

40 Ch. Odd ITU 50GHz DWDM Double Fiber Passive Mux/Demux DDMD-40-50

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.

DDMD-40-50 is passive multiplexer/demultiplexer package based on AAWG (Athermal Arrayed Waveguide Grating) technology, allowing 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-40-50 supports 40 50GHz Odd channels and it can be used as stand-alone, or together with DDMD-40-50I by plugging it to Upgrade port. DDMD-40-50 is manufactured as standard 1U high 19" subrack fitting any standard equipment rack.

Key Highlights:

- 40 Odd 50 GHz DWDM Ch. Over double SMF
- Fully Passive: No Power Supply or Cooling
- Protocol & Data Rate neutral
- MTBF: 100+ Years
- Low Insertion Loss - 5.0 dB
- 1% Mon. port for in-service troubleshooting
- Compact: 1U Standard 19" Rack
- Easy Installation & Expansion
- 5 Year Warranty

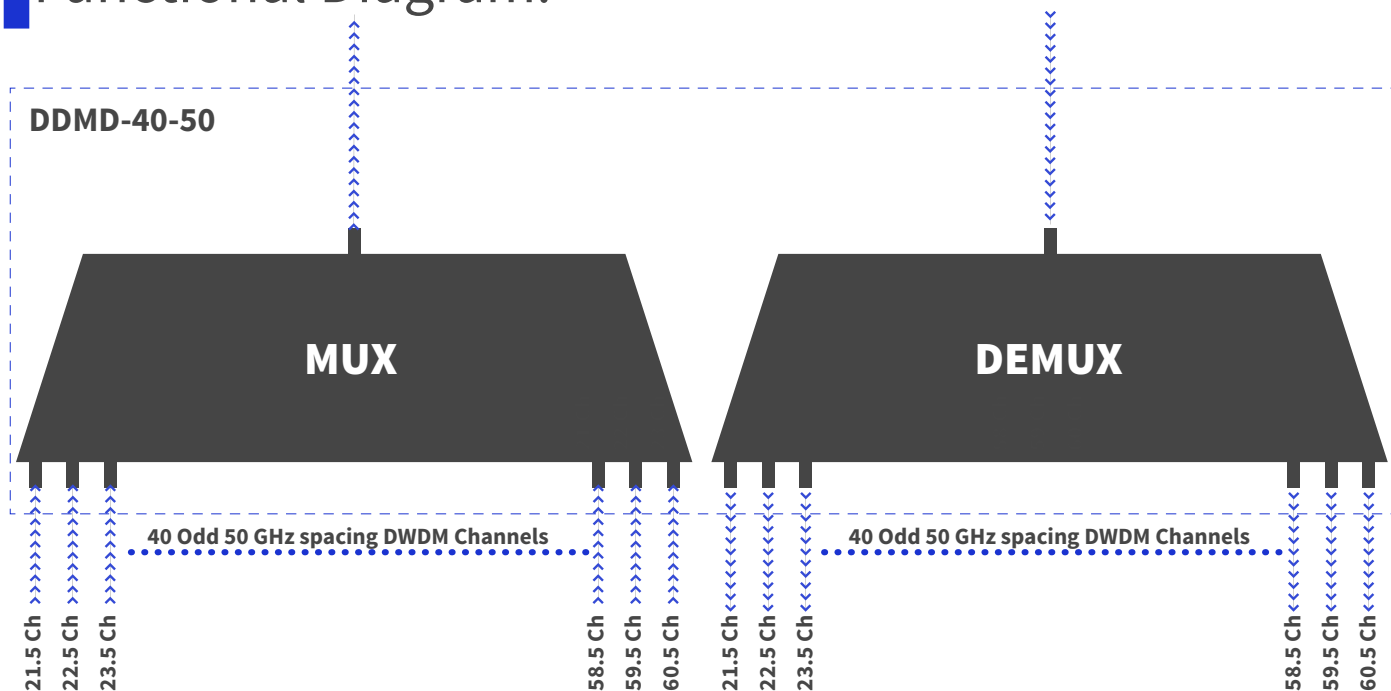


Product Specification:

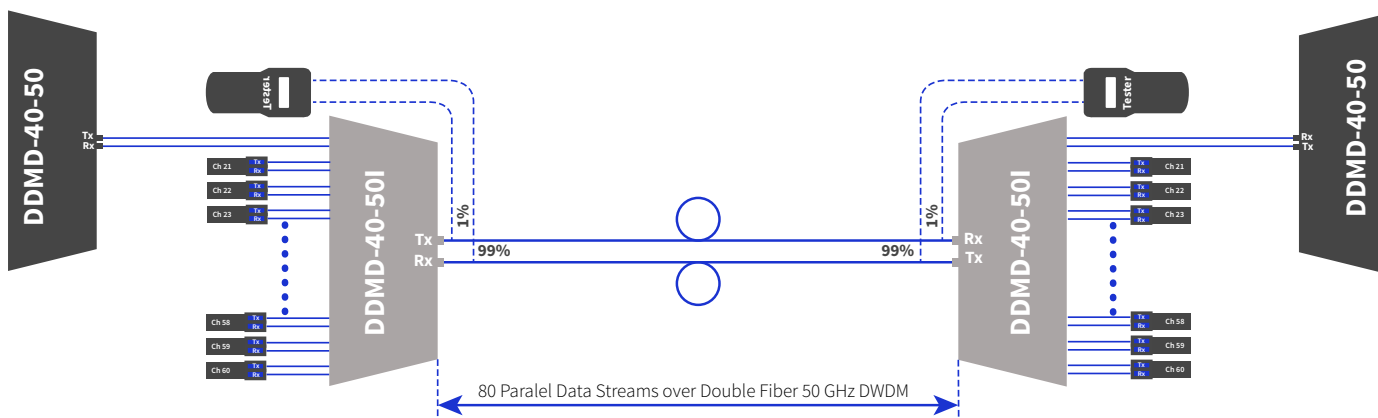
Parameter		Unit	Value
Product Type:			DWDM MUX/DEMUX Unit
Number of Data Streams:			40
Number of Channels		Ch	40 DWDM Channels According ITU-T ITU G.694.1
Transport Media:			Double Fiber Single Mode Fiber (SMF)
Operating Wavelengths:	center	nm	ITU-T C-band 50 GHz Channels 21,5 (1560,2nm) - 60,5 (1529,16 nm)
Filter Technology:			AAWG (Athermal Arrayed Waveguide Grating)
Passband:	λ_{center}	nm	± 0.1 nm
Channel Spacing:		nm	0.4 nm
Insertion Loss <small>Passband:</small>	Max	dB	5.0 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	440 x 43.6 x 260
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

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.

