

## Optical Fiber Wavelength

### Description



**Wavelength Division Multiplexers (WDM)** for singlemode optical fiber have one or two input and output branches. They are built in **fusion technology** and designed to introduce **low insertion loss** and **high isolation**. The usual mechanical presentation options are plastic boxes or standard commercial cassettes. The connection extremes can be supplied terminated with customized connectors both in angled polishing with high return loss (**FC/APC, SC/APC**) and convex polishing (**FC/ PC, SC/PC, ST/PC**) versions.

Each WDM includes its **optical insertion loss and isolation measures** of each branch. WDMs are available in several fiber sizes and types (**250µm fiber, loose tube, 900µm buffer or Ø 3mm cable**).

### Versions

WDMs are available in several versions, differing among them the wavelength of the different ports or the isolation grade . The standard versions are :

- . **HI Version:** with ultra high isolation. Available in all connectorization options. Wavelengths specified between: 1310/1550/1650 nm.
- . **STD Version:** : Standard option. Available in all connectorization options. Wavelengths specified between: 1310/1550/1650 nm.
- . **PM Version:** : Designed to divide and/or combine different optical wavelengths in optical amplifiers. Available in all connectorization options. Available wavelengths are 980/1550nm and 1480/1550 nm.

### Specifications

Standard WDM configuration	1x2 (2x2)		
Operating wavelength (nm):	I = 1.310 nm & 1.550 & 1650 nm		
Insertion Loss (dB):	I<0.3 dB	II<0.7 dB	III<1 dB
Isolation (dB):	I>15 dB	II>30 dB	III>40 dB
Polarization Sensitivity (%)	±1%		
Directivity (dB):	≥55 dB		
Operating temperature range:	-20° a +80°C		
Stability of the Insertion Loss in the range -40° to +80°C (dB):	≤ 0.005 dB/°C		
Cable type:	Tight buffered of 250 and 900 µm, loose tube or single fiber cable (under request)		
Cable length:	custom length		
Connector type:	FC(PC/APC), SC(PC/APC), ST		
Applications:	Telecommunications, CATV, Long Haul, LAN...		