



## 1 Data Channels Single Fiber Passive CWDM 2 side OADM SCAD-1-XXYY

### 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.

SCAD-1-XXYY is passive 2-side (East and West) Optical Add-Drop Multiplexer (OADM) package based on Thin-Film Filter (TFF) technology, allowing extract and add 1 data stream (2 wavelengths) from ITU-T G.694.2 compatible Coarse Wavelength Division Multiplex (CWDM) link. SCAD-1-XXYY is manufactured as LGX type B module, installed in 19" 1U sub rack fitting any standard equipment rack.

### Key Highlights:

- Add/Drop of 1 Link to East and West
- Fully Passive: No Power Supply or Cooling
- MTBF: 100+ Years
- Protocol & Data Rate neutral
- Low Insertion Loss - 1.5 dB
- Compact: LGX Type B package
- Easy Installation & Expansion
- 5 Year Warranty

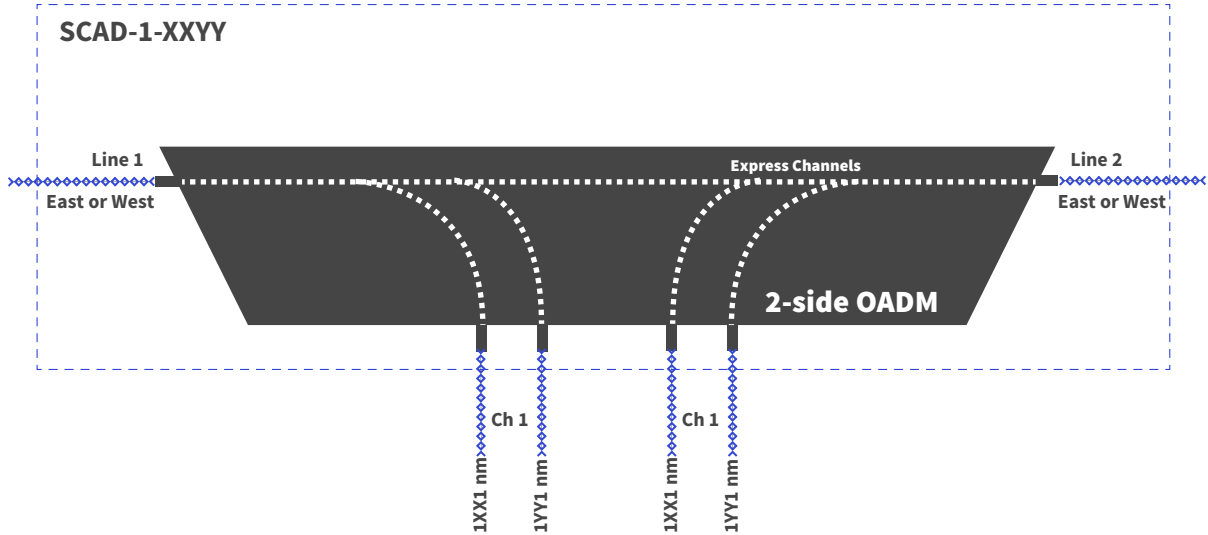


## Product Specification:

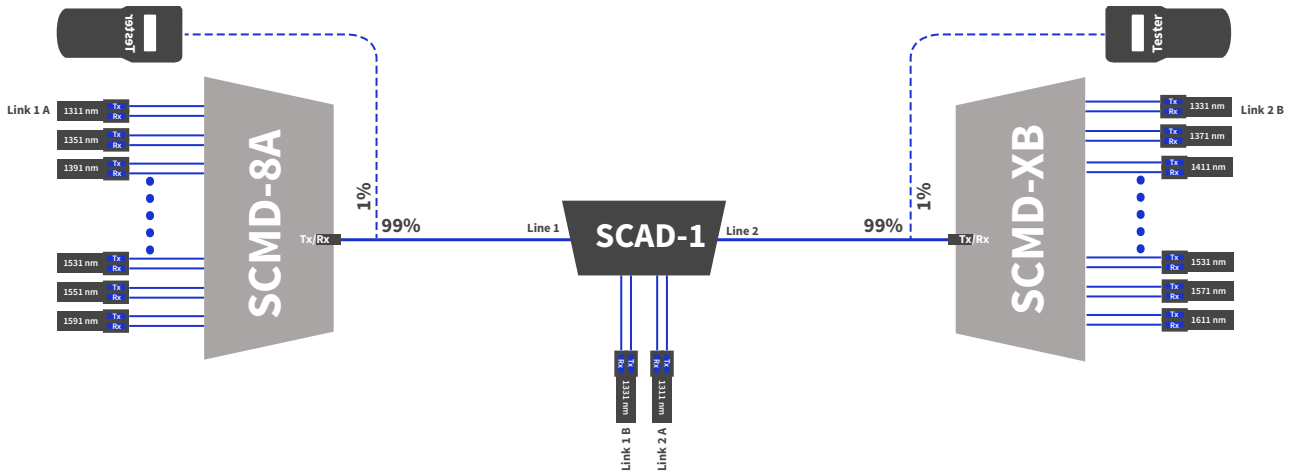
Parameter		Unit	Value
Product Type:			CWDM Two Side OADM
Number of Data Streams:			1
Number of Channels		Ch	2 CWDM Channels According ITU-T G.694.2
Transport Media:			Single Fiber Single Mode Fiber (SMF)
Operating Wavelengths:	center	nm	1311nm 1451nm 1591nm 1331nm 1471nm 1611nm 1351nm 1491nm 1371nm 1511nm 1391nm 1531nm 1411nm 1551nm 1431nm 1571nm
Filter Technology:			TFF (Thin Film Filter)
Passband:	$\lambda_{center}$	nm	$\pm 6.5$ nm
Channel Spacing:		nm	20 nm
Insertation Loss Add/Drop Channels:	Max	dB	1.5 dB
