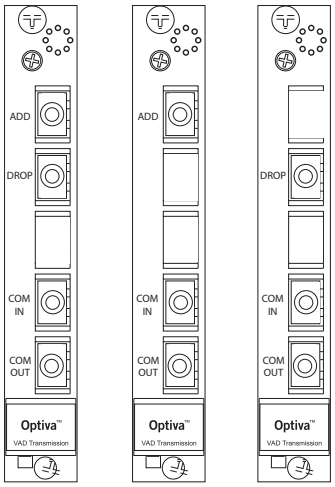
MDA-7001 Series

CWDM Add/Drop Multiplexer



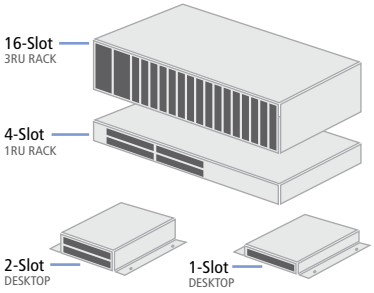
Features

- Available in sixteen different CWDM wavelength versions
- 1530 and 1550 EDFA Compatible wavelengths
- 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

Enclosure Options



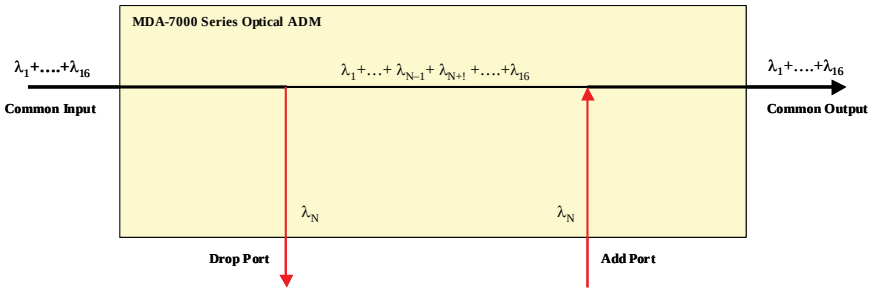
The MDA-7001 series CWDM optical add/drop multiplexer enables the adding and/or dropping of a single CWDM wavelength onto or from a common single mode optical fiber carrying up to sixteen (8) CWDM wavelengths in the range of 1490 nm to 1630 nm. MDA-7001 has the form factor of a 1-slot Optiva plug-in module insert card.

System Design

The MDA-7001 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 8 CWDM wavelengths are supported, up to 16 nodes may be addressed on such a CWDM ring. MDA-7001 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.

Insert cards are supported in both of Emcore's 1U or 3U 19" rack mount enclosures and 1 or 2 slot desk top enclosures.

Functional Diagram



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MDA-7001 Series

CWDM Add/Drop Multiplexer

Models

Model	Wavelength
MDA-7001C-27-SA	1270 nm
MDA-7001C-29-SA	1290 nm
MDA-7001C-31-SA	1310 nm
MDA-7001C-33-SA	1330 nm
MDA-7001C-35-SA	1350 nm
MDA-7001C-37-SA	1370 nm
MDA-7001C-39-SA	1390 nm
MDA-7001C-41-SA	1410 nm
MDA-7001C-43-SA	1430 nm
MDA-7001C-45-SA	1450 nm
MDA-7001C-47-SA	1470 nm
MDA-7001C-49-SA	1490 nm
MDA-7001C-51-SA	1510 nm
MDA-7001C-53-SA	1530 nm
MDA-7001C-55-SA	1550 nm
MDA-7001C-57-SA	1570 nm
MDA-7001C-59-SA	1590 nm
MDA-7001C-61-SA	1610 nm

Model	Wavelength
MD-7001C-27-SA	1270 nm
MD-7001C-29-SA	1290 nm
MD-7001C-31-SA	1310 nm
MD-7001C-33-SA	1330 nm
MD-7001C-35-SA	1350 nm
MD-7001C-37-SA	1370 nm
MD-7001C-39-SA	1390 nm
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MD-7001C-45-SA	1450 nm
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MA-7001C-57-SA	1570 nm
MA-7001C-59-SA	1590 nm
MA-7001C-61-SA	1610 nm

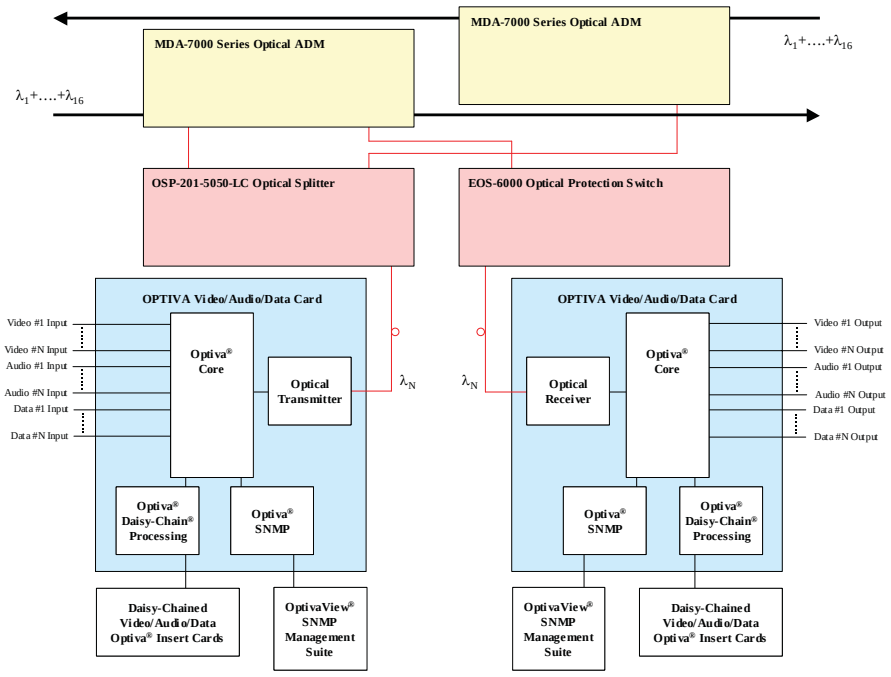
Specifications

Specifications	Values
CWDM Wavelength	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
Max Power Handling	21.7 dBm

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

System Diagram



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