

NuBEAM 1000 µm Core Beam Delivery Fiber

Nufern's beam delivery NuBEAM specialty multimode step-index fibers are designed for compatibility with the majority of fiber interconnect systems and diode laser power delivery systems. This fiber features a 1000 micron core diameter, 0.22 NA and 1100 micron clad diameter with a silicone coating and a transparent nylon buffer. This fiber is also available with Nufern's proprietary NuCOAT-FA coating for added power confinement or polyimide for high temperature applications. Additional clad diameters and different NAs are available upon request.

Typical Applications

- Fiber coupled diode lasers
- Couplers and pump combiners
- · Beam delivery cables
- Spectroscopy and instrumentation

Features & Benefits

- Robust industry standard design Compatible with majority of fiber interconnect systems
- Exceptional geometric uniformity and core/clad concentricity Ease of assembly
- Clean room fiber draw Eliminates coating "hot spots"
- Pure Silica Core High resistance to optical damage

Optical Specifications

BD-S1000/1100-STN

Operating Wavelength
Core NA
OH Level

800 - 2100 nm 0.220 ± 0.020 Low

Geometrical & Mechanical

Specifications Cladding Diameter Core Diameter First Buffer Diameter Second Buffer Diameter

 $1122.0 \pm 22.0 \ \mu m$ $1020.0 \pm 20.0 \ \mu m$ $1200.0 \pm 36.0 \ \mu m$ $1400 \pm 70 \ \mu m$ Silicone

First Buffer Material Second Buffer Material Short Term Bend Radius Long Term Bend Radius

Transparent Nylon

≥ 110 mm

≥ 330 mm

Prooftest Level ≥ 70 kpsi (0.5 GN/m²)



Buffer Requirements: Silicone Primary Buffer, Transparent Nylon Outer Buffer Low or High -OH Core: Low Matched or Depressed Cladding: Depressed Special Core Dopants: Pure Silica Core

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