

14/250 NuMatch LMA Double Clad Fiber



Coherent | Coherent's passive series of Large Mode Area (LMA) double clad fibers are ideal for high power monolithic fiber lasers and amplifiers. These passive fibers are based on a 14 μm diameter core and 250 μm diameter clad size with a low NA (0.07) core and are designed to work well with the active Yb-doped 14/250 LMA fibers. These fibers utilize the latest fiber design and NuCOATHP 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. These fibers are available in both non-PM and PANDA-style PM fibers.

Typical Applications

- Monolithic high power lasers & amplifiers
- LMA fiber couplers & pump combiners
- High power pump & signal pigtails
- Military, industrial and medical

Features & Benefits

- NuMATCH™ — Optimized compatibility with 14/250 active fibers
- NuCOATHP fluoroacrylate coating — Greater fiber durability in extreme environmental operating & storage conditions
- Optimized LMA core design — Easy to maintain single mode LP01 beam through fiber & components at high power
- All fiber proof tested to > 100 kpsi — Critical for ensuring long term reliability when coiling

Optical Specifications

Operating Wavelength	1015 – 1115 nm
Core NA	0.070 \pm 0.005
First Cladding NA (5%)	\geq 0.46
Core Attenuation	\leq 20.0 dB/km @ 1200 nm
Cladding Attenuation	\leq 15.0 dB/km @ 1095 nm

Geometrical & Mechanical Specifications

Cladding Diameter	247.0 \pm 3.0 μm
Core Diameter	14.0 \pm 1.0 μm
Coating Diameter	395.0 \pm 15.0 μm
Core/Clad Offset	\leq 1.00 μm
Clad Non-Circularity	\leq 0.50 %
Proof test Level	\geq 100 kpsi (0.7 GN/m ²)

LMA-GDF-14/250-HP-M 1365474



Nufern • 7 Airport Park Road, East Granby, CT 06026 • 860.408.5000 • Toll-free 866.466.0214 • Fax 860.844.0210 • Email: tech.sales@coherent.com
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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