

# Flat-Top Fiber 105 Micron Core 0.22 NA Power Delivery

Coherent | Nufern's PRISM Award winning specialty flat-top fiber technology is designed in mulitimode step-index fibers to ensure high compatibility with conventional fibers from the power delivery family. These proprietary fibers are specially designed to tailor the mode content propagating in its core in order to transform input beams into a homogeneous top-hat beam profile while maintaining highly efficient light propagation and ensuring ultra-low insertion loss. This fiber features a 100 µm core and a 125 µm clad with a 0.22 NA.

### **Typical Applications**

- · Power Delivery
- Uniform Illumination
- Spectroscopy
- Medical

#### **Features & Benefits**

- Beam Homogeneity Generates top-hat homogeneous beams
- · Multimode beam uniformity Reduction of hot spots
- · Efficient brightness conservation of multimode beams
- Robust design Compatible with majority of fiber interconnect systems
- · All fiber proof tested to > 100 kpsi Critical for ensuring long term reliability.

#### **Optical Specifications**

## MMF-S105/125-22A

1335821

Operating Wavelength Core NA

700 – 2200 nm

A 0.220 ± 0.020

#### Geometrical & Mechanical Specifications

Cladding Diameter
Core Diameter
Coating Diameter
Core/Clad Offset
Coating Material
Short Term Bend Radius
Long Term Bend Radius
Prooftest Level

 $125.0 \pm 2.0 \ \mu m$   $105.0 \pm 3.0 \ \mu m$  $245.0 \pm 15.0 \ \mu m$ 

≤ 3.00 µm

Acrylate

, ≥ 12 mm

≥ 25 mm

≥ 100 kpsi (0.7 GN/m²)



Flat-Top Technology



