

TEAMLINK E1 OPTIMUX

E1 OPTICAL USER MANUAL

Product Description:

TeamLink 4 E1 Optical multiplexer is high performance optical line transmission equipment. It combines 4E1's along with 4 (10/100 Mbps) Ethernet ports, four asynchronous ports into one or 1+1 optical stream for transmission over an optical fiber. The superior performance of this product eliminates the need for repeaters as compared to copper media.



This model supports several transmitter options up to 120 Kms for different optical cable types and wavelengths, 1+1 redundancy for optical protection and 10/100 Base Ethernet port.

Features:

- Compact design which performs E1 multiplexing and de-multiplexing
- Provides visible and audible local and remote alarms
- Optional Order wire channel for the end to end installation and maintenance
- Local and Remote Loop backs for the diagnostics
- Optional 1+1 Fiber path protection supported
- Optional 10/100 Mbps Ethernet port for end to end LAN connectivity [4 Port]
- Easy configuration through the front panel dipswitch
- Transmission distance 20/40/60/80 Kms. (Optional)
- Remote Branch loop backs provided by software and hardware
- LED indicators are supported
- Single mode and multi-mode modules supported

TECHNICAL SPECIFICATIONS

E1 Interface:

Electrical Interface	E1
Channel Capacity	4E1
Bit Rate	2.048Mbps + / - 50ppm
Line Code	HDB3
Frame structure	As per the G703.4
Line Type	Balanced 120 Ohms
Line Impedance	120 Ohms for Balanced and 75 ohms unbalanced (option)
Jitter character	As per ITU-T G.742, G.823 complaint
Connectors	RJ-45 connectors (120 Ohms balanced) and BNC connectors for the 75 Ohms Unbalanced.

Optical:

Type of the transmitter	Class 1 Laser
Transmit power	>-3dB,>-6dB,>-9dB, -11dB [Optional]
Bit Rate	155Mbps
Wavelength	1310nm/1550nm [Optional]
Optical Connector	LC / SC / FC / PC [Optional]
Receive sensitivity	Better than -36dB
Laser standard	IEC 60825-1 and Bell core GR -468-CORE

Ethernet Interface:

No. of Interfaces	4 [Optional]
Interface	10 Mbps or 100 Mbps auto sensing
Compliance	Compliance with the IEEE 802.3 10Base-T,100Base-T half/ Full Duplex, V-LAN
Connecter	RJ -45
Auto MDI-X	Auto MDI-X is as per the HP auto cross over

Async Ports (Optional):

No. of Interfaces	4 [Optional]
Interface	RS232 auto sensing
Compliance	V.24
Connecter	RJ -45

Power Supply:

Power Input	AC or DC
AC Power	110V to 240V AC with 50/60Hz Frequency
DC power	-48V DC (38 VDC to 230 VDC) support 110VDC
Power consumption	Less than 5W

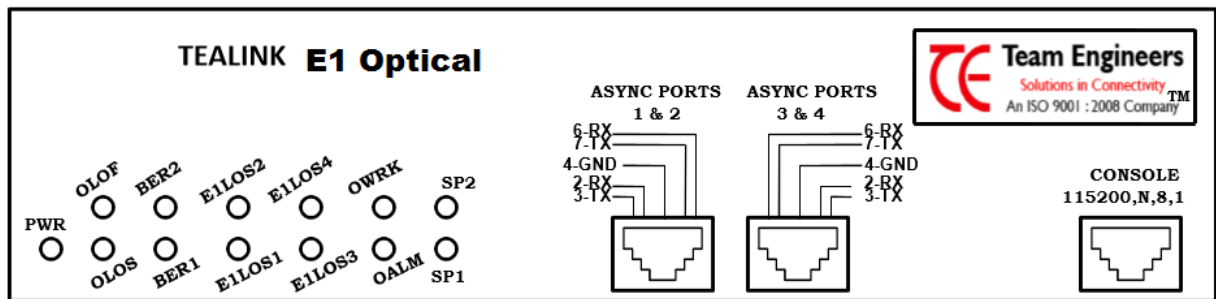
Environment:

Temperature	-5 to 55 degrees centigrade
Humidity	Upto 95% at 35 degrees centigrade

Ordering Information:

Teamlink 4E1-Optimux	Teamlink 4E1-2/4/6 ETH-Optimux	Teamlink 4E1-4A-2/4/6ETH-Optimux
Teamlink 8E1-Optimux	Teamlink 8E1-2/4//6ETH-Optimux	Teamlink 8E1-4A-2/4/6ETH-Optimux
Teamlink 16E1-Optimux	Teamlink 16E1-2ETH-Optimux	Teamlink 16E1-2A-2ETH-Optimux

Front panel indications:



