

30/250 with 0.09 NA Matched Passive LMA Double Clad Fiber



Coherent's passive series of Large Mode Area (LMA) double clad fibers are ideal for high power monolithic fiber lasers and amplifiers. This passive fiber is based on a 30 μm diameter core and 250 μm diameter clad size with a low NA (0.09) core. It is precision matched to its active Er/Yb co-doped 30P/250 LMA matched counterpart to ensure excellent splice compatibility and low loss. As with all Coherent standard LMA fibers, this fiber is proof-tested to 100 kpsi, an industry requirement for long term reliability. They utilize the latest fiber design and NuCOAT-FA™ coating technology to ensure excellent preservation of beam quality and extended operating life at the high power levels demanded by today's industrial fiber laser applications.

Typical Applications

- Eye safe (1.5 μm) lasers and amplifiers
- High peak power, pulsed fiber amplifiers
- Ultra-short pulse fiber amplifiers
- Military and commercial lidar

Features & Benefits

- NuCOAT-FA™ fluoroacrylate coating — Greater fiber durability in extreme operating & storage conditions
- Unique LMA core design — Useful for transmitting high peak powers
- "Few" moded core design — Easy to maintain single mode LP01 beam through fiber & components
- Tight geometric tolerances — Superior optical performance and uniformity
- All fiber proof tested to > 100 kpsi — Critical for ensuring long term reliability when coiling

Optical Specifications

Operating Wavelength	800 – 2100 nm
Core NA	0.0900 \pm 0.0100
First Cladding NA (5%)	\geq 0.46
Cladding Attenuation	\leq 15.0 dB/km @ 1095 nm

LMA-GDF-30/250-09M

Geometrical & Mechanical Specifications

Cladding Diameter	247.0 \pm 3.0 μm
Core Diameter	30.0 \pm 2.0 μm
Coating Diameter	350.0 \pm 10.0 μm
Core/Clad Offset	\leq 2.00 μm
Clad Non-Circularity	\leq 0.5 %
Coating Material	Low Index Acrylate
Proof test Level	\geq 100 kpsi (0.7 GN/m ²)



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www.coherent.com ; www.shop.coherent.com • Coherent products are manufactured under an ISO 9001:2008 certified quality management system.



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.

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