



8 Data Channels Single Fiber Passive DWDM Mux/Demux SDMD-8A

Product Description:

8 Channels Single Fiber DWDM Mux/Demux A-Side – SDMD-8A 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. The main advantage of xWDM is its passive nature – no power supply or cooling necessary, robustness – no special micro-climate requirements, and as a passive element, it has MTBF 100+ Years. 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.

SDMD-8A is a Single Fiber DWDM multiplexer, based on TFF (Thin-Film Filter) technology, designed to organize 8 protocol independent parallel ITU-T G.694.1 compatible Dense Wavelength Division Multiplex (DWDM) Data Streams over Single SMF. With our focus on providing maximally low insertion loss, SDMD-8A is equipped with band-pass or skip filters extending the maximum distance of DWDM connections. The unit has LC/UPC connectors. SDMD-8A supports 8 channels (16 x 100GHz wavelengths). SDMD-8A is manufactured as an LGX-type package fitting any standard equipment rack.

Key Highlights:

- 8 DWDM Data Streams over Single SMF
- Fully Passive: No Power Supply or Cooling
- MTBF: 100+ Years
- Protocol & Data Rate neutral
- Band-Pass / Skip filters Installed
- Low Insertion Loss - 4.8 dB
- Compact: LGX package
- 5 Year Warranty

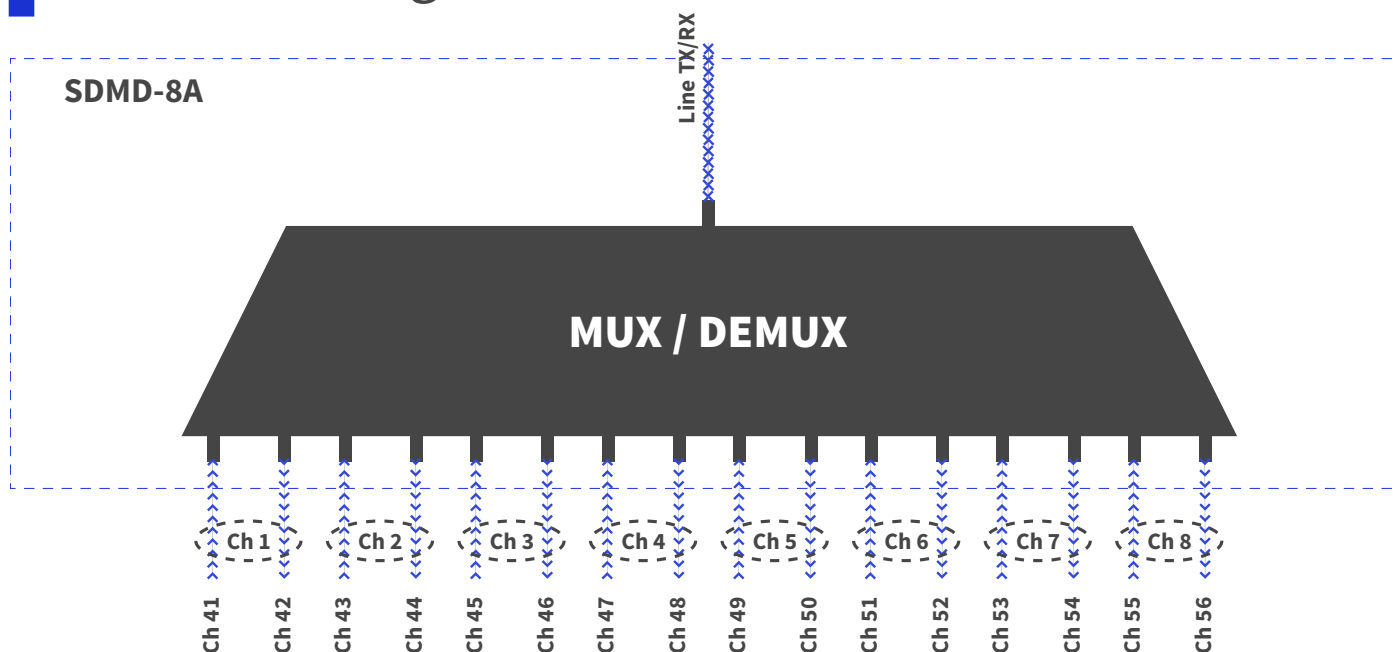


Product Specification:

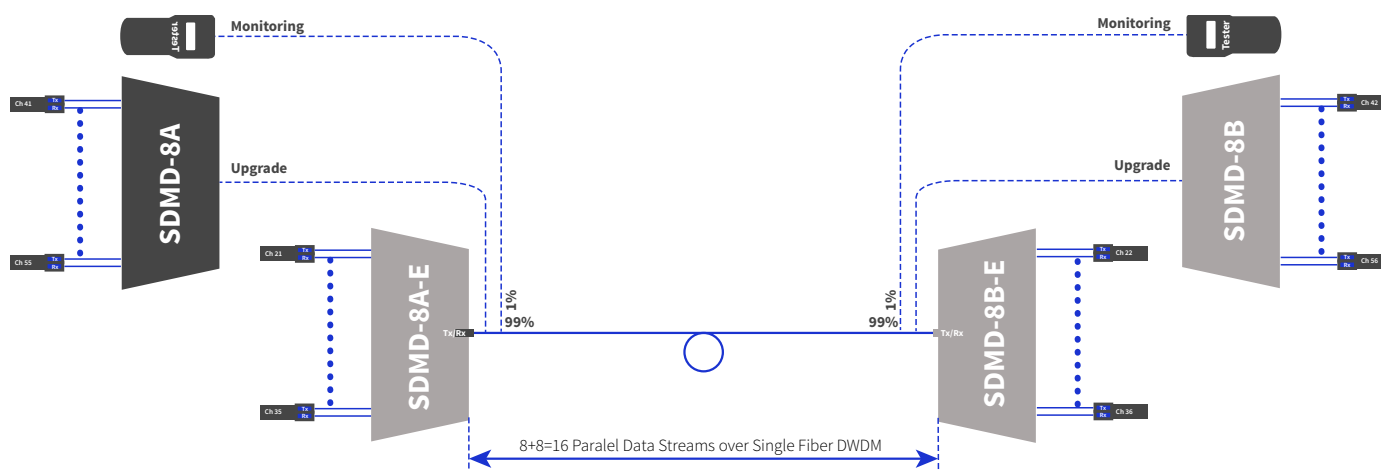
Parameter		Unit	Value
Product Type:			DWDM MUX/DEMUX Unit
Number of Data Streams:			8
Number of Channels		Ch	16 DWDM Channels According ITU-T ITU G.694.1
Transport Media:			Single Fiber Single Mode Fiber (SMF)
Operating Wavelengths:	center	nm	ITU-T C-band 100 GHz Channels 41 (1544.53 nm) - 56 (1532.68 nm)
Filter Technology:			TFF (Thin Film Filter)
Passband:	λ_{center}	nm	>0.22 nm
Channel Spacing:		nm	100GHz (0.8nm)
Insertation Loss _{Passband} :	Max	dB	4.8 dB
Isolation Adjacent Channels:	Min	dB	>25 dB
Isolation Non-Adjacent Channels:	Min	dB	>35 dB
Channel Passband Ripple:	Min	dB	≤0.5 dB
Polarization Dependant Los (PDL):	Max	dB	<0.1 dB
Polarization Mode Dispersion (PMD):	Max	ps/nm	<0.1 PS
Directivity:	Min	dB	>50 dB
Return Loss:	Min	dB	>45 dB
Maximum Power:	Max	mW	500 mW
Connectors:			LC Adapters for use with TIA/EIA 604-10 compliant LC UPC Connectors
Operating Temperature:		(°C)	0~+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.694.1, CE, ISO, RoHS



Functional Diagram:



Network Diagram:



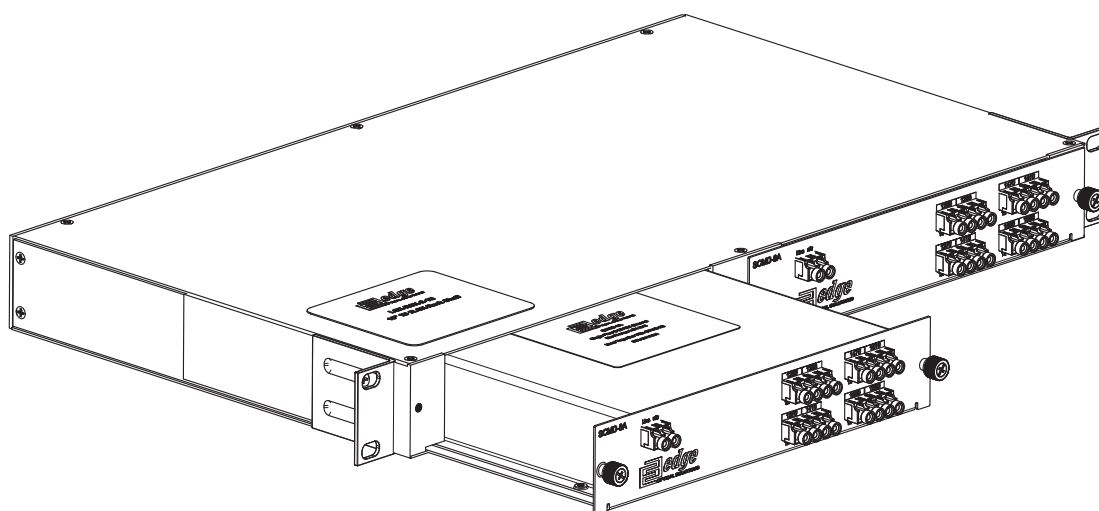
Front Panel:



Line: Line interface for common signal

Ch XX: DWDM 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.

