



Nufern'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 15 micron diameter core and 130 micron diameter clad size with a low NA (0.08) core and are designed to work well with the active Yb-doped 15/130 LMA fibers. These fibers utilize the latest fiber design and NuCOAT™ 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

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

Features & Benefits

- Designed for compatibility with 15/130 active fibers
- NuCOAT™ 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 (nominal) Core NA

> First Cladding NA (5%) **Cladding Attenuation**

Birefringence

PLMA-GDF-15/130

LMA-GDF-15/130

1060 nm 1060 nm 0.080 ± 0.005 0.080 ± 0.005 ≥ 0.460 ≥ 0.460

≤ 15.0 dB/km @ 1095 nm ≤ 15.0 dB/km @ 1095 nm

nominal 1.5 × 10-4 N/A

Geometrical & Mechanical **Specifications**

Cladding Diameter Core Diameter Coating Diameter Coating Concentricity Prooftest Level

 $130.0 \pm 1.0 \, \mu m$ $130.0 \pm 1.0 \, \mu m$ $15.0 \pm 1.5 \, \mu m$ $15.0 \pm 1.5 \, \mu m$ $245.0 \pm 10.0 \, \mu m$ $245.0 \pm 10.0 \, \mu m$ $< 5.0 \mu m$ $< 5.0 \ \mu m$

≥ 100 kpsi (0.7 GN/m²) ≥ 100 kpsi (0.7 GN/m²)



Designed to work with 15/130 LMA Yb-doped active fibers.



