



8 Ch. ITU 100GHz DWDM Double Fiber Passive Mux/Demux DDMD-8-4350

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-8-4350 is passive multiplexer/demultiplexer package based on TFF (Thin-Film Filter) technology, allowing to organize 8 duplex, protocol independent paralel ITU-T G.694.1 compatible Dense Wavelength Division Multiplex (DWDM) data streams over pair of single mode optical fiber. DDMD-8-4350 is equipped with 1% Monitoring (tap) port, with allows easy in-service analytics and troubleshooting. DDMD-8-4350 is equipped with Upgrade port allowing gradually expand link capacity by cascading additional 8-port DWDM filters. DDMD-8-4350 is manufactured as LGX type B module, installed in 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 Insertation Loss - 2.2 dB
- 1% Mon. port for in-service troubleshooting
- Compact: 1U Standard 19" Rack
- Easy Installation & Expansion
- 5 Year Warranty

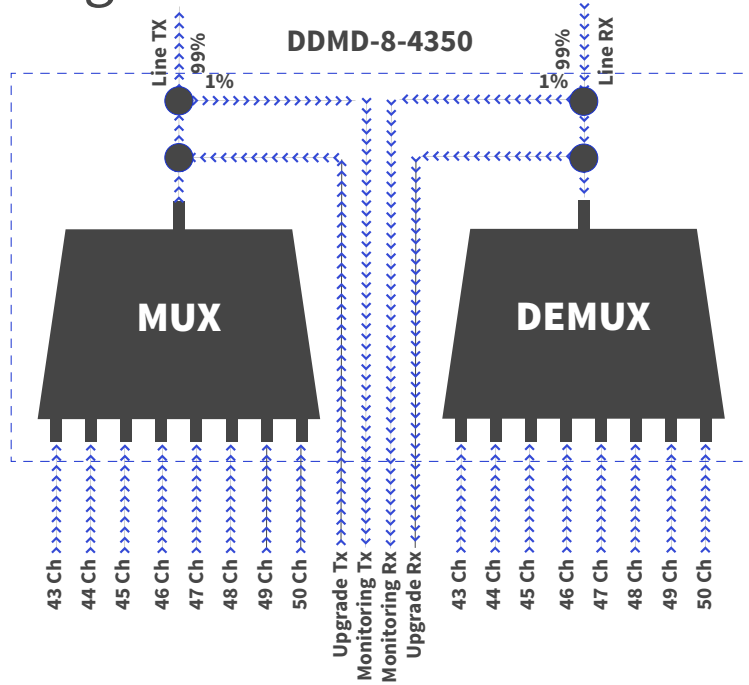


Product Specification:

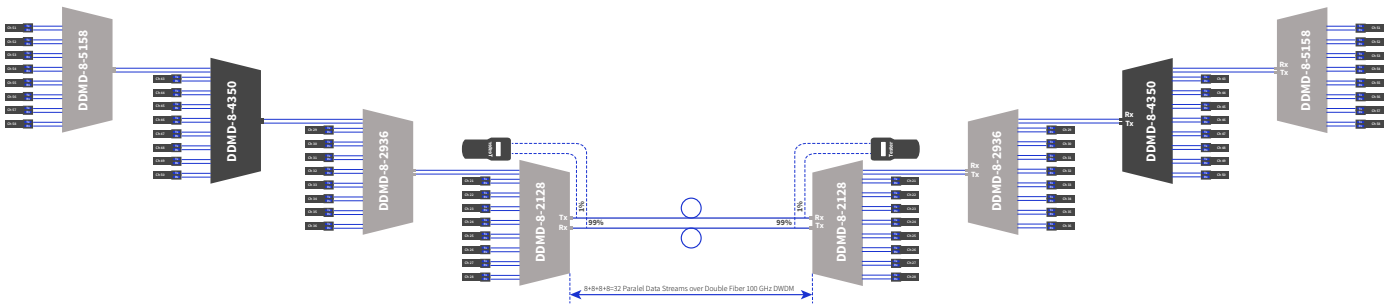
| Parameter | | Unit | Value |
|---|--------------------|-------|---|
| Product Type: | | | DWDM MUX/DEMUX Unit |
| Number of Data Streams: | | | 8 |
| Number of Channels | | Ch | 8 DWDM Channels According ITU-T ITU G.694.1 |
| Transport Media: | | | Double Fiber Single Mode Fiber (SMF) |
| Operating Wavelengths: | center | nm | ITU-T C-band 100 GHz Channels 43 (1542.94nm) - 50 (1537.40 nm) |
| Filter Technology: | | | TFF (Thin Film Filter) |
| Passband: | λ_{center} | nm | ± 0.1 nm |
| Channel Spacing: | | nm | 0.8 nm |
| Insertation Loss _{Passband} : | Max | dB | 2.2 dB |
| Insertation Loss _{Upgrade Port} : | Max | dB | 1.0 dB |
| Insertation Loss _{1% Monitor Port} : | Max | dB | 23.8 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 | 214 x 41.3 x 198 |
| Relative Humidity: | | % | 0 - 90% |
| Compliance: | | | ITU-T G.694.1, CE, ISO, RoHS, Telecordia GR-20 |



Functional Diagram:



Network Diagram:



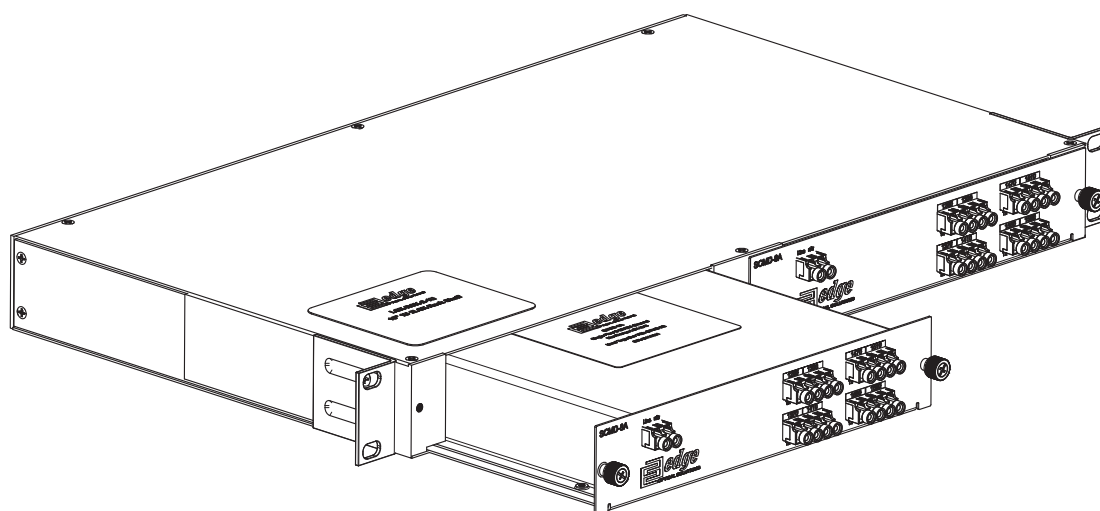
Front Panel:



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

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.

