

WDM and CWDM Multiplexers

The MDM-7000 series combines different multiplexing techniques to provide an overall cost efficient and upgradeable customized multi-channel, single-fiber solution. Each MDM-7000 product is ideal for the transmission of multiple channels of Video with Audio and/or Data, where only a minimum number of fiber optic cable is available. For example, up to 96 channels of uncompressed SDI video can be transported using 16 "OTS-6SD" units and one MDM-7016.

The multiplexer module can combine up to sixteen wavelengths over one singlemode fiber, and the de-multiplexer module outputs the wavelengths on the receiving end. The CWDM modules operate independently of protocol and data rate, and are designed to work with uncooled lasers with wavelengths spaced 20nm apart.

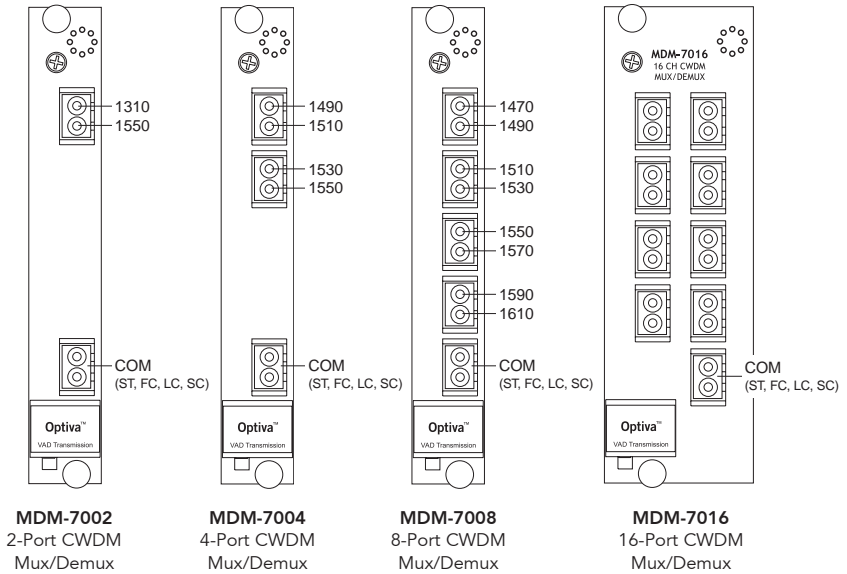
System Design

All MDM-7000 units come as insert cards. The cards can be inserted into our 16-slot, 19" 3RU rack-mountable card enclosure (OT-CC-16) or one of our Optiva™ Desktop Card Racks (OT-DTCR Series).

The Optiva™ Desktop Card Racks can handle one, two or four cards, allowing for greater flexibility and future expansion. They can sit on a flat surface as a larger stand-alone unit, or can be surface mounted with the flanges provided. Each one of our card housings operates with an appropriate power supply.

Versions Available

Model	# of Ports	# of Slots	Wavelengths
MDM-7002	2 Ports	IC 1 slot	1310/1550 nm
MDM-7004	4 Ports	IC 1 slot	1490-1550 nm
MDM-7008	8 Ports	IC 1 slot	1470-1610 nm
MDM-7016	16 Ports	IC 2 slot	1310-1610 nm



Features

- CWDM operation over one fiber
- Multiplexers and de-multiplexers (up to 16 separate wavelengths over one single mode fiber with 20 nm separation)
- Designed for use with uncooled lasers
- Compatible with Opticomm Optiva™ Systems and Enclosures
- Enables Modular System Configuration
- No EMI or RFI and no ground loops
- Rack Mount or Stand Alone

Passive Multiplexing Solutions

CWDM

Dimensions & Weight	Insert card (IC): 6.3" L x 0.8" W x 4.0" H; 10 oz
Channel center wavelengths	1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, and 1610 nm
Wavelength separation	20nm
Loss with mux/demux	< 3 dB
Optical return loss	> 50 dB
Uniformity with mux/demux	< 1.2 dB
Total input power	500 mW max
Polarization dependent loss	< 0.1 dB
Wavelength thermal stability	0.005 nm/°C
Jumper fiber length	1 ft.
Operating temperature	-20°C to +70°C
Storage temperature	-40°C to +85°C

WDM

Dimensions & Weight	Insert card (IC): 6.3" L x 0.8" W x 4.0" H; 10 oz
Channel center wavelengths	865, 1310 & 1550 nm
Loss with mux/demux	< 3 dB
Optical return loss	> 50 dB
Uniformity with mux/demux	< 1.2 dB
Total input power	500 mW max
Polarization dependent loss	< 0.1 dB
Wavelength thermal stability	0.005 nm/°C
Jumper fiber length	1 ft.
Operating temperature	-20°C to +70°C
Storage temperature	-40°C to +85°C

General

Humidity	0 to 95% non-condensing
Operating voltage	9-12 V _{DC}

Remote Monitoring

Compatible with OptivaView™
SNMP Management Suite

Optiva™ Configurable
Communication Platform

Network Management

SDI & HD-SDI

Composite Video,
Audio & Data

RGB/VGA/DVI

Audio/FSK/Intercom

Data (Ethernet/Serial/USB)

CATV/RF & L-Band

Optical Switching, Routing
& Redundancy

Passive Multiplexing
Solutions

Enclosures, Racks
& Frames

Power Supplies
& Accessories

10 **ISO**
YEAR **9001:2000**
WARRANTY **CERTIFIED**

CE

FCC PART 15
COMPLIANT

MADE IN THE USA