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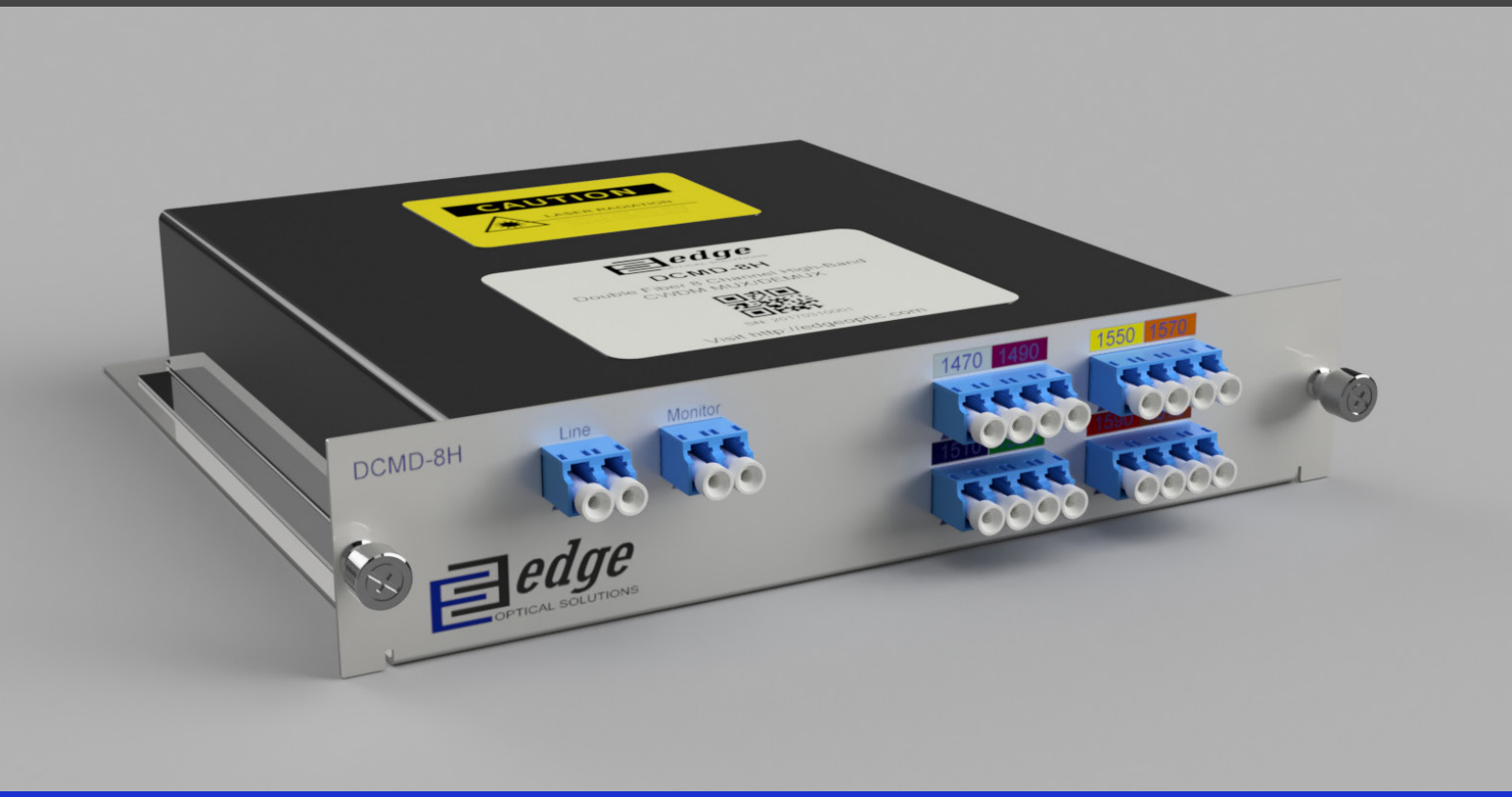
Product Data Sheet



8 Data Channels Double Fiber Passive CCWDM Mux/Demux

DCMD-8H

Product Description:

8 Channels Double Fiber High-Band Passive CWDM Mux/Demux – DCMD-8H is a member of EDGE Optics xWDM Series product line. We designed EDGE Optics xWDM Series products to allow easy, gradual, logical, and cost-efficient expansion of network bandwidth using industry-leading passive WDM technology. xWDM is fully data rate or line protocol neutral – it is possible to use with colored transceivers supporting such applications as 1G/10G Ethernet, SDH/SONET, and 8/4/2/1G Fiber Channel. It's simple to install and requires no configuration or maintenance.

DCMD-8H is a passive multiplexer/de-multiplexer package based on Compact CWDM technology, designed to organize 8 duplex and parallel protocol independent ITU-T G.694.2 compatible Coarse Wavelength Division Multiplex (CWDM) data streams over pair of single-mode optical fiber. DCMD-8H operates within the CWDM High-Band range of 1470-1610nm. The unit has LC/UPC connectors. With our focus on providing maximally low insertion loss, DCMD-8H is equipped with band-pass or skip filters extending the maximum distance of CWDM connections. DCMD-8H is manufactured as an LGX-type package, installed in a 19" 1U sub-rack fitting any standard equipment rack. Monitor port (1%) ensures easy troubleshooting without downtime.

