



9 Channel 25G Ready Double Fiber Industrial class CWDM MUX/DEMUX DCMD-9I

Product Description:

DCMD-9I is part of our Industrial Passive xWDM filter series and supports 9 Channel interconnection over double fiber using CWDM 1331-1371nm and 1471-1571nm wavelengths from ITU-T G.694.2 grid. DCMD-9I unit is for harsh outdoor environments supporting IP65 water, dust resistance, -40 to 85°C industrial temperature, telecom pole or wall installation options and comes with ODVA double LC connectors for easy fiber connection. Unit is small in size, light in weight, is simple to install, requires zero configuration or maintenance and is fully passive - no power supply or cooling required.

DCMD-9I is deployed in the middle site and is connected to DHMD-21 which is deployed in the main site, additionally through DCMD-9I upgrade port DLMD-12I far end site is connected to the DHMD-21 and bus network topology is realized. DCMD-9I uses Compact CWDM technology and provides ≤ 1.6 dB insertion loss for service ports and upgrade port.

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 DLMD-12I 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:

- 9 CWDM Data services over Double SMF
- Connect to DHMD-21
- IP65 Water, Dust resistant
- Outdoor ODVA Double LC connectors
- Telecom Pole or Wall installation
- Small size and light weight
- Low Insertion Loss: ≤ 1.6 dB
- Compact CWDM
- Industrial Temperature: -45°C – +85°C
- Fully passive (No Power Supply or Cooling)
- Zero configuration or maintenance
- Protocol & Data Rate neutral
- MTBF: 100+ Years
- 5 Year Warranty

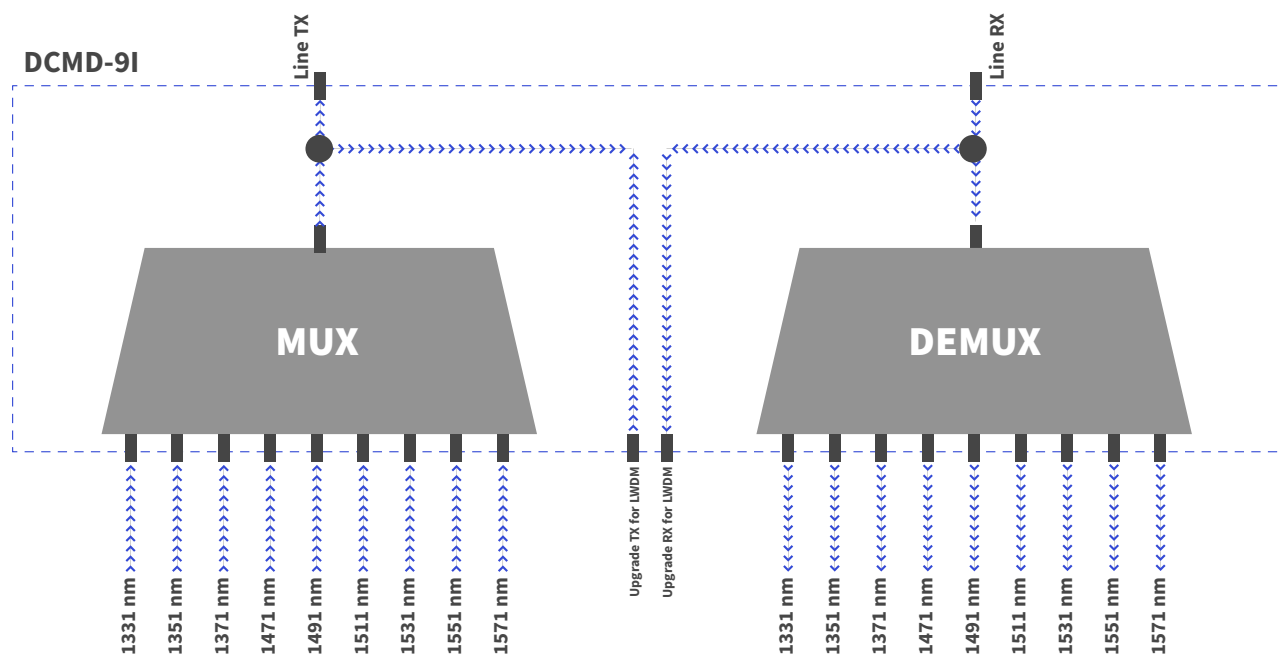


Product Specification:

