E1 Fiber Multiplexer

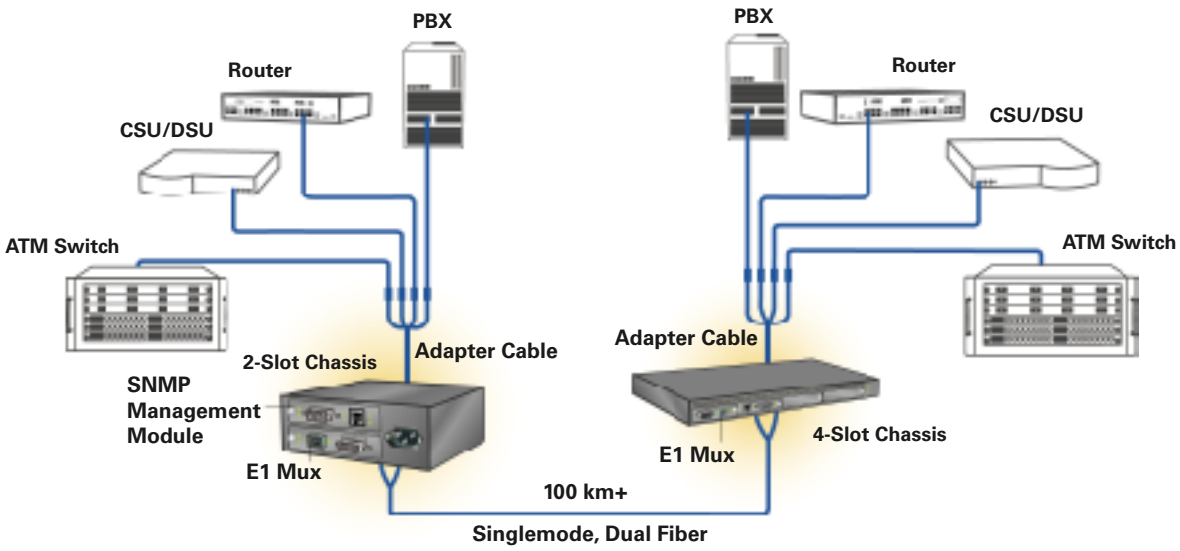
Overview

The Fiber Driver™ E1 Fiber Multiplexer from MRV Communications transmits four E1 data channels across a fiber optic trunk in a Point-to-Point (PtP) configuration. Each line interface consists of a HDB3 encoder/decoder, and a receiver with equalizer for reliable data and clock recovery. The device also includes a crystal-less jitter attenuator which, depending on system requirements, can be set in the transmit (TX) or receive (RX) path. Line distances from 0 to 100m are supported. Line protection is designed to meet Telecordia GR-1089 standards. The Fiber Driver E1 Fiber Mux is G.703 interface and G.704 framing compliant.

The fiber trunk can be either Singlemode or Multimode, dual or single fiber, using LC, SC, or DSC connectors. The E1 Fiber Mux can also be configured with the Multimode Extender (MMX) transceiver. With MMX technology - available exclusively from MRV Communications in the Fiber Driver product line - a link of up to 6 km can be achieved over a Multimode fiber trunk.

Features

- Four multiplexed channels of E1
- Multimode or Singlemode trunks
- Multimode Extender trunk with exclusive MMX technology
- Single Fiber Singlemode trunks
- Link distances up to 100+ km
- SNMP managed
- LED status and diagnostic indicators
- Jitter attenuation
- Local & Remote Loopback
- Fits in all Fiber Driver chassis
- Interoperable with Fiber Driver redundant link, OADM, WDM, optical amplifier, and signal repeater modules



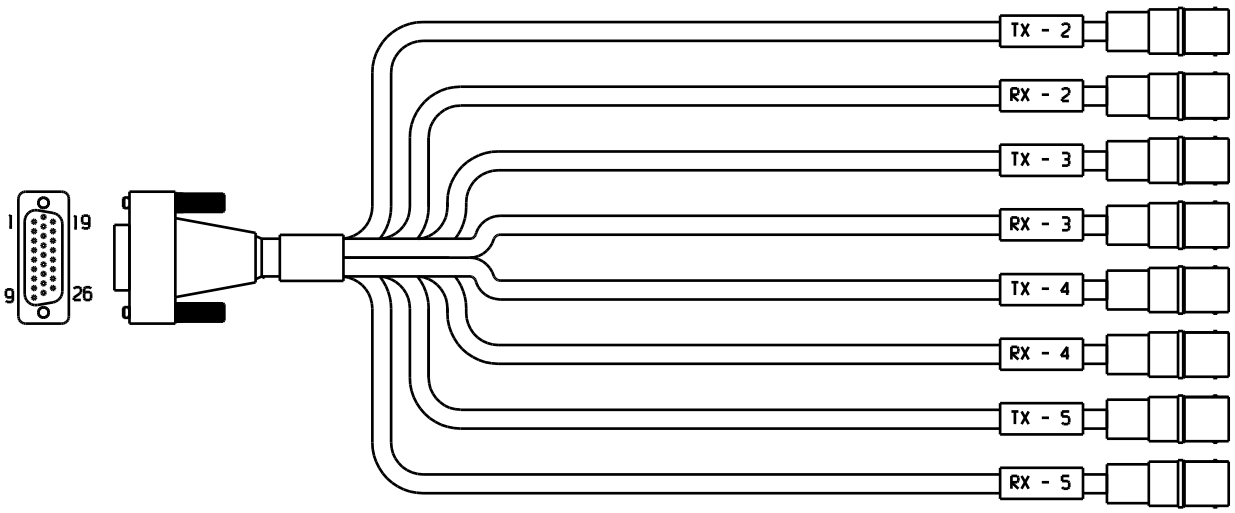
The E1 Fiber Mux offers extensive management functions. Diagnostic LED indicators ease installation and troubleshooting. When paired with the Fiber Driver Network Management Module (NMM), system activities such as loss of signal, transmit and receive signal detection, system temperature, power supply status, and more can be monitored remotely via SNMP using MegaVision Web, MRV Communications own Network Management System (NMS), or any other standard NMS. On-card jumpers allow for manual configuration of local and remote loopback, jitter attenuation, and other settings.