Key Highlights:

- 8 CWDM Data Streams over Double SMF
- Fully Passive: No Power Supply or Cooling
- MTBF: 100+ Years
- Protocol & Data Rate neutral
- Low Insertion Loss - 1.5 dB
- Band-Pass / Skip filters Installed
- Compact: LGX Type package
- Easy Installation & Expansion
- Monitoring Port for easy troubleshooting
- 5 Year Warranty

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Product Data Sheet

Product Specification:

Parameter		Unit	Value
Product Type:			CCWDM MUX/DEMUX Unit
Number of Data Streams:			8
Number of Channels		Ch	8 CWDM Channels According ITU-T G.694.2
Transport Media:			Double Fiber Single Mode Fiber (SMF)
Operating Wavelengths:	center	nm	Ch1: 1471nm Ch2: 1491nm Ch3: 1511nm Ch4: 1531nm Ch5: 1551nm Ch6: 1571nm Ch7: 1591nm Ch8: 1611nm
Filter Technology:			Compact CWDM
Passband:	λ_{center}	nm	± 6.5 nm
Channel Spacing:		nm	20 nm
Band-Pass (“Skip”) Filters:			Yes
Insertation Loss Passband:	Max	dB	1.5 dB
Insertation Loss 1% Monitor Port:	Max	dB	23 dB
Monitoring Port Type:			Yes - 1% Monitoring Port
Isolation Adjacent Channels:	Min	dB	> 30 dB
Isolation Non-Adjacent Channels:	Min	dB	> 40 dB
Channel Passband Ripple:	Min	dB	< 0.3 dB
Polarization Dependant Los (PDL):	Max	dB	≤ 0.2 dB
Polarization Mode Dispersion (PMD):	Max	ps/nm	< 0.1 PS
Directivity:	Min	dB	> 50 dB
Return Loss:	Min	dB	> 45 dB
Maximum Power Handling:	Max	mW	< 300 mW
Connectors:			LC Adapters for use with 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, ISO, RoHS

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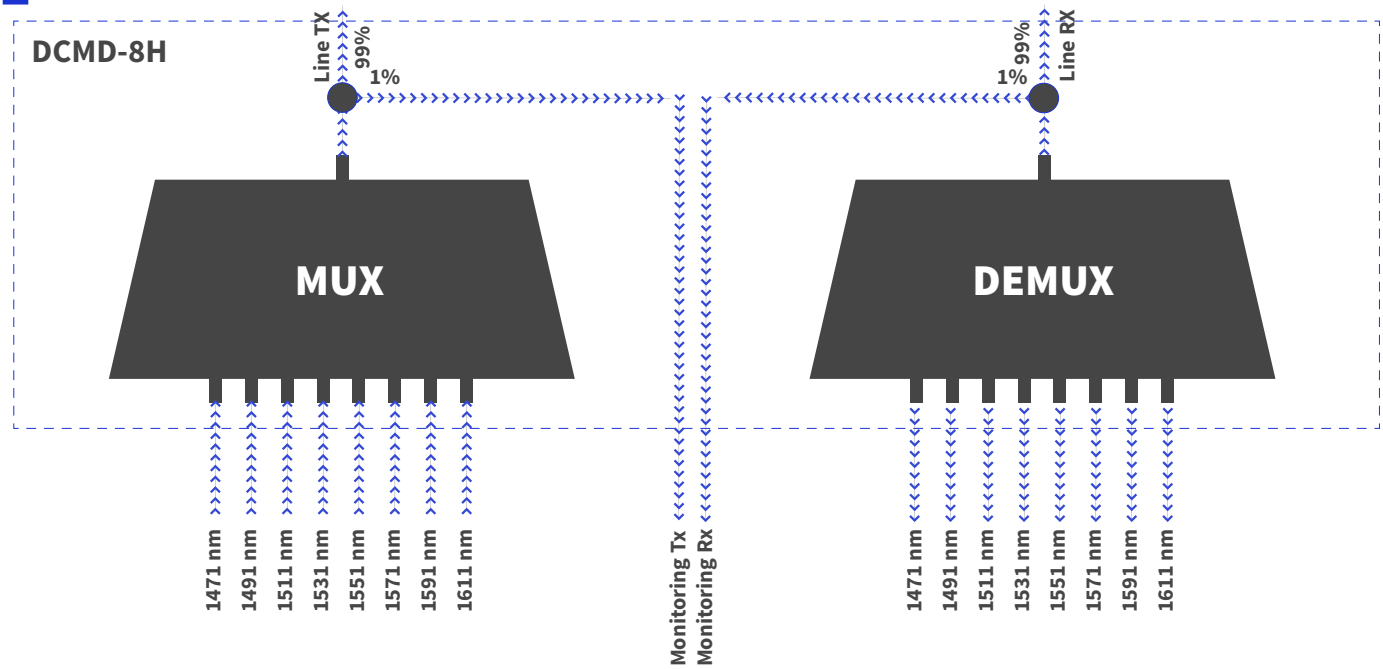
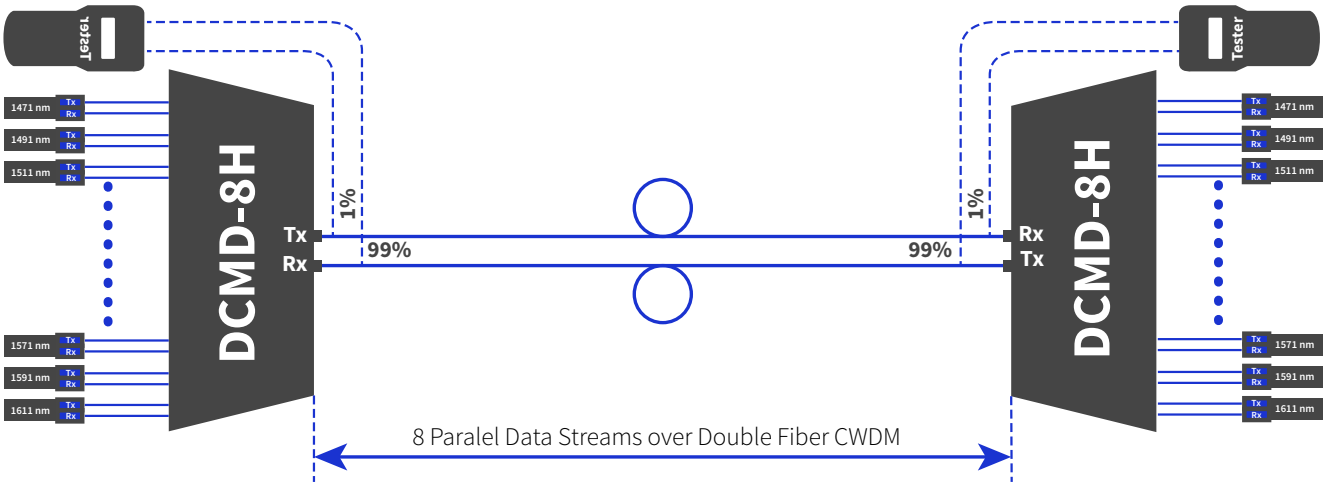
Product Data Sheet