- PWR: When unit is Powered ON LED GLOW indication
- OLOS: No Optical Cable Led Glow
- OLOF: One Fiber Break Led Glow
- BER1: 1 Optical Port Fiber Any Error Led Glow
- BER2: 2 Optical Port Fiber Any Error Led Glow
- E1 LOS1: 1 Port E1 Break Led Glow
- E1 LOS2: 2 Port E1 Break Led Glow
- E1 LOS3: 3 Port E1 Break Led Glow
- E1 LOS4: 4 Port E1 Break Led Glow
- OWRK: Optical Working
- OALM: If Any Optical and E1 Alarm Led Glow
- SP1 & SP2: Future Option

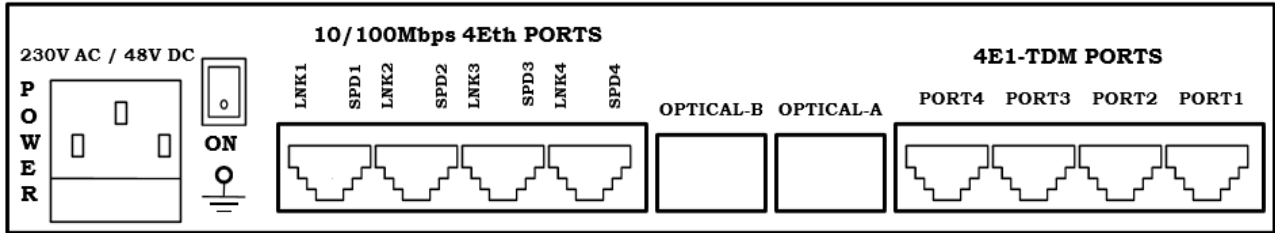
Async Port 1 & 2 Pin Details:

RJ-45	
2	Port -1 (RX)
3	Port-1 (TX)
4	Port-1 (GND)
5	Port-2 (GND)
6	Port-2 (RX)
7	Port-2 (TX)

Async Port 3 & 4 Pin Details:

RJ-45	
2	Port -3 (RX)
3	Port-3 (TX)
4	Port-3 (GND)
5	Port-4 (GND)
6	Port-4 (RX)
7	Port-4 (TX)

Back Panel:



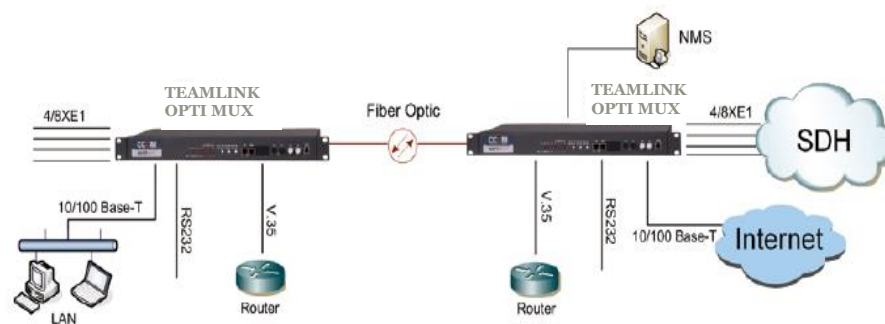
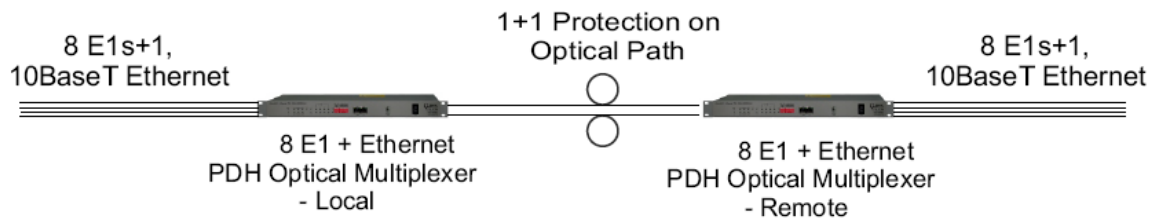
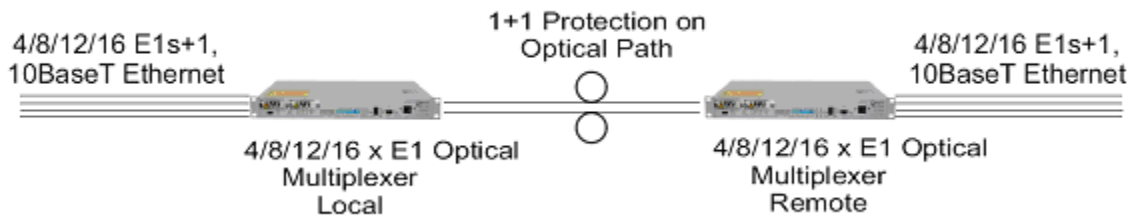
E1 Cable Pin Details:

RJ 45	
1	TX+
2	TX-
4	RX+
5	RX-

OPTICAL:

Optical-A	SC Connector
Optical-B	SC Connector

Application Diagrams:



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