Optiva MDM-7001C CWDM Multiplexer/Demultiplexer

ORTEL®
A Photonics Foundries Enterprise

The Optiva MDM-7001C CWDM MUX/DEMUX enables multiplexing or demultiplexing of up to 8 wavelengths onto, or from a common single- mode optical fiber with wavelengths ranging from 1470 nm to 1610 nm. The MDM-7100C-4 is a 1-slot Optiva plug-in module, while the MDM- 7100C-8 is a 2-slot Optiva plug-in modules.

The MDM-7001C CWDM MUX/DEMUX is most typically used when 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 8 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)
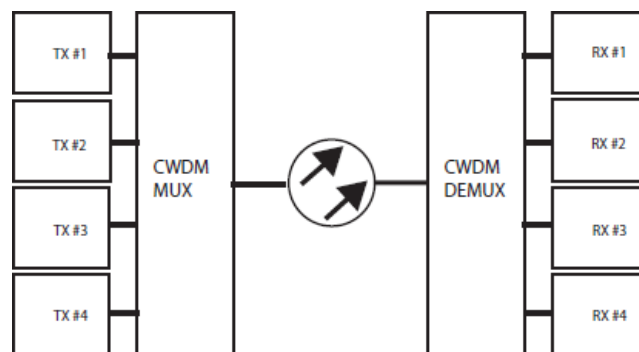- RoHS Compliant

System Design

The Optiva platform includes a wide range fiber 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, electronic warfare systems and other high-dynamic-range applications.

optiva PLATFORM

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

Specifications

Specifications	Values
Wavelengths MDM-7001C-4*	1470, 1490, 1510, 1530 nm
	1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610 nm
Insertion Loss MDM-7001C-4 MDM-7001C-8	< 3.0 dB < 4.5 dB
Optical Return Loss	50 dB
Port Isolation	30 dB (Adjacent Channel) 40 dB (Non-Adjacent Channel)
Max Power Handling	21.7 dBm

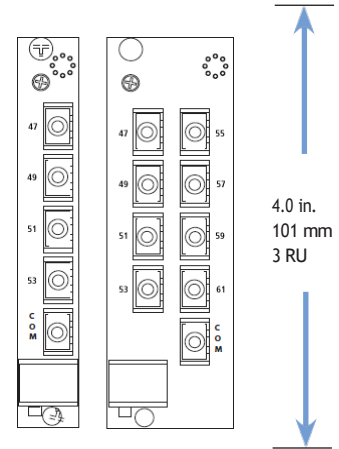*Wavelengths 1530 & 1550 nm EDFA compatible

Connection Diagram

4.0 in.
101 mm
3 RU

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
	160.0 mm D x 40.64 mm W x 101.6 mm H
Weight MDM-7001C-4 MDM-7001C-8	6 oz / 170.1 g 8 oz / 226.8 g
Operating Temperature	-20°C to +70°C
Storage Temperature	-40°C to +85°C
Humidity	0% to 95% non-condensing

Enclosure Options

16 slot 3RU Rack

6 slot 1RU Rack

2 slot Desktop

1 slot Desktop

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

RoHS COMPLIANT

MADE IN USA