Functional Diagram:



Network Diagram:



It's possible to inject DWDM Channels into 1531 & 1551 CWDM Chanels forming Hybrid WDM:

- 1531nm can add 12 100GHz spacing DWDM Channels
- 1551 can add 16 100GHz spaced DWDM Channels
- Total Hybrid xWDM capacity can reach up to 34 Data Streams or 34 x 10Gbps= 340 Gbps over pair of SMF

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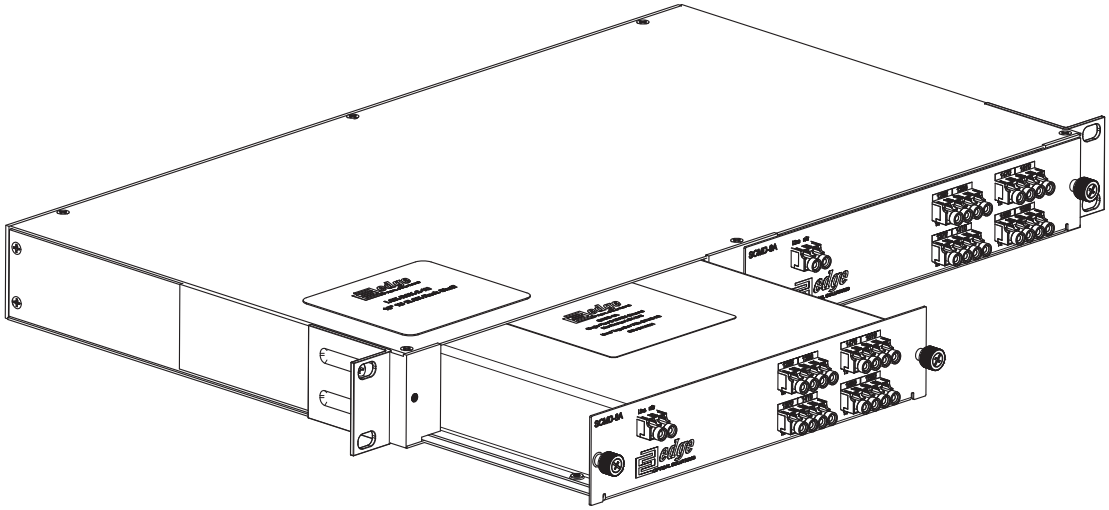
Product Data Sheet

Front Panel:

Line: Line interface for common signal
Monitor: Interface for in-service performance testing

1470-1610: CWDM Channel colored transceivers 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.**

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.

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