Datasheet

LambdaDriver®–10 Gbps XFP - Dual Transponder Module (TM2-XFP)

TM2-XFP module

Features

- 10Gbps data rates settable to OC-192, 10GE or 10FC
- 3R support
- LIN (Link Integrity Notification) mechanism
- Remote Loop-back
- Power monitoring
- Y-Cable backup protection
- Hot swappable

Applications

- 10Gbps signal regeneration and optical wavelength conversion

Overview

The TM2-XFP is a single slot module incorporating two independent 10Gbps transponders that convert the "gray" wavelength of a terminal equipment interface into ITU-T grid DWDM wavelength enabling its transport via the LambdaDriver® Optical Transport System.

The integrated Automatic Laser Shutdown (ALS) feature automatically reduces the optical power of the transmitters to an eye safe level in case of a broken link. The ALS feature is implemented on both ports of the transponders (DWDM trunk and Terminal equipment access port).

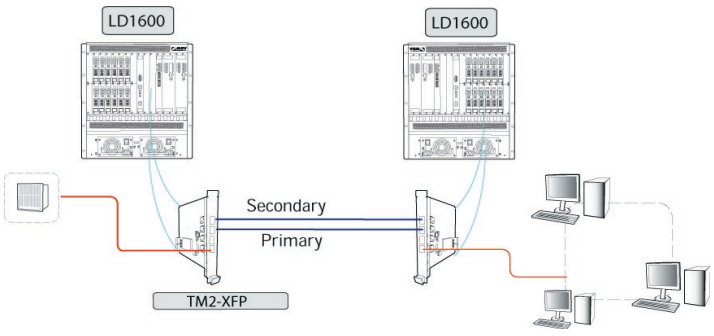
Remote and Local Loop-back functionality is supported and provides an essential tool for troubleshooting and maintenance operations in a live network.

The Link Integrity Notification (LIN) function allows the terminal equipment to detect a link failure in the path between the two end nodes regardless of the location of the failure. The link failure detected at one end is propagated throughout the network by disabling the transmission towards the terminal equipment connected at the opposite end of the connection.

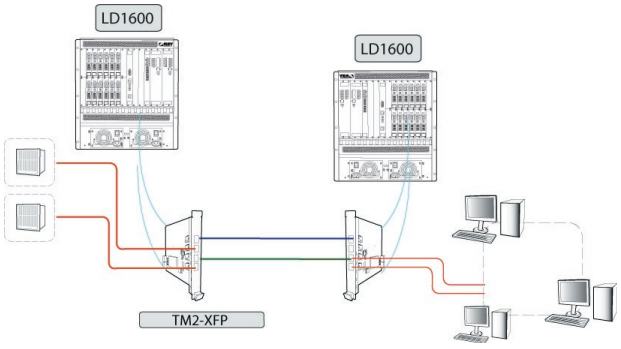
Power monitoring of the Trunk (DWDM) and the Access ports via the Digital Diagnostics is provided by the XFP Transceivers.

The TM2-XFP transponders also support the Y-Cable based fast switchover protection protocol. In this protection mode two adjacent transponders in a LambdaDriver® chassis run a protocol that maintains "operational" and "standby" transponders for a single 10Gbps port of an access device.

The modules can be managed either through the LambdaDriver® management module by local craft terminal (CLI) or remotely by SNMP with MRV's web-based NMS MegaVision® or any other SNMP management platform.



Redundant Link Transponder



Dual Transponder

Enviromental

Operating Temperature	-5 °C to +45 °C
Storage Temperature	-10 °C to +70 °C
Relative Humidity	85% max, non-condensing
Dimensions (W x H x D)	W: 26.93 mm (1.06 In); H:130.7 (5.145 In); D:227mm (8.956 In)
Weight	0.55 Kg (1.21 lb)
Connectors	XFP sockets all ports

Technical Specifications

Data Rate	10GE or OC192 (STM-64)
TX Port (Access Trasmit Port)	Connection to access equipment receive port
RX Port (Access Receive Port)	Connection to access equipment transmit port
Optical parameters	Per the XFP
LEDs	
P/L n:	Detection of XFP and Link presence or absence at port n
Power Consumption	
Card without XFPs	3.3W
Each XFP	6.8W

Order Info

Product	Description
TM2-XFP	4x10Gbps Ethernet or OC-192 full-duplex, XFP ports.