



Passive Cladding Pumped Fiber & Components

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Datasheet

Passive Dual-Clad Fiber

Passive Dual-CLad Fiber (SMM900) is a passive, dual-cladding, Multi-Mode (MM) fiber that combines both Single-Mode (SM) and multi-mode fiber characteristics within a single fiber. The fiber has a germano-silicate single-mode core, a pure silica inner cladding to guide the pump light and a fluorine-doped secondary cladding to give outstanding power handling over a full range of environmental conditions. The fiber does not rely on a low index polymer coating, so it can be stripped, cleaved and spliced like a standard telecoms fiber, without the need to apply a low index recoat material.

SMM900 has been designed specifically to be used in conjunction with Fibercore's Dual-Clad Erbium/Ytterbium Doped Fiber (CP1500Y), Multi-Mode Pump Fiber (MM105) and Isolating Wavelength Division Multiplexer (CP-IWDM). In order to minimize losses throughout the system and maximize efficiency, the optical characteristics of these fibers have been matched for high splice compatibility.

Advantages:

- All-silica design
- No recoating required
- Stable in humid environments

Typical applications:

- Telecoms
- Erbium Doped Fiber Amplifier (EDFA)
- Cable Television (CATV)
- Fiber Laser
- Biomedical Illumination

Related Products:

- Dual-Clad Erbium/Ytterbium Doped Fiber (CP1500Y)
- Multi-Mode Pump Fiber (MM105)
- Isolating Wavelength Division Multiplexer (CP-IWDM)

Product Variant:

- **SMM900** Double clad passive fiber with SM core and MM pump guide

Specifications

	SMM900
Single-Mode Core	
Mode Field Diameter (µm)	6.5 – 8.2 @1550nm
Numerical Aperture	0.18 - 0.20
Cut-Off Wavelength (nm)	870 - 970
Attenuation (dB/km)	4 (Nominal) @1550nm
Core Concentricity (µm)	≤ 0.75
Pump Guide	
Diameter (µm)	100 - 104
Numerical Aperture	0.24 - 0.28
General	
Cladding Diameter (µm)	125 ± 1
Coating Diameter (µm)	245 ± 15
Proof Test (%)	1 (100 kpsi)
Coating Type	Dual Acrylate

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