

Optiva MDM-7001C CWDM Multiplexer/Demultiplexer



The Optiva MDM-7001C CWDM MUX/DEMUX enables multiplexing or demultiplexing of up to 16 wavelengths onto, or from a common singlemode optical fiber with wavelengths ranging from 1270 nm to 1610 nm. The MDM-7100C-4 is a 1-slot Optiva plug-in module, while the MDM-7100C-8 and MDM-7100C-16 are 2-slot Optiva plug-in modules.



The MDM-7001C CWDM MUX/DEMUX is most typically used when either leased fiber cost is an issue or when the existing fiber plant has reached its maximum capacity.

Applications

- Nodes in Dual-Redundant Fiber Rings
- Test and Measurement
- Fiber Capacity Expansion
- Satellite Communications

Features

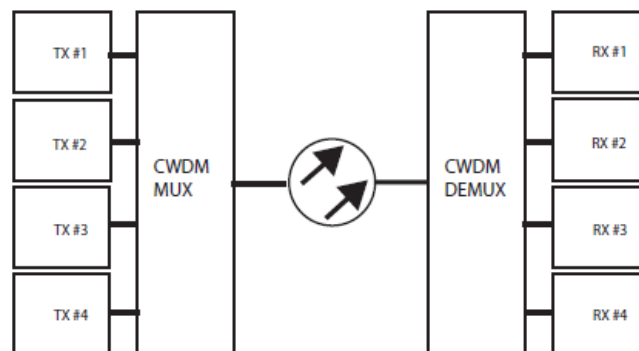
- Combines and Separates Up to 16 Different CWDM Wavelengths onto One Singlemode Fiber
- Optiva Insert Card Form Factor
- Minimization of Optical Fiber Use for Add/Drop Applications
- Low Insertion Loss
- Fits in Optiva Enclosures (16, 6, 2 and 1 slot)
- RoHS Compliant

System Design

The Optiva platform includes a wide range fiber **optiva** PLATFORM optic transport products for satellite and microwave communications from 1 MHz to 40 GHz. These units can be used to construct transparent inter- and intra-facility links from 1 meter to >100 km for RF and microwave signal transport, antenna remoting, video transport, electronic warfare systems and other high-dynamic-range applications.

Optiva is a completely modular, hot-swappable platform. Both 19" rack-mount and compact tabletop, or wall-mountable enclosures are available. The 3 RU 19" rack-mount, fan-cooled enclosures (Model OT-CC-16 and OT-CC-16F) can support up to 16 insert cards and utilize two dual-redundant, hot-swappable, 100 or 200 watt power supplies. The 1 RU 19" rack-mount, fan-cooled enclosure (Model: OT-CC-6-1U) can accommodate 6 insert cards and utilizes two hot-swappable 60 watt power supplies. Compact one-slot (OT-DTCR-1), or two-slot (OT-DTCR-2) enclosures are also available that use an external wall-mount power supply.

Functional Diagram



Optiva MDM-7001C CWDM Multiplexer/Demultiplexer

Specifications

Specifications	Values
Wavelengths	
MDM-7001C-4	1470, 1490, 1510, 1530 nm
MDM-7001C-8	1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610 nm
MDM-7001C-16	1270, 1290, 1310, 1330, 1350, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610 nm
Insertion Loss	
MDM-7001C-4	< 3.0 dB
MDM-7001C-8	< 4.5 dB
MDM-7001C-16	< 6 dB
Optical Return Loss	50 dB
Port Isolation	30 dB (Adjacent Channel) 40 dB (Non-Adjacent Channel)
Max Power Handling	21.7 dBm

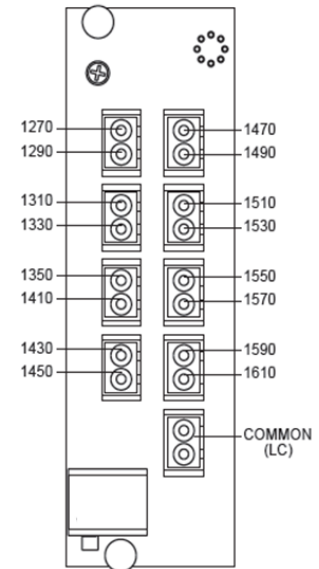
General

Specifications	Values
Dimension (Insert Card)	
MDM-7001C-4	6.3"D x 0.8"W x 4.0"H 160.0 mm D x 20.3 mm W x 101.6 mm H
MDM-7001C-8	6.3"D x 1.6"W x 4.0"H
MDM-7001C-16	160.0 mm D x 40.64 mm W x 101.6 mm H
Weight	
MDM-7001C-4	6 oz / 170.1 g
MDM-7001C-8	8 oz / 226.8 g
MDM-7001C-16	13 oz / 368.6 g
Operating Temperature	-20°C to +70°C
Storage Temperature	-40°C to +85°C
Humidity	0% to 95% non-condensing

Models

Model	Description
MDM-7001C-4-M-SA	MUX, CWDM, 4 Channel, 1470-1530 nm, SM, SC/APC
MDM-7001C-4-D-SA	DEMUX, CWDM, 4 Channel, 1470-1530 nm, SM, SC/APC
MDM-7001C-8-M-SA	MUX, CWDM, 8 Channel, 1470-1610 nm, SM, SC/APC
MDM-7001C-8-D-SA	DEMUX, CWDM, 8 Channel, 1470-1610 nm, SM, SC/APC
MDM-7001C-16-M-LC	MUX, CWDM, 16 Channel, 1270-1610 nm SM, LC
MDM-7001C-16-D-LC	DEMUX, CWDM, 16 Channel, 1270-1610 nm, SM, LC

Connection Diagram



Enclosure Options

