

## LambdaDriver®- 8x1GE Muxponder Module (TM-GM8D)



TM-GM8D

### Features

- 10 Gbps trunk port rate
- Link Integrity Notification (LIN) support
- Remotely activated Local or Remote Loopback
- SFP Digital Diagnostics monitoring
- 50GHz spacing ITU-grid(G.694.1) DWDM Trunk
- 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 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-GM8D incorporates 8 SFP based access interfaces that can accommodate various types of SFPs e.g. Multimode Singlemode and MRV SFP-GA-R/SFP-GC-R copper SFP's. The trunk port is a 10Gb/s DWDM tunable laser interface.

The TM-GM8D20T incorporates tunable dispersion compensation capability.

When running long distances over fiber, each wavelength aggregates different dispersion, therefore compensating all wavelengths together causes different dispersion residual for each wavelength. Having on transponder built-in Tunable dispersion compensator allows fine tuning of dispersion on a per wavelength basis.

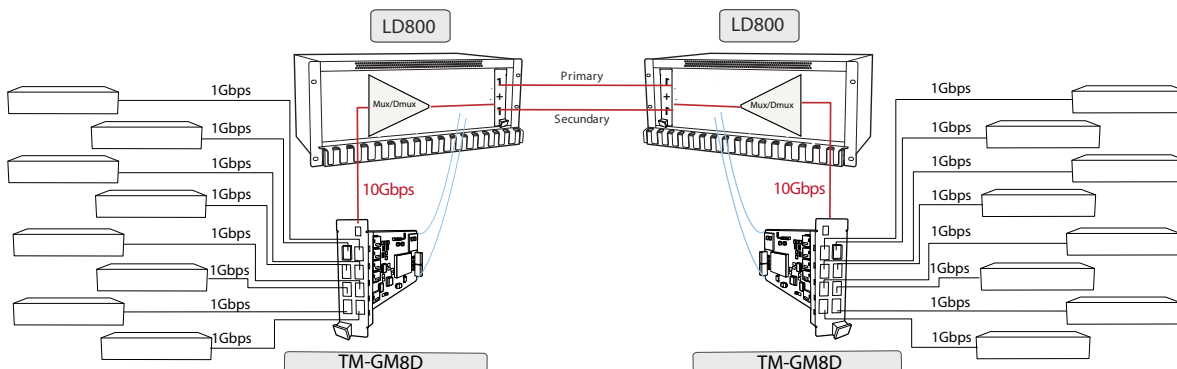
\* For each 1GE access port the following statistic are available:

- In/Out Bit Rate
- In/Out Packet counter
- In /Out Bytes counter
- Code Violation counter
- CRC errors counter

Link Integrity Notification (LIN) functionality and FEF (Far End Fault) is supported by the TM-GM8D module when F/O SFPs are used. The LIN must be disabled when using coppers SFP's. These modes of operation are user selectable.

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.

\* Starting with H/W rev.05 of modules



### Environmental

<b>Operating Temperature</b>	- 5 to 45°C (23°F to 113°F)	
<b>Storage Temperature</b>	-10 to 70°C (14°F to 158°F)	
<b>Relative Humidity</b>	85% maximum, non-condensing	
<b>Dimensions (W x H x D)</b>	54.18 x 130.7 x 227 mm (2.13 x 5.145 x 8.956 in)	
<b>Weight</b>	GM8D8T: 0.700 kg (1.54 lb) GM8D20T: 0.950 kg (2.09 lb)	
<b>Connector</b>	Access ports - SFP, DWDM port - MiniSC (MU)	
<b>Power consumption</b>	Module	SFP
	GM8D8T	11.5W 1W
	GM8D20T	13.5W 1W

### Technical Specifications

<b>WDM TX power (dBm)</b>	4 - 7
<b>Maximum receiver sensitivity (dBm)</b>	-24
<b>Overload (dBm)</b>	-8
<b>DWDM wavelengths range</b>	Any on ITU-T G694.1 50 Ghz grid
<b>Chromatic Dispersion tolerance</b>	
<b>TM-GM8D8T</b>	1600 ps/nm
<b>TM-GM8D20T</b>	3600 ps/nm
<b>Dispersion penalty at limit (db)</b>	2

### Order info

Product	Description
<b>TM-GM8D8T</b>	8 x GE, SFP access, TDM module with DWDM 80km trunk with tunable wavelength
<b>TM-GM8D20T</b>	8 x GE, SFP access, TDM module with DWDM 200km trunk with tunable wavelength

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