Insertation Loss Express Channels:	Max	dB	1.5 dB
Isolation Adjacent Channels:	Min	dB	30 dB
Isolation Non-Adjacent Channels:	Min	dB	40 dB
Channel Passband Ripple:	Min	dB	0.3 dB
Plarization Dependant Los (PDL):	Max	dB	<0.15 dB
Polarization Mode Dispersion (PMD):	Max	ps/nm	< 0.15 ps/nm
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, Telecordia GR-20



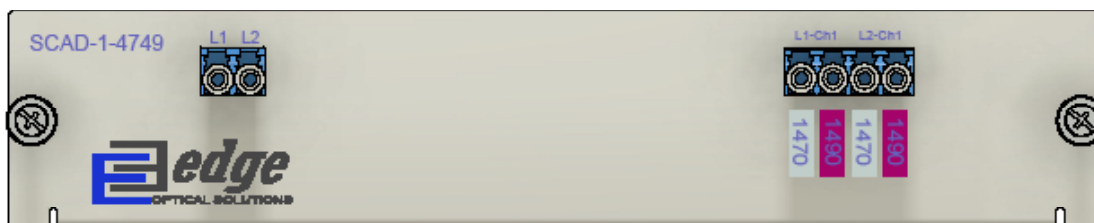
## Functional Diagram:



## Network Diagram:



## Front Panel:



L1/L2: East or West Line interface for common signal

L1-Ch1: CWDM Channel colored add/drop 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
SCAD-1-2729	Single Fiber 2 side (East and West) OADM Unit Adding/Dropping 1270nm and 1290 nm
SCAD-1-3133	Single Fiber 2 side (East and West) OADM Unit Adding/Dropping 1310nm and 1330 nm
SCAD-1-3537	Single Fiber 2 side (East and West) OADM Unit Adding/Dropping 1350nm and 1370 nm
SCAD-1-3941	Single Fiber 2 side (East and West) OADM Unit Adding/Dropping 1390nm and 1410 nm
SCAD-1-4345	Single Fiber 2 side (East and West) OADM Unit Adding/Dropping 1430nm and 1450 nm
SCAD-1-4749	Single Fiber 2 side (East and West) OADM Unit Adding/Dropping 1470nm and 1490 nm
SCAD-1-5153	Single Fiber 2 side (East and West) OADM Unit Adding/Dropping 1510nm and 1530 nm
SCAD-1-5557	Single Fiber 2 side (East and West) OADM Unit Adding/Dropping 1550nm and 1570 nm
SCAD-1-5961	Single Fiber 2 side (East and West) OADM Unit Adding/Dropping 1590nm and 1610 nm

