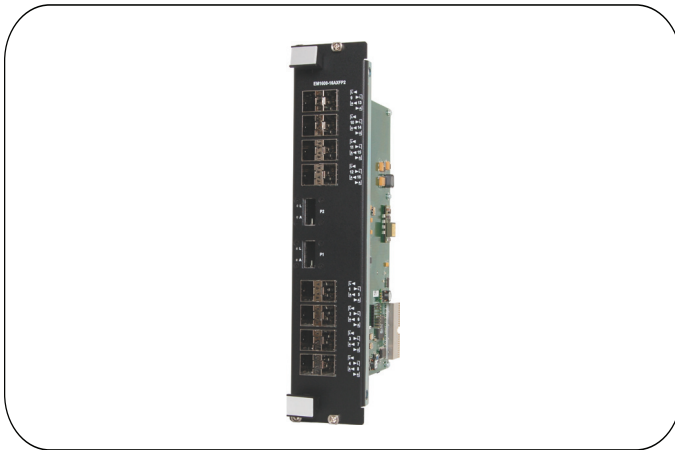


Datasheet

# LambdaDriver® Multi-protocol OTN Muxponder Module (EM1600-16AXFP2)



EM1600-16AXFP2

### Overview

The EM1600-16AXFP2 OTN Muxponders are a revolutionary addition to the LambdaDriver system that raises the versatility and flexibility of WDM based-network design and implementation to un-precedent levels.

The module is a Multi-Service line card that incorporates 16 SFP-based access ports and two XFP DWDM based line ports (model dependent) housed in a 2 slots wide “long” profile size.

The uniqueness of this device consists in its capability to accept any protocol at its access ports in different mixing schemes and aggregate these services over a 10Gbps interface with G.709 FEC and EFEC (OTU2) support.

The access services can be any mixing of STM1/4/16, OTU1, FC100/200/400, FE/GE, FICON/SDI clients.

Incoming traffic at an access port can be sent over to another client interface or to the system (line) interface to be forwarded to a remote final or intermediate node. The capability of forwarding some of the services received at one line port to local client ports while forwarding other services to a next hop via a second line port implements the function of a non-optical service add/drop multiplexer thus eliminating the need to use a dedicated wavelength for each service. This solution provides significant cost reduction and excellent fiber utilization when

### Features

- OTU2 line interfaces
- Multi-service / multi-protocol transport
- Extensive performance management capability
- Service Add/Drop
- Fast fail-over redundancy of line ports
- Diagnostics Loop-Back (DLEB)
- SFP and XFP Digital Diagnostics monitoring
- Hot swappable

### Applications

- Advanced multiprotocol OTN Networking

compared to discrete optical multiplexing.

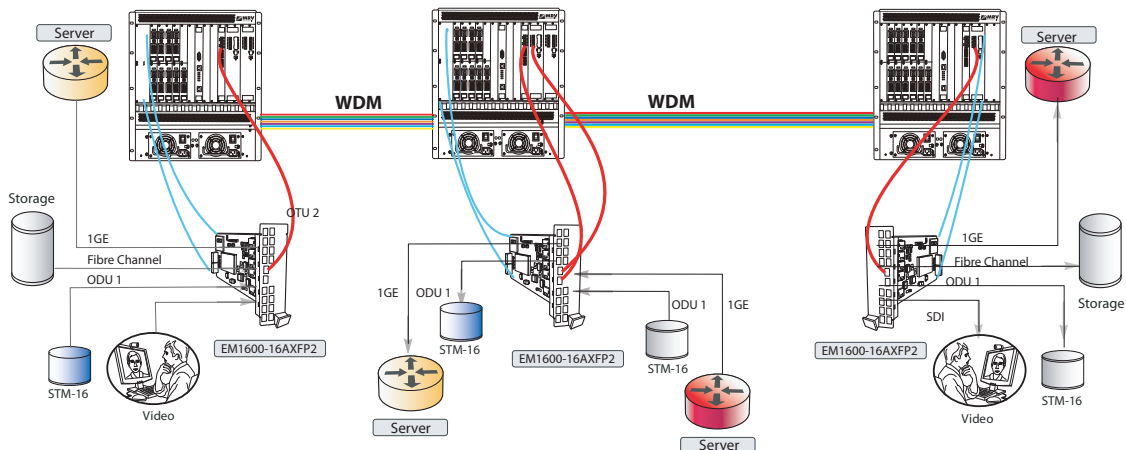
When using the module with two XFP line interfaces, the APS mode can be operated so that if the link to the primary line port fails, the traffic will be relayed via the secondary line port to an alternative path.

Extensive performance monitoring is supported on all ports as required by most of the Carrier-oriented management systems.

Diagnostics LoopBack per port can be remotely activated with the management module to facilitate troubleshooting and network maintenance.

A typical application is aggregation of multiple independent services over single fiber or single wavelength with high level of Performance Monitoring.

The modules are manageable with the LambdaDriver management module either locally by RS-232 CLI access or remotely by Telnet, SNMP, or GUI management via the MRV MegaVision Pro management platform.



### Environmental Specifications

<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 mm (2.13 in); 263.4 mm (10.37 in); 227mm (8.956 in)
<b>Weight</b>	0.55 kg (1.21 lb)
<b>Connectors</b>	16 x SFP & 2x XFP receptacles (EM1600-AXFP2)
<b>Power Consumption (Fully loaded)</b>	EM1600-16AXFP2: 18.5 Watt

### Technical Specifications

<b>Access Data Rate</b>	100Mbps to 4.25 Gbps
<b>Trunk Data Rate</b>	OTU2 (10.7 Gbps)
<b>TX power (dBm)</b>	per the XFP
<b>Maximum receiver sensitivity (dBm)</b>	per the XFP
<b>Overload (dBm)</b>	per the XFP
<b>Dispersion penalty at limit (db)</b>	as per XFP

### Order Info

EM1600-16AXFP2	16 x SFP multiprotocol ports TDM Module with 10Gbps FEC -EFEC XFP line port
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