A powerful advantage of the E1 Fiber Mux module is its interoperability with other Fiber Driver technologies, allowing its functionality to be enhanced. Fiber Driver optical amplifiers and signal repeaters can be used to extend the E1 optical link over great distances. In addition, the E1 Fiber Multiplexer technology can be combined with the Fiber Driver Wave Division Multiplexer (WDM) and Optical Add/Drop Multiplexer (OADM) technologies to create advanced optical services.

The E1 Fiber Mux can be used in any of the Fiber Driver chassis, which can be configured with either AC or DC power supplies, and redundant power supplies depending on model.

For additional information, including pricing and availability, contact your MRV Communications sales representative today.

Physical Specifications: E1 Fiber Multiplexer	
Operating Temperature:	0º to 50º C / 32º to 122º F
Storage Temperature:	-10º to 65º C / 14º to 140º F
Relative Humidity:	85% maximum, non-condensing
Dimensions:	25 mm x 75 mm x 175 mm deep (1" x 3" x 7" deep), 1-Slot
Weight:	120 - 240 g (4.2 - 8.5 oz) depending on configuration
Emission Compliance:	FCC-PART 15, SUBPART B 1999, CLASS A. CE MARK - EN 50081-1:1992; EN 50082:1997; EN 55024:1998; EN 55022:1998. AS/NZS 3548:1995



DB-26 to BNC (x4) Breakout Cable

Ordering Info

Part Number	Description	Connector* Port / Trunk	Port Range (m)	Trunk Wavelength (nm)	Trunk Min. Loss Budget (dB)	Trunk Approx. Range (km)
EM316E1MUX4/M	4x E1 Mux (DF, MM)	BNC / DSC	0 - 100	1310	NA	0 - 4
EM316E1MUX4/MX	4x E1 Mux (DF, MMX)	BNC / DSC	0 - 100	1310	NA	4 - 10
EM316E1MUX4/S1	4x E1 Mux (DF, SM)	BNC / DSC	0 - 100	1310	15	0 - 30
EM316E1MUX4/S2	4x E1 Mux (DF, SM)	BNC / DSC	0 - 100	1310	25	10 - 50
EM316E1MUX4/S3	4x E1 Mux (DF, SM)	BNC / DSC	0 - 100	1550	25	25 - 100
EM316E1MUX4/S4	4x E1 Mux (DF, SM)	BNC / DSC	0 - 100	1550	30	40 - 120
EM316E1MUX4SF/S2	4x E1 Mux (SF, SM)	BNC / SC-APC	0 - 100	1310	19	0 - 35
EM316E1MUX4SF/S3	4x E1 Mux (SF, SM)	BNC / SC-APC	0 - 100	1550	22	0 - 90
EM316E1MUX4SF/S4	4x E1 Mux (SF, SM)	BNC / SC-APC	0 - 100	1550	26	20 - 100
EM316WE1MUX4C/S2 EM316WE1MUX4T/S2	4x E1 Mux (SF, SM, DW) (Sold in pairs only)	BNC / SC	0 - 100	1310 / 1550	14 @ 1310	0 - 25
EM316WE1MUX4C/S3 EM316WE1MUX4T/S3	4x E1 Mux (SF, SM, DW) (Sold in pairs only)	BNC / SC	0 - 100	1310 / 1550	22 @ 1310	15 - 45
EM316WE1MUX4C/S4 EM316WE1MUX4T/S4	4x E1 Mux (SF, SM, DW) (Sold in pairs only)	BNC / SC	0 - 100	1520 / 1560	28	35 - 110

DF = Dual Fiber; SF = Single Fiber; DW = Dual Wavelength; SM = Singlemode Fiber; MM = Multimode Fiber; MMX = Multimode Extender
* Input port requires DB-26 to BNC (x4) breakout cable

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