Parameter		Unit	Value
Product Type:			Double Fiber CWDM Unit
Number of Data Channels:			9
Number of Wavelength			9 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"> • 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	≤ 1.6 dB
Insertion Loss <small>Upgrade:</small>	Max	dB	≤ 1.6 dB
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:			ODVA Connectors with LC Adapters for use with ODVA Connectors and TIA/EIA 604-10 compliant LC UPC Connectors
Operating Temperature:		(°C)	-40~+85 (°C)
Storage Temperature:		(°C)	-40~+85 (°C)
Dimensions (W x H x D):		mm	150 x 250 x 100
Protection Class:		%	IP65 - Water, Dust resistant
Compliance:			ITU-T G.694.2, CE, RoHS, IP65

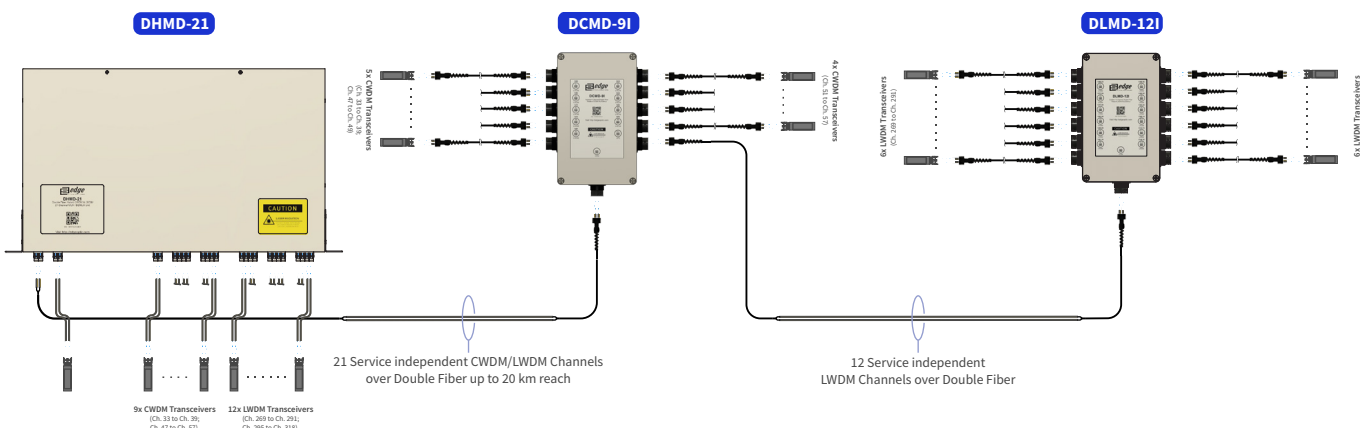


Functional Diagram:

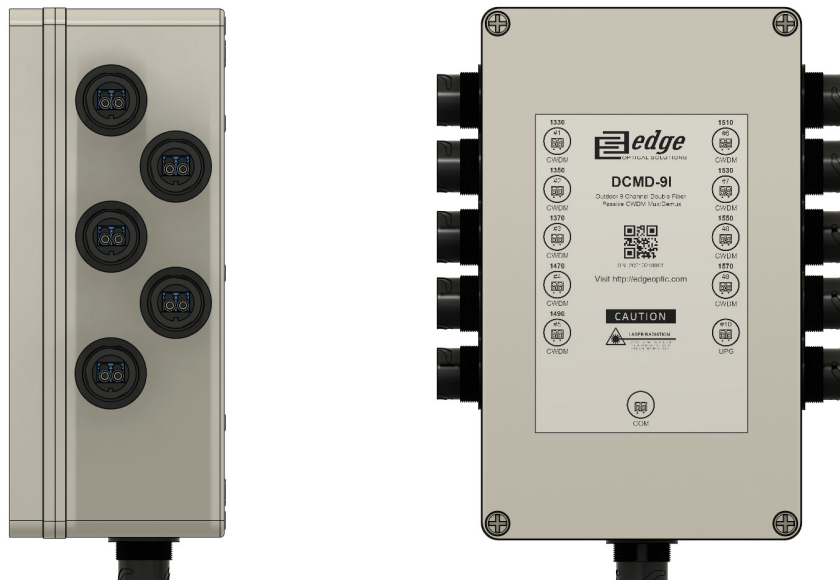


Network Diagram:

DCMD-9I 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. DCMD-9I is deployed in the middle site and is connected to DHMD-21 which is deployed in the main site, additionally through DCMD-9I upgrade port DLMD-12I far end site is connected to the DHMD-21 and bus network topology is realized.



