

CWDM OADM Optical Add/Drop Multiplexer

Description

One of the most important parts of a flexible CWDM system is the CWDM Optical Add/ Drop (OADM). CWDM OADM is designed to add/drop one multiple CWDM channels into one or two fibers. CWDM Optical Add Drop Multiplexers are the ideal solution for the increasing bandwidth demand on enterprise and metro access networks. ESCON, ATM, Fiber Channel, Gigabit-Ethernet are supported simultaneously, without disturbing each other.

Montclair CWDM Optical Add Drop Multiplexers (OADM) are available in 1RU 19" Rack mount, LGX module, and Tray-mount ruggedized cassettes. CWDM OADMs can be configured to fit your specific network application: one or two fibers, redundant networks, ring or linear network design.



Passive

Applications

- CWDM Networks
- Telecommunication
- Line Monitoring
- Cellular Application
- Fiber Optical amplifier
- Access Network

Features

- Optical drop/pass and drop/insert of single CWDM channel for point-to-point, ring/bus configuration
- Entirely passive device, no power supply needed
- Low-cost transceivers applicable, existing equipment can still be used
- Fully transparent to all data rates and protocols
- Up to 10 Gbit/s per channel
- Compliant to ITU-T CWDM standard

CWDM OADM Optical Add/Drop Multiplexer

Specifications

Parameters				
Channel Wavelength	ITU-T CWDM Grid			
Channel Spacing	20nm			
Number of Channels	1	2	4	8
Bandwidth @ 0.5dB (nm)	>14	>14	>14	>14
Passband (nm)	$\lambda \pm 7.5/\pm 6.5$			
Passband flatness (dB)	≤ 0.4	≤ 0.4	≤ 0.4	≤ 0.4
IL(In @ Drop @ λ drop) (dB)	≤ 0.6	≤ 0.9	≤ 2.0	≤ 3.2
IL(Add @ Out @ λ add) (dB)	≤ 0.6	N/A	≤ 2.0	≤ 3.2
IL(In @ Out @ other λ) (dB)	NA	≤ 1.2	≤ 2.5	≤ 4.8
Adjacent isolation (dB)	>30			
Non-adjacent isolation (dB)	>40			
Isolation(In @ Out @ λ drop) (dB)	>25			
Wavelength thermal stability (nm/ °C)	< 0.002	< 0.002	< 0.002	< 0.002
Insertion Loss Thermal Stability (dB/ °C)	< 0.006	< 0.006	< 0.006	< 0.007
PDL (dB)	< 0.15	< 0.15	< 0.15	< 0.2
PMD (ps)	< 0.1	< 0.1	< 0.1	< 0.15
Return Loss (dB)	>45			
Operating Temperature (° C)	-5 to 65			
Storage Temperature (° C)	-40 to 85			
*Note: Insertion Loss values do not include connector losses.				

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CWDM reference table - ITU G.694.2

Nominal central wavelengths for 20nm spacing

1270	1450
1290	1470
1310	1490
1330	1510
1350	1530
1370	1550
1390	1570
1410	1590
1430	1610

Housing type

CWDM OADMs available in the following standard housing types and in high-density options

