Clad Offset	≤ 1.00 µm
Proof test Level	≥ 100 kpsi (0.7 GN/m ²)



Coating Requirements: Low Index Polymer.
The precision matched passive version of this fiber is also available - see LMA-GDF-15/130-M

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Custom developed fiber (FUD) specifications are subject to change without notice. Other configurations such as alternative form factors, optimized cut-off and UV cured color coating may be available. Let us know how Nufern can assist with your requirements.