Front Panel:

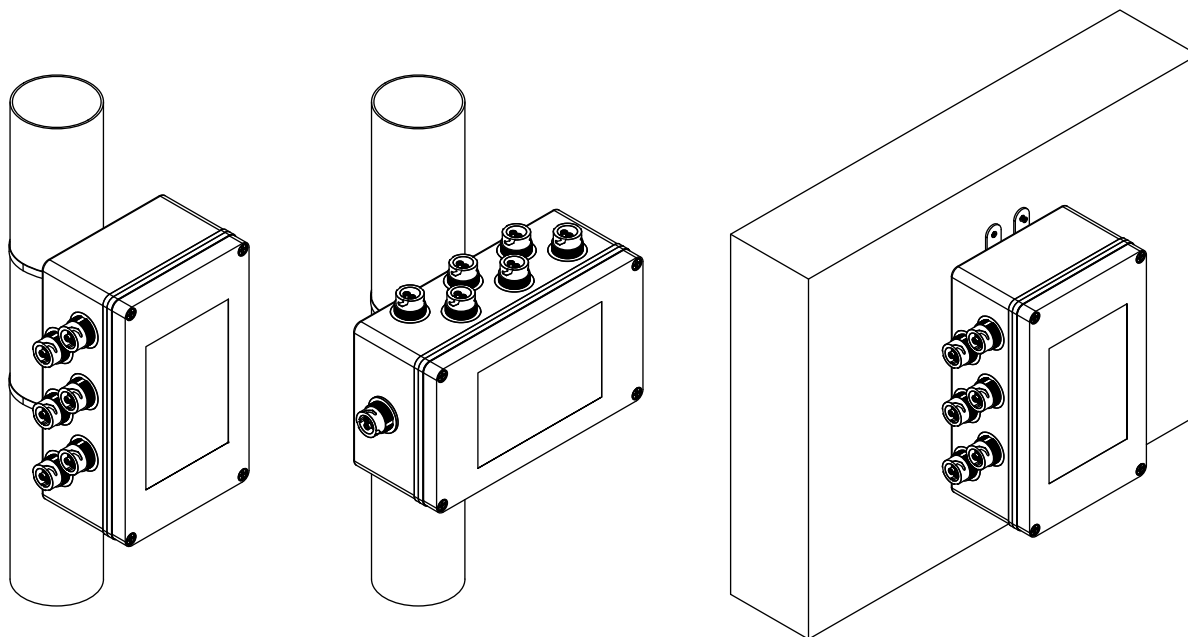


COM: Line interface for common signal

UPG: Line interface for Upgrade (Connecting LWDM MUX DLMD-12I)

1330 - 1570: CWDM Channel colored interfaces

Installation:



DCMD-91 is available for ordering with included pole mount kit, which allows easy install on any pole with diameter over 50mm vertically (recommended method) or horizontally. If necessary - DCMD-91 is also available with included wall installation kit.



Ordering Information:

PN	Description
DCMD-9I-P	9 Channel Double Fiber 25G Ready IP65-Class Full Outdoor Passive CWDM Mux/Demux 1331-1571nm, IL below 1.6 dB, UPG Port IL below 1.6dB, Temp. -45 to 85C, IP65 Outdoor Type, ODVA LC/UPC Connectors, with Pole Mount kit
DCMD-9I-W	9 Channel Double Fiber 25G Ready IP65-Class Full Outdoor Passive CWDM Mux/Demux 1331-1571nm, IL below 1.6 dB, UPG Port IL below 1.6dB, Temp. -45 to 85C, IP65 Outdoor Type, ODVA LC/UPC Connectors, with Wall Mount kit

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.

