

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

Coherent'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 Coherent'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	LMA-YDF-15/130-M
Operating Wavelength Core NA First Cladding NA (5%) Cladding Attenuation Cladding Absorption	1060 - 1115 nm 0.080 ± 0.005 ≥ 0.46 ≤ 15.0 dB/km @ 1095 nm 1.80 ± 0.20 dB/m at 915 nm 5.40 dB/m near 976 nm
Geometrical & Mechanical Specifications	
Cladding Diameter (flat-to-flat) Core Diameter Coating Diameter Coating Concentricity Core/Clad Offset Prooftest Level	130.0 ± 1.5 μm 15.0 ± 1.5 μm 245.0 ± 10.0 μm < 5.0 μm ≤ 1.00 μm ≥ 100 kpsi (0.7 GN/m²)



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 Coherent can assist with your requirements.