

creating
unique advantages
together



WaveMetro™ Narrow WDM

Product Capabilities and Value

E-commerce and new Internet-based multi-media are creating a need for bandwidth, not just in the long-haul backbone, but also in the metro and access networks. These new systems need more than two channels used in original coarse-WDM designs (1310 and 1550nm), but do not need the dense channel spacings of DWDM systems. In the metro environment, WDM systems must also compete with other bandwidth solutions such as deploying new fiber or increasing bit-rates. Amplifiers are avoided whenever possible to reduce the cost, placing a premium on component insertion loss in addition to component cost.

The WaveMetro is a low-loss, economical alternative to thin-film filters for use in narrow-WDM metro systems. The Fused Cascaded Fiber (FCF) approach offers an intrinsically low loss design while allowing multiple wavelengths to be combined or filtered. The WaveMetro is available with a choice of channel spacings and wavelength range, giving you flexibility to design your Metro WDM system.

WaveSplitter understands that excellent performance is just one of the many selection criteria for choosing a filter, and the WaveMetro has been designed to the highest reliability standards.

As you are looking to reduce cost for today's Metro WDM networks—take a look at the WaveMetro.

Features

- Very low insertion loss
- Flexible channel plan
- Telcordia™ reliability
- Economical

Benefits

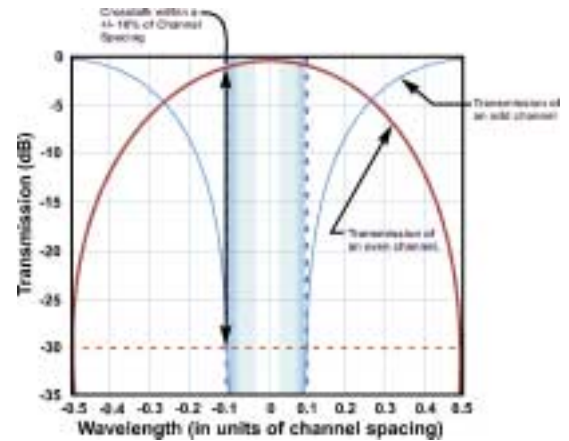
- Narrow WDM design
- Extended link lengths
- Economical system value

Performance Specifications for WaveMetro Narrow WDM¹⁻³

Parameters	Multiplexer					
Available Channel Wavelength Range ⁴ (nm)	1500 to 1610					
Available Channel Spacing ⁵ (nm)	6		10		20	
Available Number of Channels ⁵	2	4	2	4	2	4
Effective Passband Window (nm)	±0.6		±1.0		±2.0	
Insertion Loss (dB)	≤ 0.6	≤ 1.0	≤ 0.5	≤ 0.9	≤ 0.4	≤ 0.8
Crosstalk (dB)	≥ 10	≥ 11	≥ 12	≥ 13	≥ 13	≥ 14
PDL ⁶ (dB)	≤ 0.1					
Typical Thermal Wavelength Drift (pm/°C)	5 to 7					
Operating Temperature (°C)	-20 to 70					
Storage Temperature (°C)	-40 to 85					
Fiber Type	SMF 28					
Optical Power (W)	≥ 5					

Insertion loss and crosstalk are typical values measured in the passband width and at room temperature. US patent no. 5,809,190
 Note: All data taken prior to connectorization.

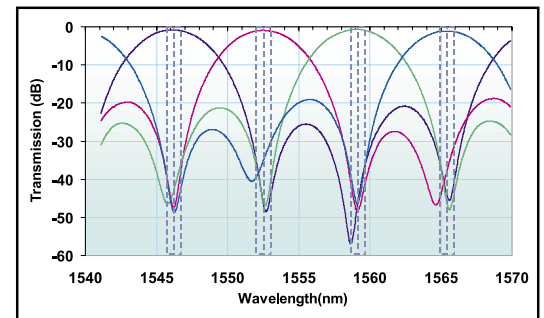
- 1 - Options include packaging couplers as an assembly or an unsplined kit.
 - 2 - Both internal and external termination of unused ports are available upon request.
 - 3 - Standard pigtail length = 100 (±10) cm.
 - 4 - Measured wavelengths are referenced to vacuum unless otherwise requested.
 - 5 - Custom channel counts and spacing are available upon request.
 - 6 - PDL is typical value measured at the target wavelength and at room temperature.
- * Contact your sales representative for product availability.



WaveMetro Ordering Information: Standard WaveMetro devices are specified with appropriate model number options. If you require devices with different specifications, please contact your sales representative for product availability.

	Channel Count	Channel Spacing	Channel Wavelength	Package Dimension
WMM	---	-----	-----	---
	Ex. 2 = 2 Ch 3 = 3 Ch	Select a channel spacing Ex. 5nm=050 15.5nm=155	Select a starting wavelength Ex. 1450.00nm=145000 973.00nm=097300	1 = D 1.2 2 = D 2.0

For more information on any WaveSplitter product contact your sales representative listed on our web site www.wavesplitter.com. Or contact WaveSplitter Technologies, Inc. directly at 510.580.8888.



Typical spectra showing the multiple input channels of a WaveMetro™ multiplexer. The WaveMetro has very low insertion loss at the different input channels.