

# MDA-7000 Series

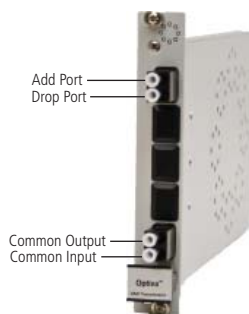
CWDM Add/Drop Multiplexer

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The MDA-7000 series CWDM optical add/drop multiplexer enables the adding and/or dropping of a single CWDM wavelength onto or from a common single mode optical fiber carrying up to sixteen (16) CWDM wavelengths in the range of 1270 nm to 1610 nm. MDA-7000 has the form factor of a 1-slot Optiva plug-in module insert card.



## Features

- Available in sixteen different CWDM wavelength versions
- Optiva insert card form factor
- Minimization of optical fiber for Add/Drop applications
- Low insertion loss

## Applications

- Nodes in dual-redundant fiber rings
- Test and measurement
- CCTV
- Security

## System Design

The MDA-7000 series OADM is most typically used in rings, or other network topologies, in which particular directed video, audio, and data signals are sourced and terminated at nodes on a network that are characterized by a particular optical wavelength. As 16 CWDM wavelengths are supported, up to 16 nodes may be addressed on such a CWDM ring. MDA-7000 is wavelength specific and supports a baseband digital bandwidth of up to 3.125 Gbps per wavelength. As a result, up to 50 Gbps may be transported on a CWDM network, with any particular node being capable of adding and/or dropping 3.125 Gbps. As a result of Optiva's Daisy-Chain technology. Video, audio, and data signals from multiple Optiva insert cards may be combined onto a single wavelength and routed to any particular node.

Optiva® insert cards support both 19" rack mount and compact table top or wall mountable enclosures. The 3RU 19" rack mount enclosure (Model: OTCC-16-100) can support up to 16 insert cards. It also supports dual-redundant hot-swappable power supplies (Model: OT-CC-16-100-RPS) utilizing two PS-100 power supplies or two PS-200 power supplies (Model: OT-CC-16-200-RPS). Also available in the rackmount form factor is the 4-slot (Model: OT-CC-4-1U) which houses 4 insert cards in 1RU of rack space. The compact one slot (Model: OT-DTCR-1) and two slot (Model: OT-DTCR-2) enclosures both use an external power supply (Model: PS-9012).

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## Models

Model	Wavelength
MDA-7000-L4A-LC	1270 nm
MDA-7000-L4B-LC	1290 nm
MDA-7000-L4C-LC	1310 nm
MDA-7000-L4D-LC	1330 nm
MDA-7000-L4E-LC	1350 nm
MDA-7000-L4F-LC	1370 nm
MDA-7000-L4G-LC	1390 nm
MDA-7000-L4H-LC	1410 nm
MDA-7000-L4I-LC	1430 nm
MDA-7000-L4J-LC	1450 nm
MDA-7000-L4K-LC	1470 nm
MDA-7000-L4L-LC	1490 nm
MDA-7000-L4M-LC	1510 nm
MDA-7000-L4N-LC	1530 nm
MDA-7000-L4O-LC	1550 nm
MDA-7000-L4P-LC	1570 nm
MDA-7000-L4Q-LC	1590 nm
MDA-7000-L4R-LC	1610 nm

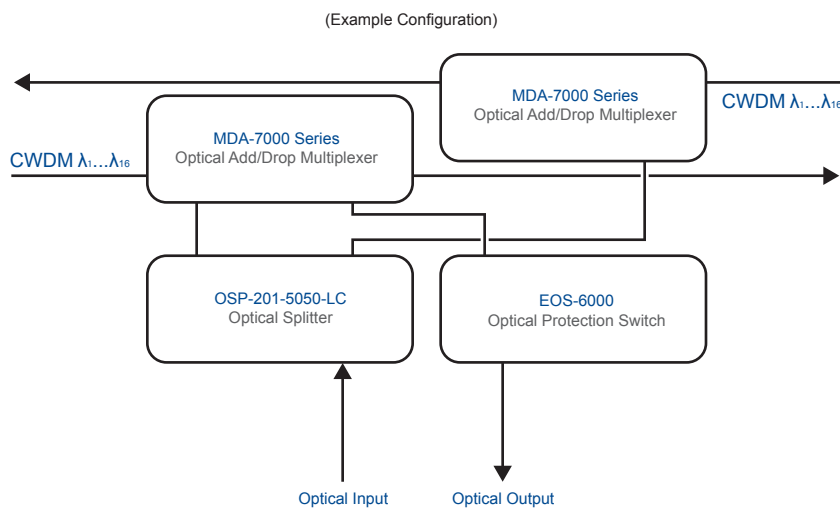
## Specifications

Specifications	Values
CWDM Wavelengths	1270 nm - 1610 nm
Common Port Insertion Loss	< 2.0 dB
Add/Drop Port Insertion Loss	< 2.0 dB
Directivity (CWDM)	50 dB
Common Port Isolation	25 dB
Add/Drop Port Isolation	Adjacent Channel 30 dB; Non-Adjacent Channel 40 dB

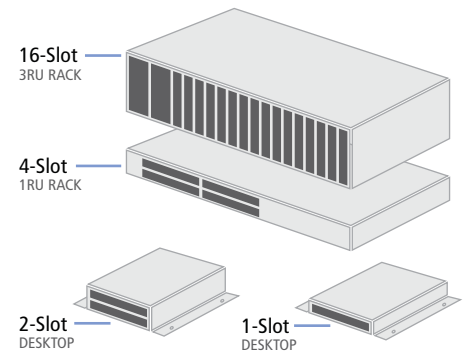
## General

Specifications	Values
Dimensions (Insert Card)	6.3" D x 0.8" W x 4.0" H
Weight	11 oz.
Operating Temperature	-20°C to +55°C
Storage Temperature	-40°C to +85°C
Humidity	0 to 95% non-condensing
Power Consumption	N/A
System Latency	N/A
Warranty	3-Years

## Application Diagram



## Enclosure Options



## Compliance

