



12 Channel 25G Ready Double Fiber CWDM MUX/DEMUX DCMD-12

Product Description:

DCMD-12 is part of our Industrial Passive xWDM filter series and supports 12 CWDM Channel interconnection over double fiber using 1271-1371nm and 1471-1571nm wavelength from ITU-T G.694.2 grid. DCMD-12 is a LGX type B module installed in standard 19-inch 1U telecom subrack, is simple to install, requires zero configuration or maintenance and is fully passive - no power supply or cooling required. DCMD-12 can be used together with Industrial DCMD-12I, which is deployed in harsh outdoor environments on the other side of the link or can be used with another DCMD-12 filter unit. DCMD-12 uses Compact CWDM filter technology and provides ≤ 1.7 dB insertion loss and has a monitor port, which ensures easy troubleshooting without downtime.

xWDM filters are data rate or line protocol neutral and are used in combination with colored optical transceivers which ensure desired application and data rate. Typical use case for DCMD-12 filters are 5G/4G Mobile Fronthaul Network Baseband Unit (BBU) and Remote Radio Head (RRH) interconnection (CPRI/eCPRI protocol), Enterprise Network 25G/10G Ethernet links or Datacenter 32/16/8G Fiber Channel connections.

Key Highlights:

- 12 CWDM Data Services over Double SMF
- Connect to DCMD-12 or DCMD-12I
- Compact: 1U Standard 19" Rack
- Low Insertion Loss: ≤ 1.7 dB
- Compact CWDM filters
- Monitoring Port for easy troubleshooting
- Fully passive (No Power Supply or Cooling)
- Zero configuration or maintenance
- Protocol & Data Rate neutral
- MTBF: 100+ Years
- 5 Year Warranty

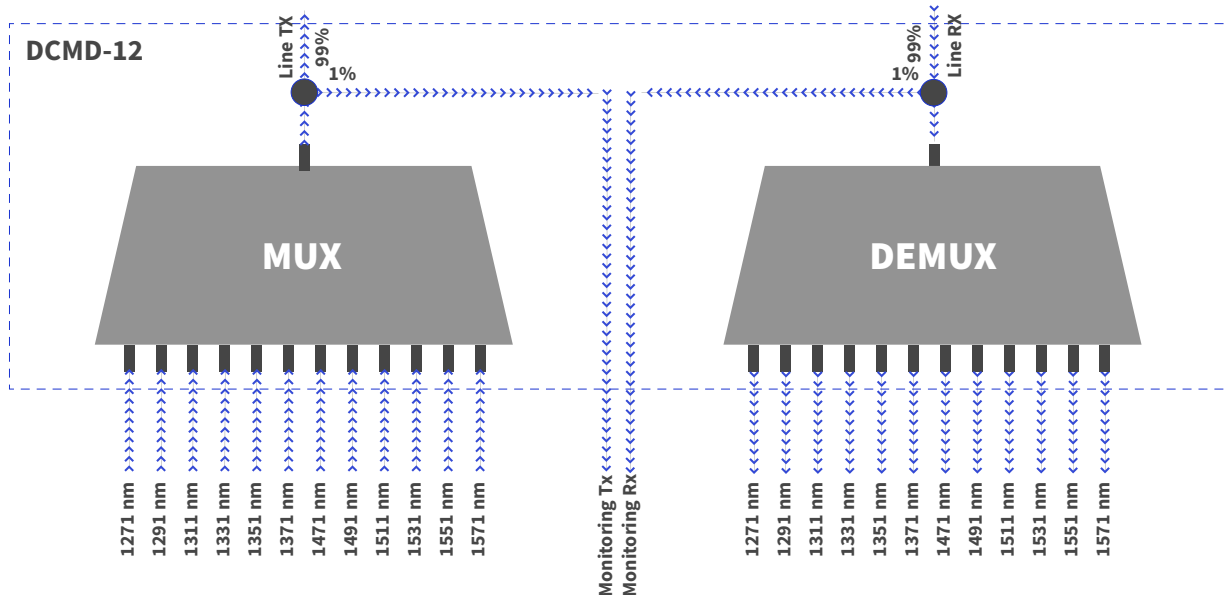


Product Specification:

Parameter		Unit	Value
Product Type:			Double Fiber CWDM Unit
Number of Data Channels:			12
Number of Wavelength			12 CWDM Channels According ITU-T G.694.2
Transport Media:			Double Fiber Single Mode Fiber (SMF)
Operating Wavelengths:	center	nm	<ul style="list-style-type: none"> • Ch1: 1271 nm • Ch2: 1291 nm • Ch3: 1311 nm • Ch4: 1331 nm • Ch5: 1351 nm • Ch6: 1371 nm • Ch7: 1471 nm • Ch8: 1491 nm • Ch9: 1511 nm • Ch10: 1531 nm • Ch11: 1551 nm • Ch12: 1571 nm
Filter Technology:			CCWDM (Compact CWDM - Free Space Technology)
Passband:	λ_{center}	nm	± 7.5 nm
Channel Spacing:		nm	20 nm
Insertion Loss <small>Passband:</small>	Max	dB	≤ 1.7 dB
Monitoring Port Type:			Yes - 1% Monitoring Port
Isolation Adjacent Channels:	Min	dB	30 dB
Isolation Non-Adjacent Channels:	Min	dB	45 dB
Channel Passband Ripple:	Min	dB	0.5 dB
Insertion Loss Temperature:		dB/ (°C)	<0.003
Wavelength Temperature Shifting:		nm/ (°C)	<0.002
Polarization Dependant Los (PDL):	Max	dB	<0.1 dB
Polarization Mode Dispersion (PMD):	Max	ps/nm	< 0.1 ps/nm
Directivity:	Min	dB	>50 dB
Return Loss:	Min	dB	>45 dB
Maximum Power Handling:	Max	mW	500mW = 26.98dBm maximum power pass
Connectors:			TIA/EIA 604-10 compliant LC UPC Connectors
Operating Temperature:		(°C)	5~+70 (°C)
Storage Temperature:		(°C)	-40~+85 (°C)
Dimensions (W x H x D):		mm	214 x 41.3 x 198
Relative Humidity:		%	0 - 90%
Compliance:			ITU-T G.694.2, CE, RoHS

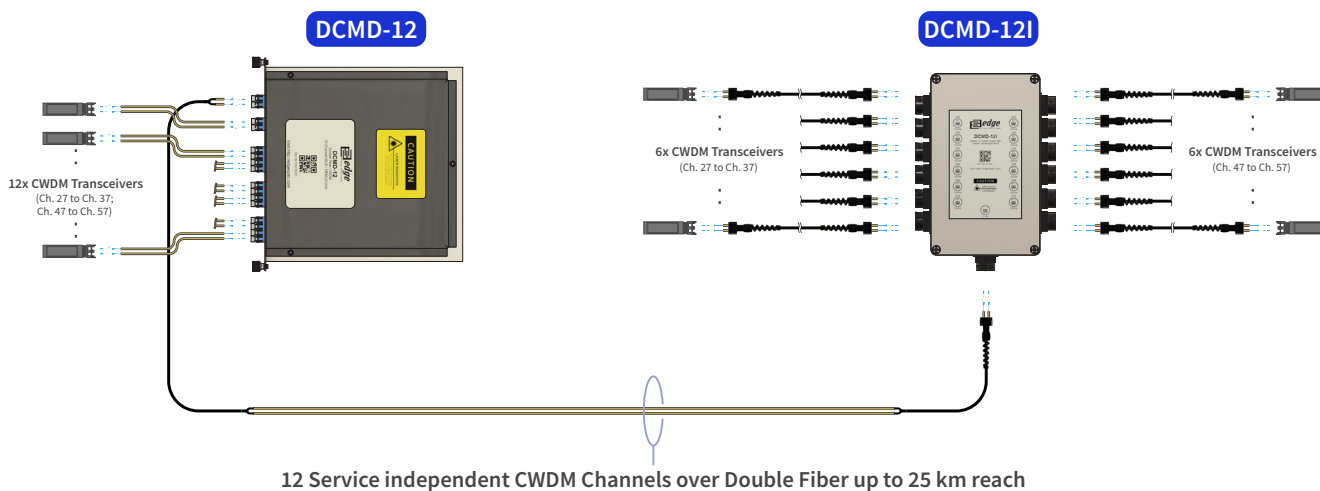


Functional Diagram:

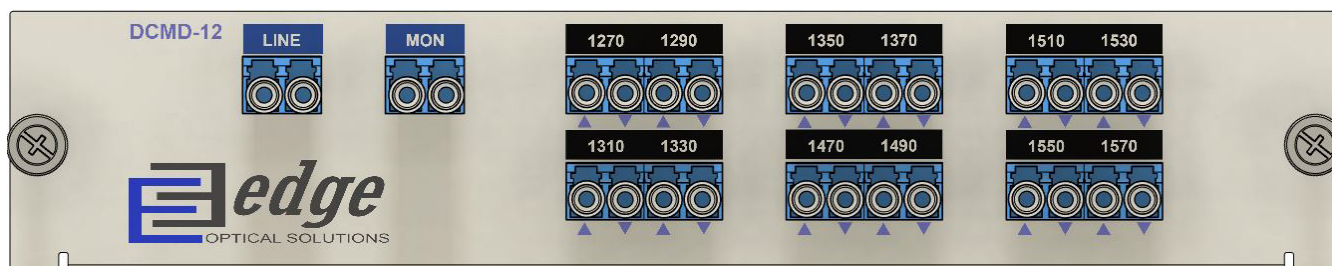


Network Diagram:

DCMD-12 is part of our Passive xWDM filter product line, which is designed with primary focus on wireless fronthaul applications - optimized to carry 25G services, however it is compatible with legacy 10G services as well. In order to create 12 CWDM capacity line, it's possible to use DCMD-12 in both ends of pair of single-mode fibers, or it can be interfaced with DCMD-12I Industrial version fully outdoor mux.



Front Panel:

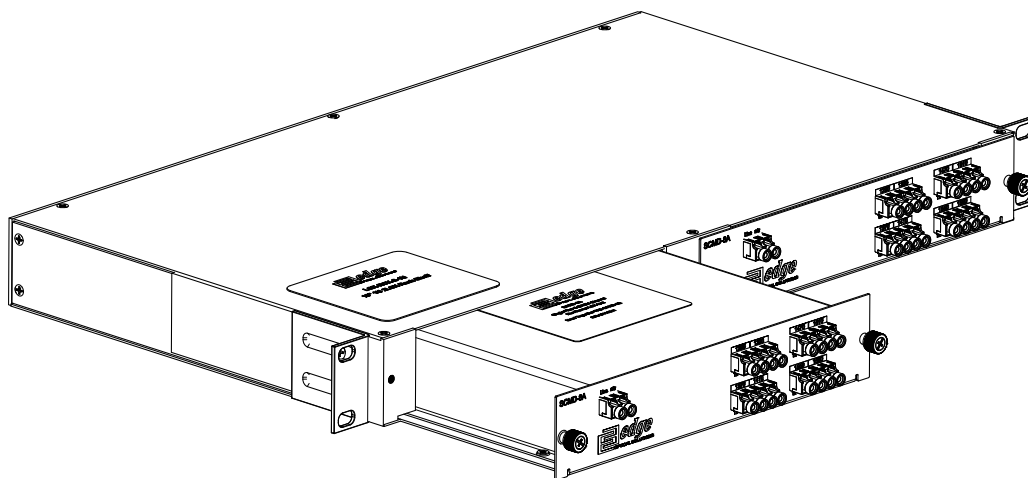


LINE: Line interface for common signal

MON: 1% Monitoring Port

1270 - 1570: CWDM Channel colored interfaces

Installation:



In order to install CWDM LGX Module in 19" rack, please order 19" 1U sub-rack supporting up to two LGX modules. Product code **LGX-RCK-2-1U**.



Ordering Information:

PN	Description
DCMD-12	12 Channel Double Fiber 25G Ready Passive Modular CCWDM Mux/Demux, ITU-T G.694.2 Channels (1271 - 1371 nm & 1471 - 1571nm), IL below 1.7 dB, with Monitor port, LGX Type

Warranty:

EDGE Optic's provides a limited warranty for **sixty (60)** months from Purchaser's receipt of the Equipment represented in this data sheet against defective design or workmanship.