LGX® module

Cassette

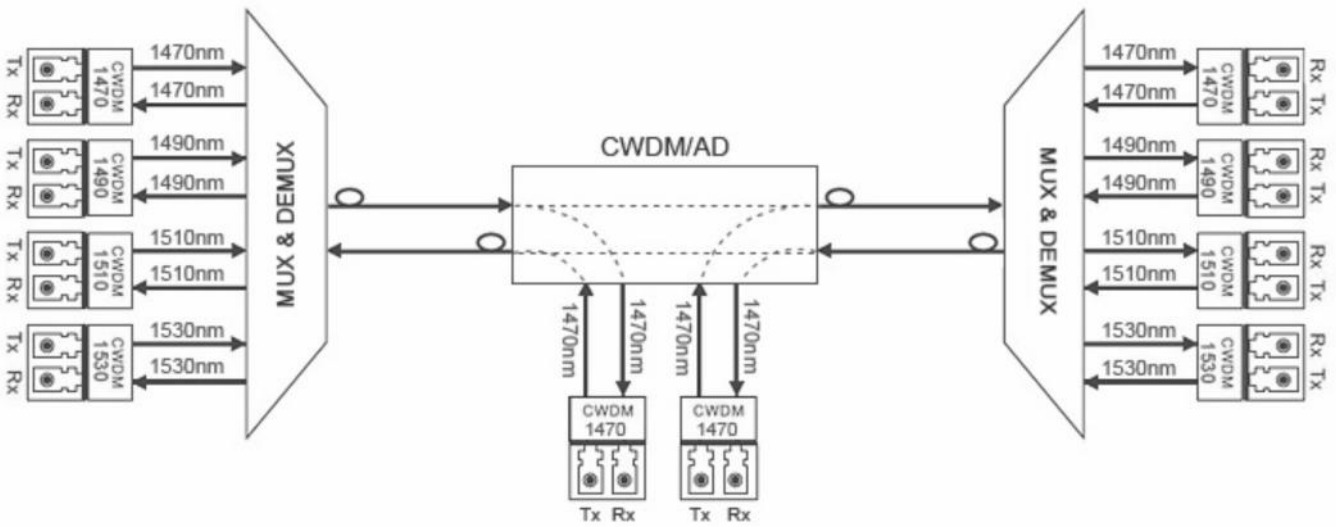
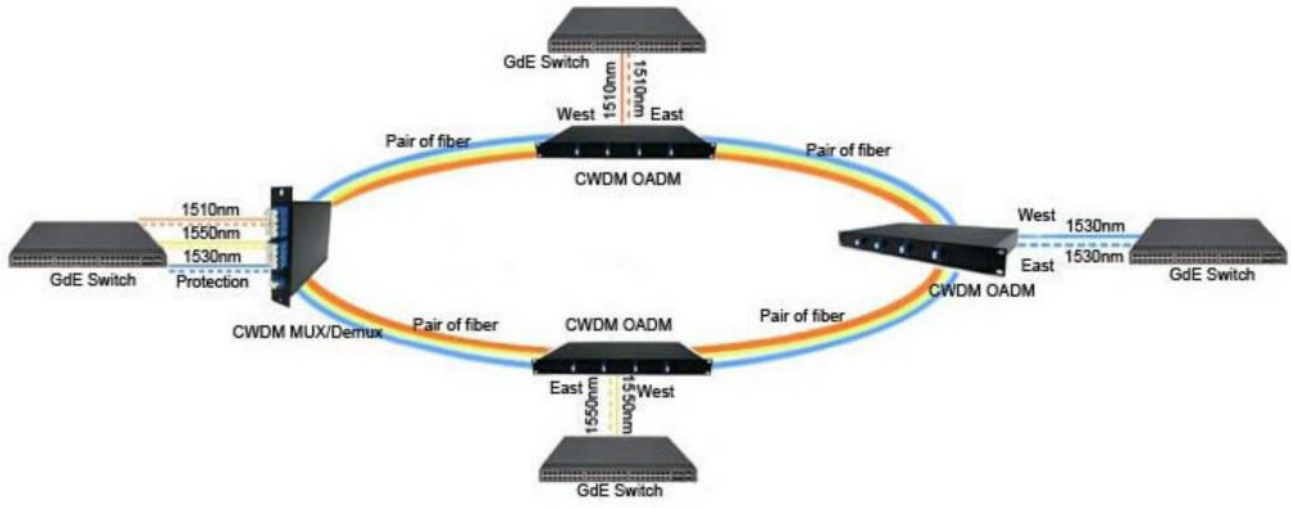
Rack-mount 19/23"

Note:

CWDM OADM housing dimensions dependant on number of channels and packaging in either single mux, single demux, or combination mux/demux. CWDM OADM housing type and size determined at time of inquiry.

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Applications



1-Channel Duplex Add/Drop MUX/DEMUX

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CWDM OADM Optical Add/Drop Multiplexer

Ordering information

M W - A D - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8

1. Number of Add/Drop channels:

1	1 Add; 1 Drop
2	2 Add; 2 Drop
4	4 Add; 4 Drop
8	8 Add; 8 Drop
12	12 Add; 12 Drop
16	16 Add; 16 Drop
18	18 Add; 18 Drop

Note: Available in other channels

2. Starting wavelength (nm):

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

3. Housing type:

C	Cassette
M	LGX® module
R	Rack-mount

4. Adapter/connector type:

AFC	FC/APC
FCU	FC/UPC
ALC	LC/APC
LCU	LC/UPC
ASC	SC/APC
SCU	SC/UPC
PL	Pigtail

5. Fiber length Input / Output (m): 1, 2, 3, 4, 5

Note: For specifying fiber cable leads on housings with connectors or pigtails; Leave Blank if not specifying fiber cable leads

6. Fiber cable type options:

9	900um loose-tube cable
2	2.0mm diameter
3	3.0mm diameter

Note: For specifying fiber cable leads on housings with connectors or pigtails; Leave Blank if not specifying fiber cable leads

7. Additional wideband port:

31	1310±40nm wideband
55	1550±40nm wideband

Note: Leave Blank if not specifying Add-on wavelength/port

8. Monitor port:

M1	1% Monitor Port
M2	2% Monitor Port
M3	3% Monitor Port
M4	4% Monitor Port
M5	5% Monitor Port

Note: Leave Blank if not specifying Monitor port

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