MRV

Datasheet

LambdaDriver®- 8x1GE Muxponder Module (TM-GM8D/TM-GM8CD)

TM-GM8D/TM-GM8CD

Features
- 10 Gbps trunk port rate
- Link Integrity Notification (LIN) support
- Remotely activated Local or Remote Loopback
- SFP Digital Diagnostics monitoring
- Tunable wavelength option of trunk DWDM laser.
- Hot swappable
- 2 slots wide – can be used on all LD chassis

Applications
- Point-to-Point interconnection of up to 8 LANs
- 8 Independent 1GE services over one DWDM wavelength

Overview

The LambdaDriver TM-GM8D/ TM-GM8CD Muxponders use advanced TDM technology to transport 8 separate Gigabit Ethernet data streams into a 10 Gbps DWDM trunk port over a single pair of fibers.

This solution provides a significant cost reduction and excellent fiber utilization when compared to discrete optical multiplexing.
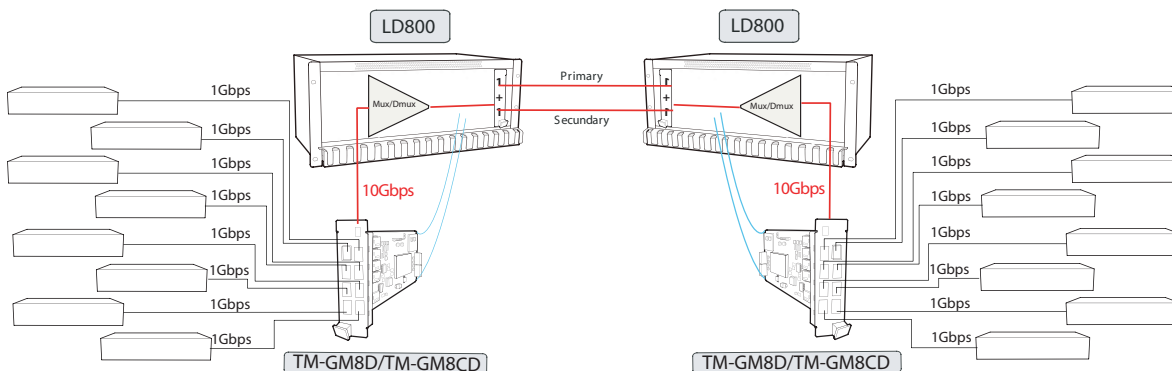
The TM-GM8CD incorporates 8 1000BaseTx (RJ45) access interfaces whereas the TM-GM8D has 8 SFP based access interfaces that can accommodate various types of SFPs e.g. Multimode or Singlemode. The trunk port is a 10Gb/s DWDM interface that can be ordered either as predefined wavelength or with tunable laser.

Typical applications include :

- point-to-point (gray wavelenght) interconnection of up to 8 independent 1GE services (one per access port).

- DWDM integrated - Using only one DWDM channel to pass 8 independent 1GE services between two sites over one or more WDM LD nodes.

Link Integrity Notification (LIN) functionality is supported by the TM-GM8CD and also by the TM-GM8D module when F/O SFPs are used (no LIN support for copper SFPs).

The modules are manageable by the LambdaDriver management module either locally by RS232 CLI access or remotely by Telnet, SNMP or GUI management via the MRV MegaVision Pro management platform.

Enviromental

Operating Temperature	-5º to 45ºC
Storage Temperature	-10º to 70ºC
Relative Humidity	85% maximum, non-condensing
Dimensions (W x H x D)	54.18 x 130.7 x 227 mm (2.13 x 5.145 x 8.956 in)
Weight	0.82 kg (1.80 lb)
Connector	Access ports - SFP, DWDM port - MiniSC (MU)

Technical Specifications

	Fixed wavelength	Tunable wavelength
WDM TX power (dBm)	0 - 1	4 - 7
Maximum receiver sensitivity (dBm)	-23	-24
Overload (dBm)	-6	-8
DWDM wavelengths range	Any on ITU-T G694.1 50 Ghz grid	
Chromatic Dispersion tolerance		
TM-GM8D4/xx or TM-GM8CD4/xx*	800 ps/nm	
TM-GM8D/xx or TM-GM8CD/xx*	1600 ps/nm	
TM-GM8D8T or TM-GM8CD8T	1600 ps/nm	
TM-GM8D16T	3000 ps/nm	
Dispersion penalty at limit (db)	2	

Order Info

Product	Description
TM-GM8D4/xx*	8 x GE, SFP access, TDM module with DWDM 40km ch#xx trunk
TM-GM8D/xx*	8 x GE, SFP access, TDM module with DWDM 80km ch#xx trunk
TM-GM8D8T	8 x GE, SFP access, TDM module with DWDM 80km trunk with tunable wavelength
TM-GM8D16T	8 x GE, SFP access, TDM module with DWDM 160km trunk with tunable wavelength
TM-GM8CD4/xx*	8 x 1000BaseTx TDM module with DWDM 40km ch#xx trunk
TM-GM8CD/xx*	8 x 1000BaseTx TDM module with DWDM 80km ch#xx trunk
TM-GM8CD8T	8 x 1000BaseTx TDM module with DWDM 80km trunk with tunable wavelength