

# Optiva MDM-7001D DWDM Multiplexer/Demultiplexer



## Applications

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

## Features

- Combines and Separates Up to 16 Different DWDM 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

The Optiva MDM-7001D DWDM MUX/DEMUX supports as many as 16 DWDM wavelengths for applications from 1547 nm to 1559 nm. The MDM-7001D-4 is a 1-slot Optiva plug-in module, while the MDM-7001D-8 and MDM-7001D-16 are 2-slot Optiva plug-in modules.

The MDM-7001D DWDM 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.



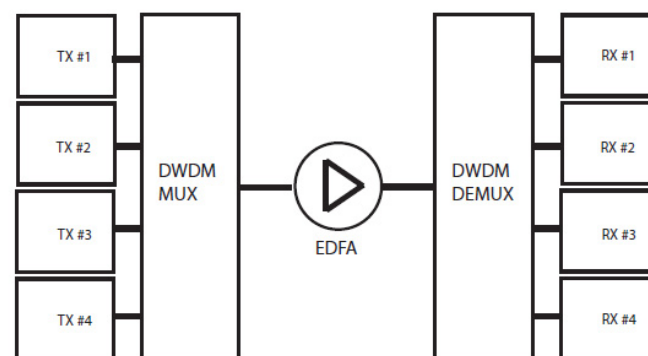
## System Design

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, video transport, 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



# Optiva MDM-7001D DWDM Multiplexer/Demultiplexer

## Specifications

Specifications	Values
Wavelengths	1547 nm - 1559 nm
Insertion Loss	
MDM-7001D-4	<3.0 dB
MDM-7001D-8	<4.5 dB
MDM-7001D-16	<6.0 dB
Optical Return Loss	50 dB
Port Isolation	30 dB (Adjacent Channel) 40 dB (Non-Adjacent Channel)
Max Power Handling	21.7 dBm

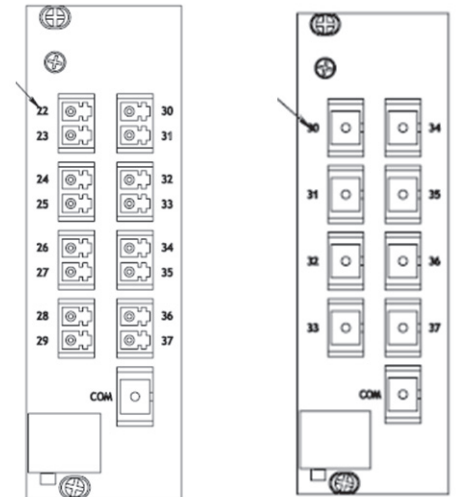
## General

Specifications	Values
Dimension (Insert Card)	
MDM-7001D-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-7001D-8	6.3" D x 1.6" W x 4.0" H
MDM-7001D-16	160.0 mm D x 40.64 mm W x 101.6 mm H
Weight	
MDM-7001D-4	6 oz / 170.1 g
MDM-7001D-8	8 oz / 226.8 g
MDM-7001D-16	12 oz / 340.2 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-7001D-4-M-SA	MUX, DWDM, 4 Channel, 30-33 SM, SC/APC
MDM-7001D-4-D-SA	DEMUX, DWDM, 4 Channel, 30-33, SM, SC/APC
MDM-7001D-8-M-SA	MUX, DWDM, 8 Channel, 30-37, SM, SC/APC
MDM-7001D-8-D-SA	DEMUX, DWDM, 8 Channel, 30-37, SM, SC/APC
MDM-7001D-16-M-LC	MUX, DWDM, 16 Channel, 22-37, SM, LC
MDM-7001D-16-D-LC	DEMUX, DWDM, 16 Channel, 22-37, SM, LC

## Connection Diagram



## Enclosure Options

