

# M-8 D-8

## *mini-metro* CHANNEL

### **Eight-Channel Coarse WDM (CWDM) Multiplexer and Demultiplexer**

The Tsunami™ Mini-MetroChannel™ M-8 and D-8 are eight-channel coarse WDM (CWDM) multiplexer and demultiplexer modules designed for integration into metro and access optical communication networks. The multiplexer module combines eight wavelengths (channels) traveling in eight separate singlemode fibers into one singlemode fiber, while the demultiplexer module separates eight wavelengths traveling in one singlemode fiber into eight wavelengths, each traveling in a separate singlemode fiber. The unique and highly integrated design of the Mini-MetroCHANNEL™ offers a very small form factor and very low insertion loss to support a higher degree of integration and long link length. The modules operate independent of data rate and protocol, and are designed to work with uncooled lasers having wavelengths spaced 20 nm apart. Deployed in CWDM architectures, Tsunami's Mini-MetroCHANNEL™ modules provide unsurpassed small form factor as well as an ideal balance of price and performance for multiplexing and demultiplexing in metro and access networks.

### *features & benefits)*

Small footprint

Multiplexes or demultiplexes 8 channels with 20 nm separation and 13 nm bandwidth

Designed for use with uncooled lasers

Thin film filter technology enables cost-effective performance

Operate independent of protocol and data rate

Low insertion loss supports long links

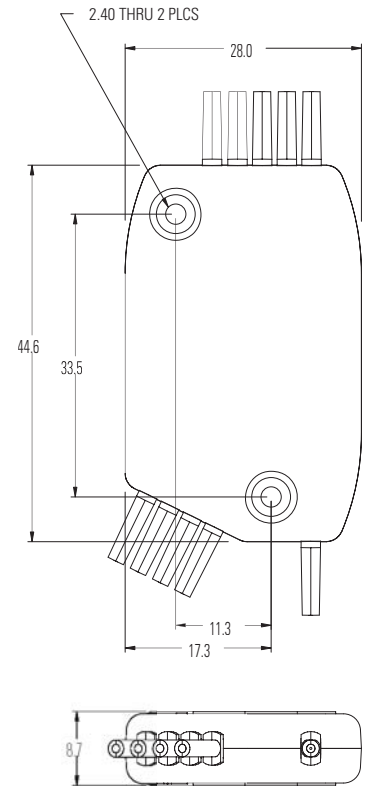
High channel isolation minimizes cross-talk

Qualified in accordance with applicable Telcordia and NEBS standards

## Specifications

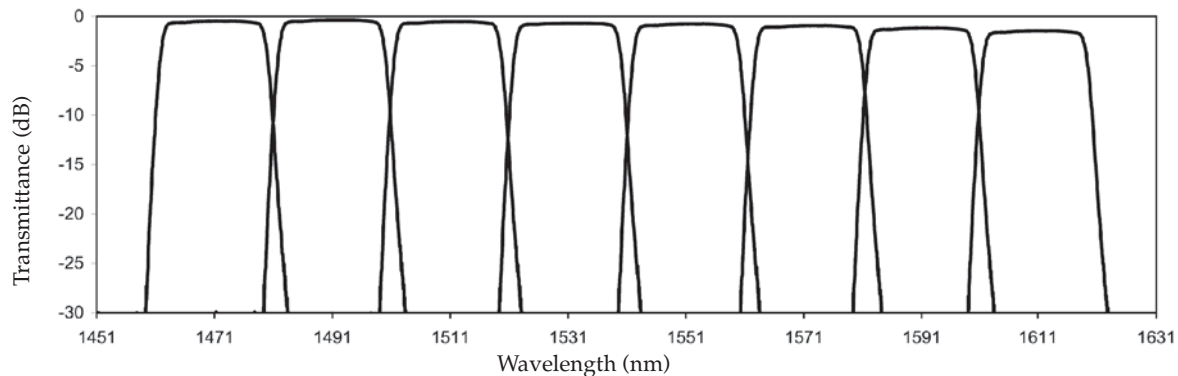
	MUX		DEMUX
Channel center wavelengths		1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611 nm	
Channel center wavelength separation		20 nm	
Channel bandwidth at channel insertion loss		≥ 13 nm	
Insertion loss		≤ 1.5 dB	
Link loss with mux/demux combination		≤ 2.5 dB	
Return loss		≥ 50 dB	
Adjacent channel isolation	–		≥ 30 dB
Non-adjacent channel isolation	–		≥ 50 dB
Channel uniformity		≤ 0.5 dB	
Input power		300 mW max	
Polarization dependent loss		≤ 0.1 dB	
Thermal stability		0.005 nm/°C	
Pigtail fiber type		Corning® SMF-28™ (9 / 125 / 250 micron) Connectorized pigtails have 900 micron buffer.	
Pigtail fiber length		1 m ± 5 cm	
Operating temperature		- 10°C to +65°C	
Storage temperature		- 40°C to +85°C	
Dimensions		44.6 x 28.0 x 8.7 mm [1.76 x 1.10 x .34 in]	

Specifications do not include connectors. The modules are tested in accordance with applicable Telcordia™ 1209, Telcordia 1221 and NEBS standards. Please contact Tsunami to discuss specific performance requirements.



millimeters  
(approximate scale 1:1)

## Transmittance (Demux)



## Part Number

MUX OR DEMUX	8	-	WAVELENGTHS	-	CONNECTOR	-	D00
MM = Mux MD = Demux			0 = Customer Specified 1 = 1471, 1491, 1511, 1531 1551, 1571, 1591, 1611 2 = 1310, 1330, 1350, 1570 1590, 1610, 1630, 1650		NO = No connector FP = FC / UPC SP = SC / UPC FA = FC / APC SA = SC / APC LC = LC MU = MU ST = ST CU = Custom		Custom Options* D00 = Standard

\* Tsunami will assign a custom number.

For additional information, please contact Tsunami's Sales Department at sales@tsunamioptics.com  
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