



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

### Product Description:

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. Main advantage of xWDM is its passive nature – no power supply or cooling necessary, robustness – no special micro-climate requirements and as passive element, it has MTBF 100+ Years. xWDM is – it 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, requires no configuration or maintenance.

SDMD-8A is Single Fiber DWDM multiplexer, based on TFF (Thin-Film Filter) technology, allowing 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 to provide maximally low insertion loss, SDMD-8A is equipped with band-pass or skip filters extending maximum distance of DWDM connections. SDMD-8A supports 8 channels (16 x 100GHz wavelengths) and it can be used as standalone, or together with SDMD-8A-E by plugging it to Upgrade port and expanding link capacity up to 16 channels. SDMD-8A is manufactured as a LGX Type B 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 - 3.2 dB
- Compact: LGX Type B package
- Easy Installation & Expansion
- 5 Year Warranty

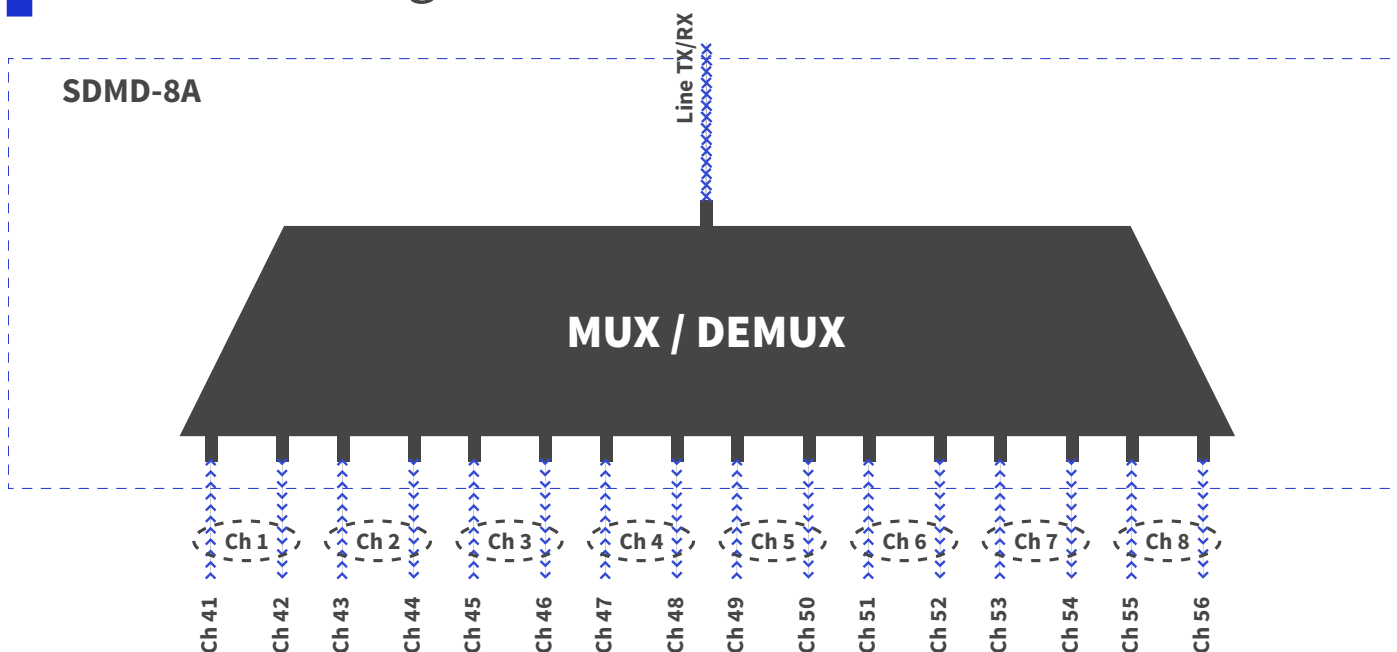


## Product Specification:

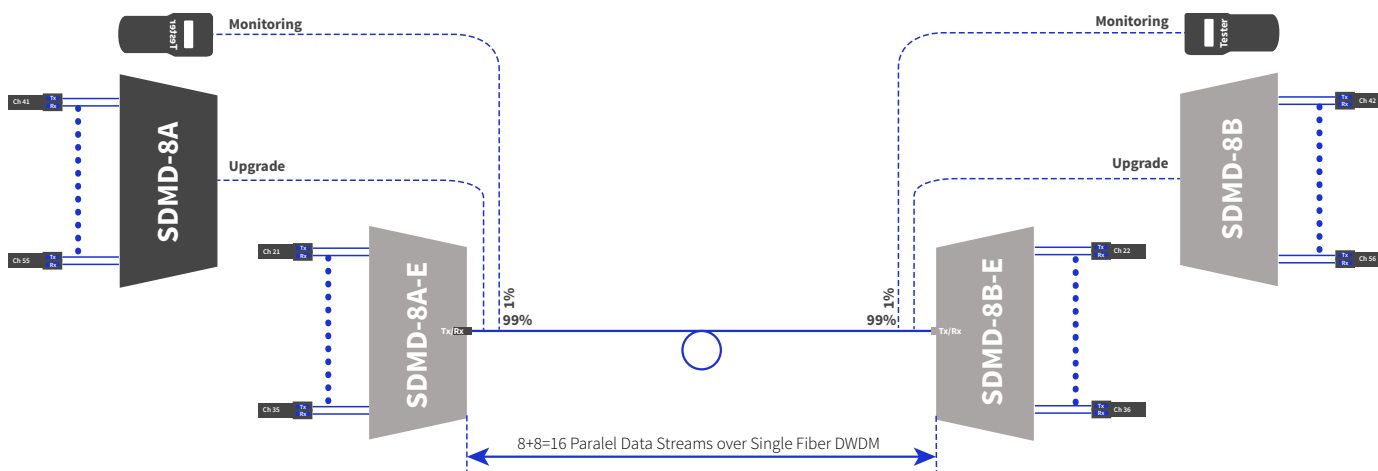
Parameter		Unit	Value
Product Type:			DWDM MUX/DEMUX Unit
Number of Data Streams:			8
Number of Channels		Ch	16 DWDM Channels According ITU-T ITU G.694.1
Transport Media:			Single Fiber Single Mode Fiber (SMF)
Operating Wavelengths:	center	nm	ITU-T C-band 100 GHz Channels 41 (1544.53 nm) - 56 (1532.68 nm)
Filter Technology:			TFF (Thin Film Filter)
Passband:	$\lambda_{center}$	nm	$\pm 0.1$ nm
Channel Spacing:		nm	0.8 nm
Insertion Loss <small>Passband:</small>	Max	dB	3.2 dB
Isolation Adjacent Channels:	Min	dB	25 dB
Isolation Non-Adjacent Channels:	Min	dB	30 dB
Channel Passband Ripple:	Min	dB	0.75 dB
Polarization Dependant Los (PDL):	Max	dB	<0.5 dB
Polarization Mode Dispersion (PMD):	Max	ps/nm	< 0.50 ps/nm
Directivity:	Min	dB	>21 dB
Return Loss:	Min	dB	>40 dB
Maximum Power:	Max	dBm	23 dBm on common port
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.694.1, CE, ISO, RoHS, Telecordia GR-20



## 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.

