

Datasheet

**LambdaDriver®- 8x1GE Muxponder Module with FEC (TM-GM8DF8T)**



**TM-GM8DF8T**

**Overview**

The LambdaDriver TM-GM8DF8T Muxponders use advanced TDM technology to transport 8 separate Gigabit Ethernet data streams into a 10 Gbps trunk port and out over a single pair of fibers.

This solution provides significant cost reduction and excellent fiber utilization when compared to discrete optical multiplexing.

A key feature of the module is support of the G.709 FEC protocol as well as Enhanced FEC (EFEC), with superior error correction performance.

FEC significantly extends the overall distance reach of a 10GE rate link while conforming to keeping the expected industry standard BER performance.

FEC or EFEC is user selectable with the system management card. Performance monitoring is supported for both access (client) and trunk ports, providing the relevant conditions and alarms at each receive side.

Statistics for the current 15 minutes interval and up to 31 previous intervals can be collect and viewed.

For 10GE traffic performance parameters are defined per RFC2819 (RMON). Line and Diagnostic Loop-back functionality is supported and provides an invaluable tool for troubleshooting and maintenance operations in a live network.

**Features**

- 10GE Trunk port rate
- G.709 performance monitoring
- Line and Diagnostics Loop-back tests
- Link Integrity notification (LIN)
- Hot swappable
- 50GHz spacing ITU-grid(G.694.1) DWDM Trunk

**Applications**

- Point to point interconnection of up to 8 LANs
- Extension of optical spans distance at 10 Gbps performance

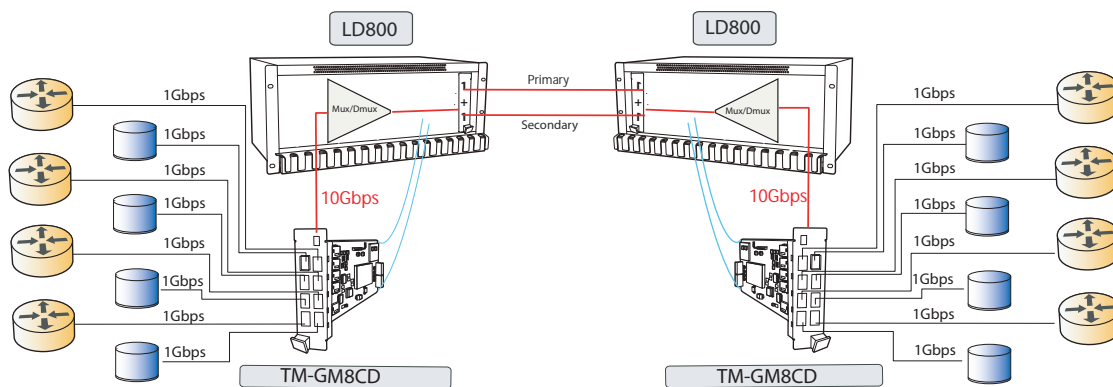
The Diagnostics loopback function checks the integrity of the internal ports circuitry while the Line loopback function is used to check the fiber connections integrity. The Line loopback and the Diagnostics loopback functions are available for both the access and trunk ports.

\* 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. LIN must be disabled when using copper SFPs . LIN and FEF are user selectable.

The modules are manageable with the LambdaDriver management module either locally by RS-232 CLI access or remotely by TELNET, SNMP or e.g., using MRV MegaVision Pro NMS.



**Environmental**

<b>Operating Temperature</b>	-5° to 45° C (23° to 113° F)			
<b>Storage Temperature</b>	-10° to 70° C (14° 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 <sup>3</sup> (2.13 x 5.145 x 8.956 in <sup>3</sup> )			
<b>Weight</b>	0.82 kg (1.80 lb)			
<b>Connector</b>	Access ports - SFP, DWDM port - MiniSC (MU)			
<b>Power consumption</b>	Module	SFP	XFP	
	GM8DF8T	11.5W	1W	3.5W

**Technical Specifications**

<b>TX power (dBm)</b>	4.5 - 7		
<b>Maximum receiver sensitivity (dBm)</b>	-28		
<b>APD 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-GM8DF8T</b>	1600 ps/nm		
<b>Transmission Dispersion Penalty (dB)</b>	2		

**Order Info**

Product	Description
<b>TM-GM8DF8T</b>	8 x GE, SFP access, TDM module with tunable wavelength DWDM trunk, 80km dispersion tolerance with FEC

All statements, technical information and recommendations related to the products herein are based upon information believed to be reliable or accurate. However, the accuracy or completeness thereof is not guaranteed, and no responsibility is assumed for any inaccuracies. Please contact MRV Communications for more information. MRV Communications and the MRV Communications logo are trademarks of MRV Communications, Inc. Other trademarks are the property of their respective holders.