SFP-to-SFP Media Module

Overview

Combining data rate independent connectivity with support for SFP transceivers, the Fiber Driver® SFP-to-SFP media module (EM316-2SFP) from MRV defines a new generation of deployment flexibility and inventory management. It is now simple to deploy an extremely wide range of optical infrastructure solutions including media conversion, signal boosting, lambda conversion, Wave Division Multiplexing (WDM), and Optical Add/Drop Multiplexing (OADM).

The SFP-to-SFP media module offers plug-n-play ease of installation. Simply install the module into the Fiber Driver chassis, insert the SFP transceivers required for the protocol and distance of the application, and connect to the network. Changing the connection type later requires changing only the transceivers. With SFP and module hot-swapping, there is virtually no down time involved.

Because SFP transceivers are portable, they may be shared easily between different locations and applications. Modular design maximizes equipment investment and reduces the need for on-hand inventory. MRV Communications provides a complete range of optical and copper plug-in interfaces for the EM316-2SFP to satisfy your network growth and changing needs.

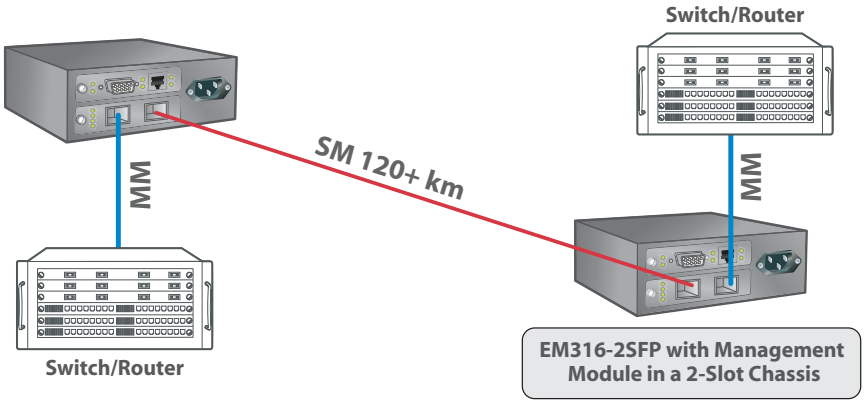
Highlights

- SFP-to-SFP interface connectivity
- Data rate independence
- Transparent protocol determined by SFPs
- Flexibility and scalability
  - Add/Change optics
  - Adjust data rates as needed
  - Maintain single item inventory
- Complete range of optical and copper plug-in interfaces available from MRV Communications
- 2R data signal conditioning
- SFP Digital Diagnostics (SFF-8472)
- SNMP management
- Full graphical management support in MegaVision Pro®

Applications

- Media conversion
- Signal boosting
- Lambda conversion
- CWDM
- DWDM
- OADM

Typical Application: **Multi-mode to Single-mode Conversion**



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Datasheet

The SFP-to-SFP media module is data rate independent and performs 2R (reshape and retransmit) conditioning of the data signal. Any protocol is supported, including Fast and Gigabit Ethernet, FDDI, ESCON, SONET (OC-3, OC-12, OC-48 and above), Fibre Channel (1 Gbps & 2 Gbps), DVB, Serial Digital Video Interface (SDI) SMPTPE-259M (270Mbps), High Definition Serial Interface (HD-SDI/ HDTV) SMTPE-292M (1.5 Gbps), and many others. The SFP pair selected determines the protocol.

The SFP-to-SFP media module fully supports the SFP standard including Digital Diagnostics as defined by SFF-8472. Together with a Fiber Deriver network management module, it provides real-time access to information such as transceiver type (protocol, range, vendor, etc.), transceiver temperature, TX/RX optical power, and transceiver supply voltage. It also provides a means for generating management alerts and warnings when system parameters fall outside of the normal operating range.

With an external Mux/DeMux unit such as the 4-channel or 8-channel Fiber Driver CWDM Passive Mux/DeMux (EM316PA4N / EM316PA8N), the SFP-to-SFP media module becomes a WDM building block for any protocol and data rate of the SFPs. MRV also offers Dense Wave Division Multiplexing (DWDM) options.

Deployed along a WDM trunk at customer service points with MRV Communications passive OADM technology, the SFP-to-SFP media module becomes a sophisticated Add/Drop topology component.

The SFP-to-SFP media module is a hot-swappable, single-slot device that fits in any powered Fiber Driver chassis. Through a Fiber Driver network management module, the EM316-2SFP is SNMP manageable and fully supported through the GUI of MegaVision Pro®, the comprehensive network management system (NMS) from MRV.

Contact your MRV representative for additional information on the full line of MRV products, pricing, and availability.

Physical Specifications	
Operating Temperature Range*	0°C to 50°C (32°F to 122°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Relative Humidity	85% maximum, non-condensing
Physical Dimensions	25 mm x 75 mm x 175 mm deep (1" x 3" x 7" deep)
Weight	Approximately 213 g (7.5 oz)
Regulatory Compliance	FCC Part 15 (Class A); IC (Class A); EMC Directive: Emission (Class A) and Immunity; RoHS Directive; China RoHS; WEEE Directive

* Operating Range listed is for the module only. Operating Range of pluggable interface(s) used may differ.

Ordering Information

Model	Function	Protocol	Connectors Port/Link	Wavelength	Budget (dB)	Distance Range
EM316-2SFP	Protocol independent media module with SFP Interfaces	Data rate independent, protocol transparent	SFP (x2)	SFP Dependent		

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