



2 Data Channels Single Fiber Passive DWDM 2side OADM SDAD-2

Product Description:

2 Channels Single Fiber Passive DWDM Two side OADM Unit – SDAD-2 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.

SDAD-2 is a passive single fiber 2-side (East and West) Optical Add-Drop Multiplexer (OADM) package based on Thin-Film Filter (TFF) technology, allowing extract and add 2 data streams (4 wavelengths) from ITU-T G.694.1 compatible Dense Wavelength Division Multiplex (DWDM) link. The unit has LC/UPC connectors. SDAD-2 is manufactured as an LGX-type package, installed in a 19" 1U sub-rack fitting any standard equipment rack.

Key Highlights:

- Add/Drop of 2 Link to East and West
- Fully Passive: No Power Supply or Cooling
- MTBF: 100+ Years
- Protocol & Data Rate neutral
- Low Insertion Loss - 1.8 dB
- Compact: LGX package
- 5 Year Warranty

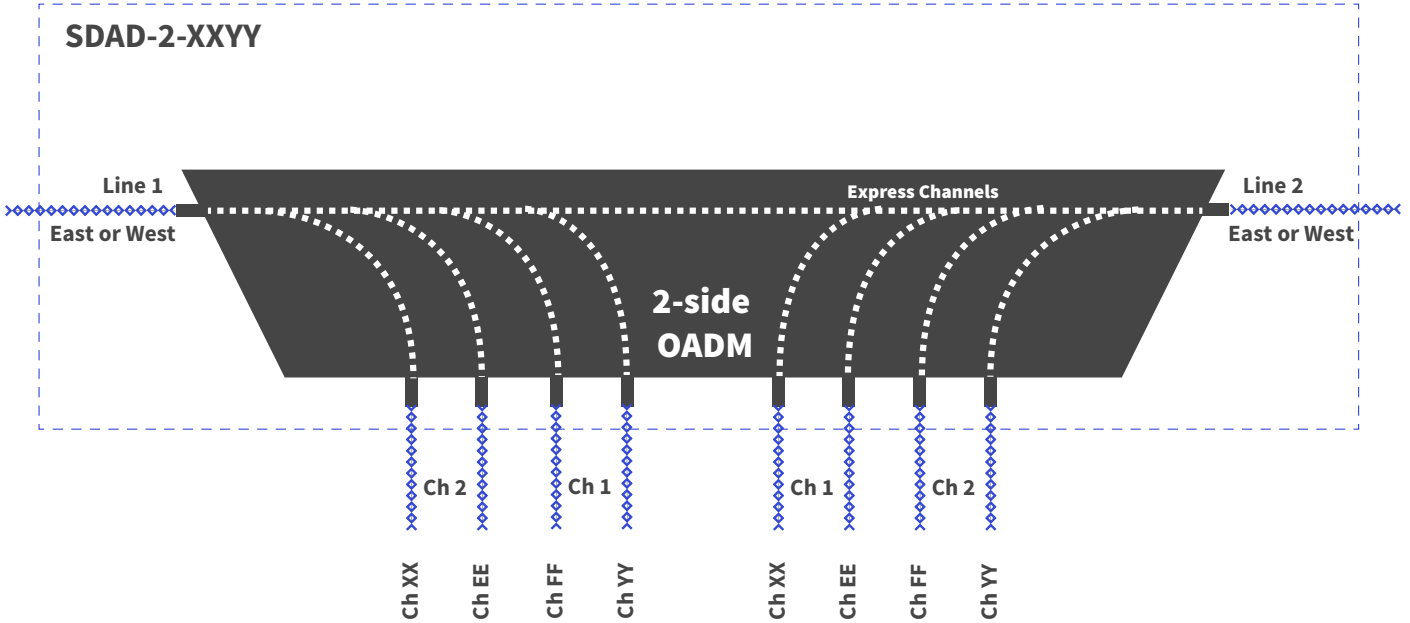


Product Specification:

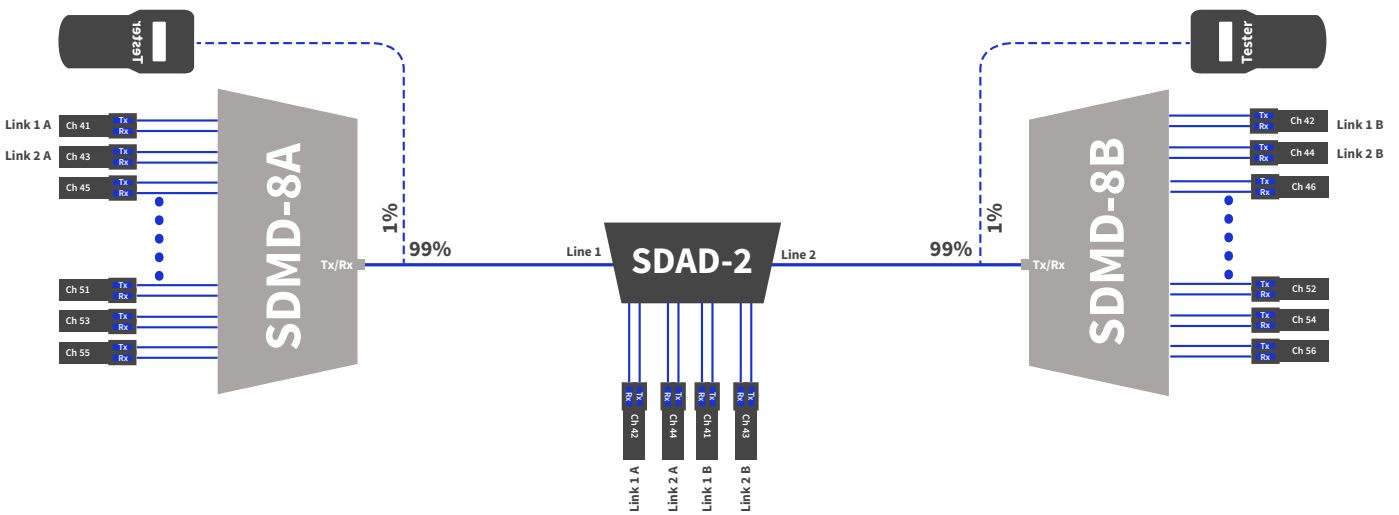
Parameter		Unit	Value
Product Type:			DWDM Two Side OADM
Number of Data Streams:			2
Number of Channels		Ch	4 DWDM Channels According ITU-T ITU G.694.1
Transport Media:			Single Fiber Single Mode Fiber (SMF)
Operating Wavelengths:	center	nm	ITU-T C-band 100 GHz Grid (According to supported versions below)
Filter Technology:			TFF (Thin Film Filter)
Passband:	λ_{center}	nm	>0.22 nm
Channel Spacing:		nm	100GHz (0.8nm)
Insertation Loss _{Add-Drop} :	Max	dB	1.8 dB
Insertation Loss _{Express} :	Max	dB	2.2 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:



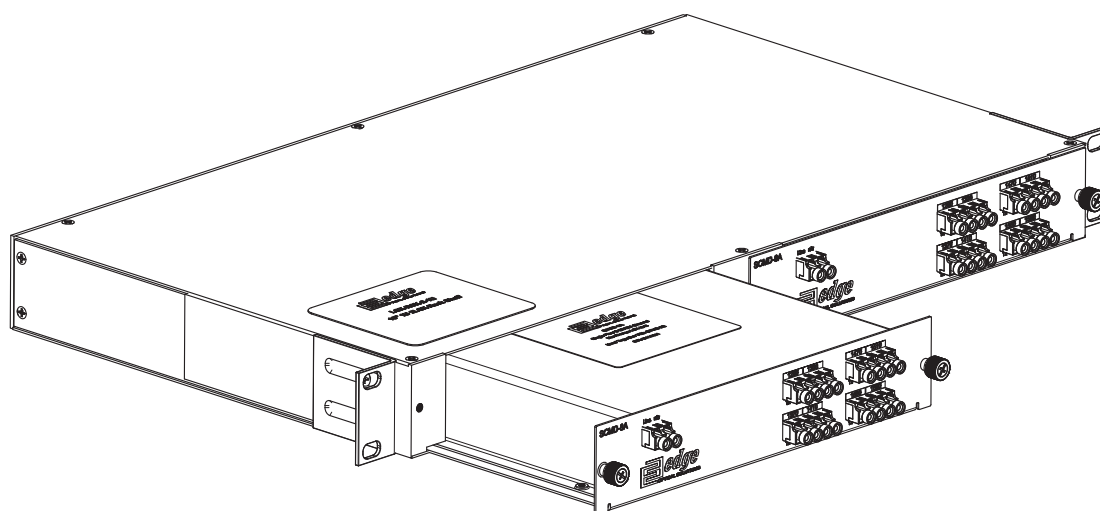
Front Panel:



L1/L2: 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.



Supported Versions:

PN	Description
SDAD-2-2124	Single Fiber DWDM OADM adding/dropping DWDM 100 GHz Chanel pair Ch 21/Ch 22 and Ch 23/Ch 24
SDAD-2-2528	Single Fiber DWDM OADM adding/dropping DWDM 100 GHz Chanel pair Ch 25/Ch 26 and Ch 27/Ch 28
SDAD-2-2932	Single Fiber DWDM OADM adding/dropping DWDM 100 GHz Chanel pair Ch 29/Ch 30 and Ch 31/Ch 32
SDAD-2-3336	Single Fiber DWDM OADM adding/dropping DWDM 100 GHz Chanel pair Ch 33/Ch 34 and Ch 35/Ch 36
SDAD-2-4144	Single Fiber DWDM OADM adding/dropping DWDM 100 GHz Chanel pair Ch 41/Ch 42 and Ch 43/Ch 44
SDAD-2-4548	Single Fiber DWDM OADM adding/dropping DWDM 100 GHz Chanel pair Ch 45/Ch 46 and Ch 47/Ch 48
SDAD-2-4952	Single Fiber DWDM OADM adding/dropping DWDM 100 GHz Chanel pair Ch 49/Ch 50 and Ch 51/Ch 52
SDAD-2-5356	Single Fiber DWDM OADM adding/dropping DWDM 100 GHz Chanel pair Ch 53/Ch 54 and Ch 55/Ch 56

