

40 Ch. ITU 100GHz DWDM Double Fiber Passive Mux/Demux DDMD-40

Product Description:

40 Channels Double Fiber Passive 100 GHz DWDM Mux/Demux – DDMD-40 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-40 is a passive multiplexer/demultiplexer package based on Gaussian type AAWG (Athermal Arrayed Waveguide Grating) technology, designed to organize 40 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-40 is equipped with a 1% Monitoring port, which allows easy in-service analytics and troubleshooting. DDMD-40 is manufactured as a standard 1U high 19" sub-rack fitting any standard equipment rack.

Key Highlights:

- 40 100 GHz DWDM Ch. Over double SMF
- Fully Passive: No Power Supply or Cooling
- Protocol & Data Rate neutral
- MTBF: 100+ Years
- Low Insertion Loss - 3.7 dB
- 1% Mon. port for in-service troubleshooting
- Compact: 1U Standard 19" Rack
- Easy Installation
- 5 Year Warranty

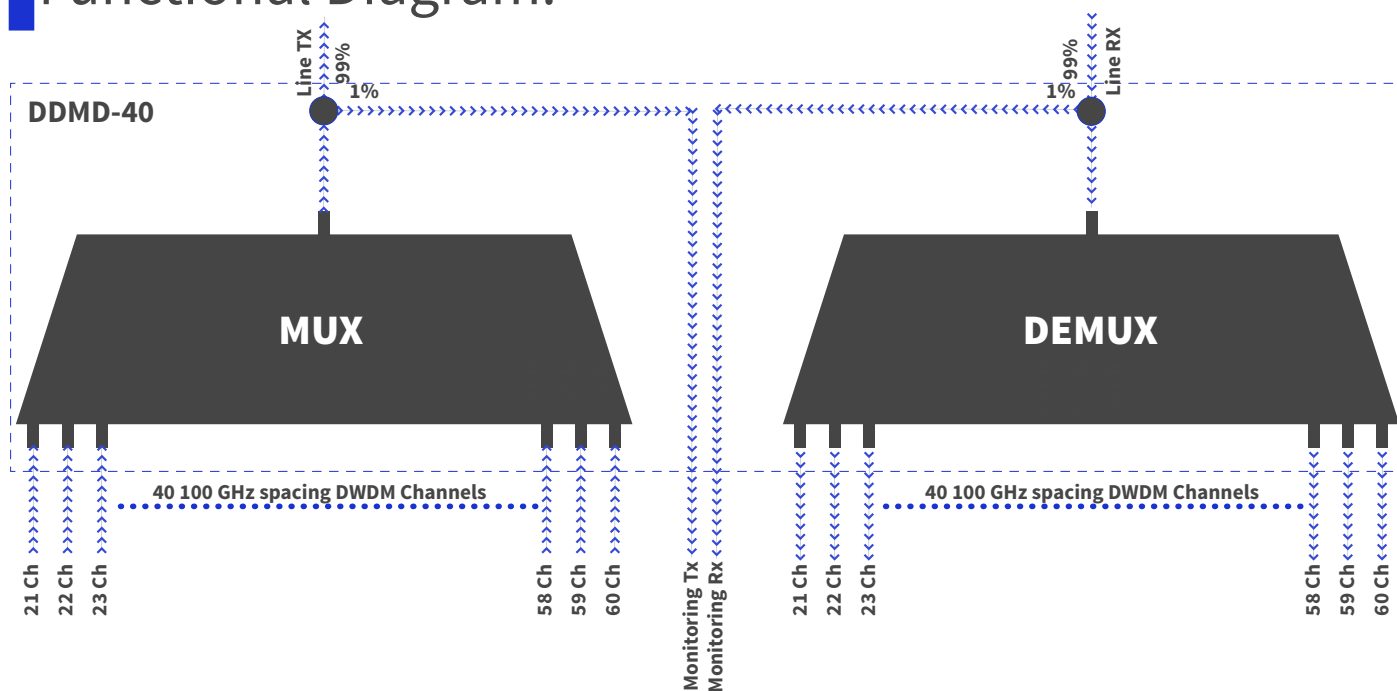


Product Specification:

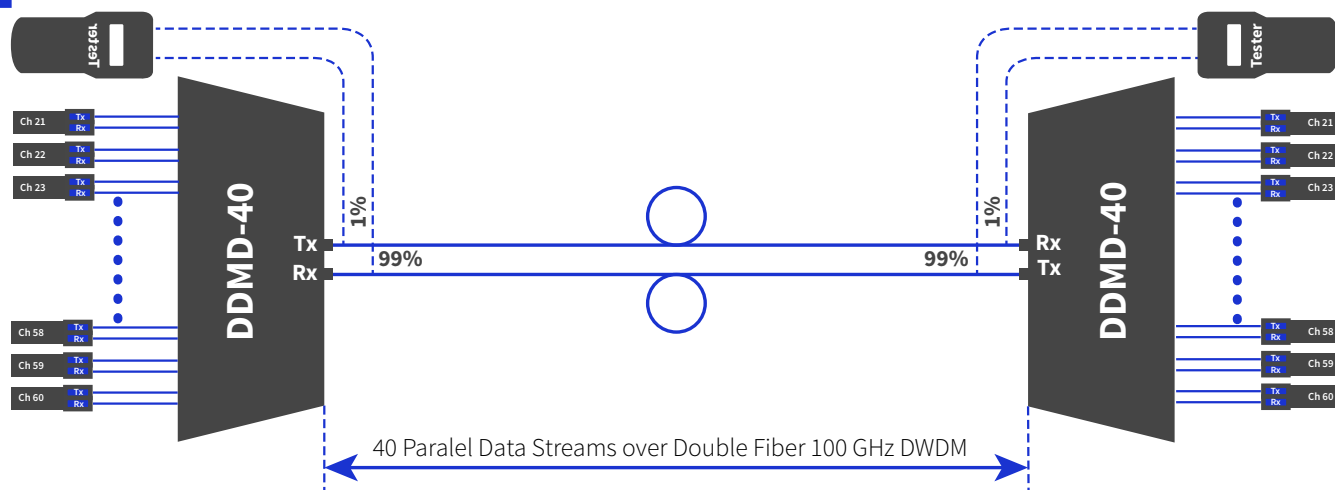
Parameter		Unit	Value
Product Type:			DWDM MUX/DEMUX Unit
Number of Data Streams:			40
Number of Channels		Ch	40 DWDM Channels According ITU-T ITU G.694.1
Transport Media:			Double Fiber Single Mode Fiber (SMF)
Operating Wavelengths:	center	nm	ITU-T C-band 100 GHz Channels 21 (1560.61nm) - 60 (1529.55 nm)
Filter Technology:			DWDM AAWG (Gaussian)
Passband:	λ_{center}	nm	>0.22 nm
Channel Spacing:		nm	100GHz (0.8nm)
Insertation Loss _{Passband} :	Max	dB	3.7 dB
Insertation Loss _{1% Monitoring Port} :	Max	dB	23 dB
Isolation Adjacent Channels:	Min	dB	>27 dB
Isolation Non-Adjacent Channels:	Min	dB	>35 dB
Channel Passband Ripple:	Min	dB	≤1.2 dB
Polarization Dependant Los (PDL):	Max	dB	<0.5 dB
Polarization Mode Dispersion (PMD):	Max	ps/nm	<0.5 PS
Uniformity:	Min	dB	≤1.0 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	440 x 43.6 x 260
Relative Humidity:		%	0 - 90%
Compliance:			ITU-T G.694.1, CE, ISO, RoHS



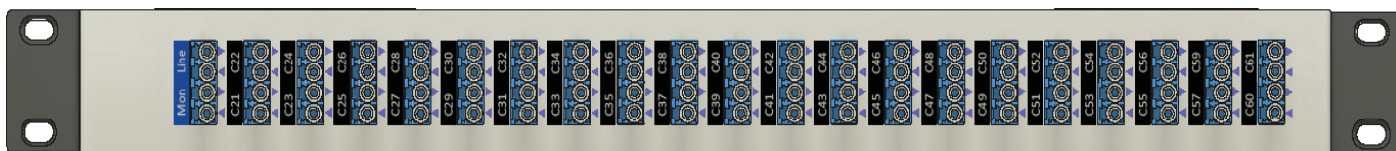
Functional Diagram:



Network Diagram:



Front Panel:



Line: Line interface for common signal

Mon: 1% Monitoring Port

Ch XX: DWDM Channel colored transceivers interfaces

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.

