



Doped Fiber

VERSION: MD21/4
RELEASE DATE: 14 DECEMBER 2016

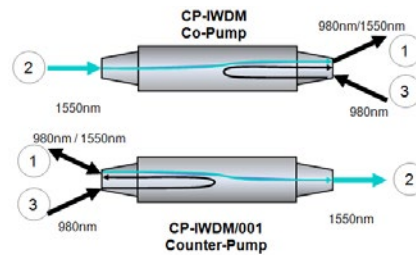
Datasheet

Isolating Wavelength Division Multiplexer CP-IWDM

CP-IWDMs are hybrid products combining an integrated isolator and 980nm/1550nm Wavelength Division Multiplexer (WDM). They are designed to combine high power Multimode (MM) pump light and Single-Mode (SM) signal light into SMM900(105/125) dual clad pump signal fiber. The signal is carried in the single-mode core while pump energy is confined within the large area 105µm multimode guide for delivery to dual cladding doped fibers.

The CP-IWDM is designed specifically as a partner for the cladding pump amplifier fiber CP1500Y. It is ideally suited to systems incorporating Fibercore's other cladding pump component fibers: Multimode Pump Fiber (MM105), a large core pump guide fiber, and Passive Dual Clad Fiber (SMM900), a dual clad fiber with single-mode core for signal propagation and multimode pump guide for high power pump light delivery.

Two variants of the CP-IWDM are available, a co-pump CP-IWDM and counter-pump CP-IWDM/001 to offer customers flexibility in their amplifier or laser design.



Advantages:

- Single component for WDM and isolating function
 - Small package size
 - Compatible with CP1500Y
 - Epoxy free optical path
- High stability and reliability
- Ultra low Polarization Dependant Loss (PDL) & Polarization Mode Dispersion (PMD)

Related Products:

- Dual Clad Erbium/Ytterbium Doped Fiber (CP1500Y)
- Large Core Fiber (MM105)
- All Silica Double Clad Fiber (SMM900)

Typical applications:

- High Power Erbium Doped Fiber Amplifiers (EDFAs)
- Fiber Lasers
- WDM systems
- Cable Television (CATV)

Product Variants:

- **CP-IWDM** Co-pumping isolating wavelength division multiplexer
- **CP-IWDM/001** Counter-pumping isolating wavelength division multiplexer



Specifications

General Mechanical	Package Size (mm)	5.5 x 54
	Operating Temperature (°C)	0 to +70
	Storage Temperature (°C)	-40 to +85
General Optical	Directivity (dB)	≥40
	Polarization Mode Dispersion (ps)	≥0.25
	Polarization Dependent Loss (dB)	≥0.1
	Isolation @23°C (dB)	≥31
	Signal Wavelength Isolation (dB) (1 to 3)	≥12
S Single-Mode Fiber	Cladding Diameter (µm)	125
	Operating Wavelength (nm)	1550
	Numerical Aperture nominal	0.12
	Max Input @1550nm (mW)	300
P Multimode Input	Cladding Diameter (µm)	125
	Pump Guide Diameter (µm) nominal	105
	Numerical Aperture nominal	0.22
	Max Input @970nm (mW)	5000
C Dual Clad Fiber	Cladding Diameter (µm)	125
	Single-Mode Cut-Off Wavelength (nm)	870 - 970
	Single-Mode NA	0.18 - 0.20
	Pump Guide Diameter (µm) nominal	105
	Pump Guide NA nominal	0.22