



## 8 Ch. ITU 100GHz DWDM Double Fiber Passive Mux/Demux DDMD-8-2128

### Product Description:

Channels (21-28) Double Fiber Passive Modular 100 GHz DWDM Mux/Demux – DDMD-8-2128 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.

DDMD-8-2128 is a passive multiplexer/demultiplexer package based on TFF (Thin-Film Filter) technology, designed to organize 8 duplex, protocol independent parallel ITU-T G.694.1 compatible Dense Wavelength Division Multiplex (DWDM) data streams over pair of single-mode optical fiber. DDMD-8-2128 is equipped with a 1% Monitoring port, which allows easy in-service analytics and troubleshooting. DDMD-8-2128 is equipped with an Upgrade port allowing gradually expanded link capacity by cascading additional 8-port DWDM filters. DDMD-8-2128 is manufactured as an LGX-type package, installed in a 19" 1U sub-rack fitting any standard equipment rack.

### Key Highlights:

- 8 100 GHz DWDM Ch. Over double SMF
- Fully Passive: No Power Supply or Cooling
- Protocol & Data Rate neutral
- MTBF: 100+ Years
- Low Insertion Loss - 3.0 dB
- 1% Mon. port for in-service troubleshooting
- Compact: LGX Type
- Easy Installation & Expansion
- 5 Year Warranty

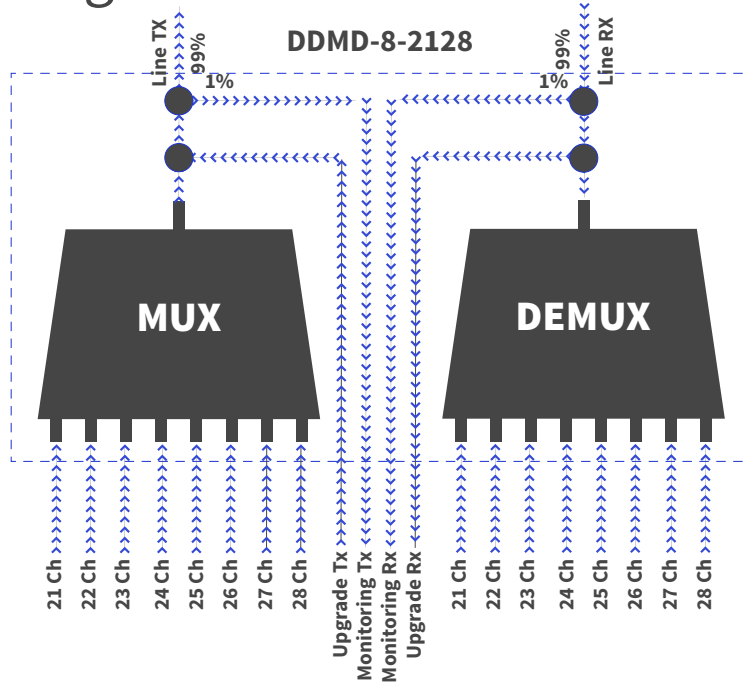


## Product Specification:

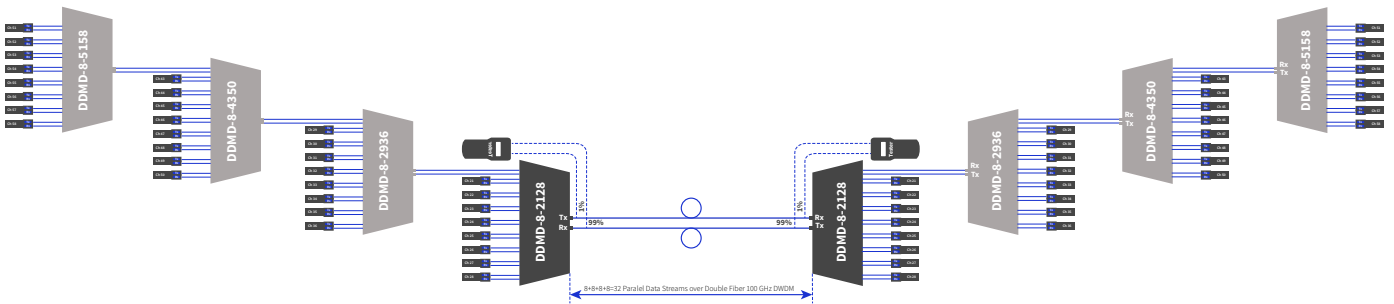
Parameter		Unit	Value
Product Type:			DWDM MUX/DEMUX Unit
Number of Data Streams:			8
Number of Channels		Ch	8 DWDM Channels According ITU-T ITU G.694.1
Transport Media:			Double Fiber Single Mode Fiber (SMF)
Operating Wavelengths:	center	nm	ITU-T C-band 100 GHz Channels 21 (1560.61nm) - 28 (1554.94 nm)
Filter Technology:			TFF (Thin Film Filter)
Passband:	$\lambda_{center}$	nm	>0.22 nm
Channel Spacing:		nm	100GHz (0.8nm)
Insertation Loss <sub>Passband</sub> :	Max	dB	3.0 dB
Insertation Loss <sub>Upgrade Port</sub> :	Max	dB	2.5 dB
Insertation Loss <sub>1% Monitoring Port</sub> :	Max	dB	23 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



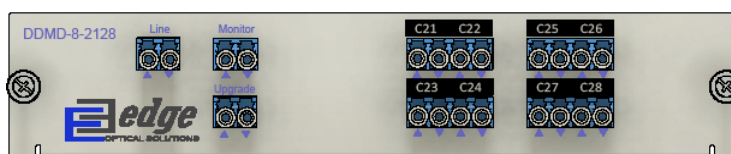
## Functional Diagram:



## Network Diagram:



## Front Panel:



**Line:** Line interface for common signal  
**Mon:** 1% Monitoring Port

**Upg:** Upgrade for compatible DWDM 100GHz Mux/Demux  
**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.

