



4 x E1 G.703 fiber multiplexer



Spot-light:

OptiMux-4E1 PDH is new generation powerful NMS GUI managed 4 x E1 fiber multiplexer, equipped with 4 E1 G.703, 1 RS-232 data port, 1 RS-232 GUI NMS management port and order wire phone channel.

Description:

The **OptiMux-4E1 PDH** is a fiber media transport for 4 x G.703 E1 transmission. The BNC model provides unbalanced 75 Ohm coaxial connections while the RJ-45 model provides balanced 120 Ohm connections over twisted pair wiring.

All media converters are available with either multi-mode or single-mode optical transceivers and with connectors for SC, ST, or FC. In single mode they are available in up to 120 km versions reach, which will provide the ability to transmit and receive data using only a single optical fiber pair.

OptiMux-4E1 PDH provides an order-wire for which a standard telephone can be used.

OptiMux-4E1 PDH provides a user RS232 transparent data link with a RJ45 connector.

OptiMux-4E1 PDH possesses complete operation monitoring function. Those indicators include Loss of optical signal, LOF, 10^{-3} , 10^{-6} bit error rate, Loss of each E1 tributary signal and Ethernet status. Since some overhead bytes are taken as monitoring channel, all alarm and status of Remote can be display locally.

OptiMux-4E1 PDH provides RS232 interface for Network Management. Supported by RS232 GUI network manager utility, users can observe the status of Local and

Remote, as well as other alarm information unable to be displayed by LEDs in the front panel. Also, with GUI NMS, user can make certain E1 loop back for testing purpose.

Features:

- Provides 4 x E1 G.703 transparent transmission over the fiber;
- **Modular designed, expandable to 8E1;**
- Provides one RS232 channel for option;
- Uses standard telephone set as order-wire;
- Speed of optical port is 155Mbps, transmission range can reach 25KM, 40KM, 60KM, 80KM or 100km,120KM;
- Two fiber two direction and single fiber WDM two direction (optional).
- E1 interface code is HDB3; E1 vibration characteristic conforms to ITU-T G.703、G.823 and G.742;
- LED indicators for alarm function and can monitor remote device status;
- Rich DIP switch settings
- Supports E1 local and remote loopback for installation
- The combination AC220V and DC-48V for redundant options;
- Current alarm and alarm history database
- GUI based RS232 NMS manager for easy and convenient monitoring and management.

Conforms carrier telecom operation requirement, MTBF above 70,000 hours.



Alarm history and current alarms via RS232 GUI NMS

Specifications

E1 interface:

Channel capacity: 4 Channels

Bit Rate: 2.048 Mb/s \pm 50 ppm

Line Code: HDB3

Line Impedance: 120 Ohm / 75 Ohm

Connector: RJ-48 / BNC

Pulse Shape: ITU-T G.703

Jitter Performance: ITU-T G.823

Clock mode: internal-clock, external-clock

Optical interface:

Line mode type: CMI

Optical wavelength: 850/1310nm for multi-mode fiber, 1310/1550nm for single-mode fiber.

Optical interface: SC/FC(Optional)

Transceiver module: > -8dBm (for 1310nm single mode 40km optical module)

Optical receiver sensitivity: <-36(BER<10) (for 1310nm single mode 40km optical module)

Transmission distance: multi-mode 2 Km, single-mode 20/40 /60/ 80 / 120 Km,

WDM available for different distances

Architecture:

19'', 1U, rack mountable

Power supply:

DC: -48V (-36 to -72V);

AC: 85 to 264 VAC ; 47 ~ 63Hz

Power Interface: DC power terminal/AC socket

Power Consumption: \leq 5 W

Other Specification

Temperature: -10°C ~ 60°C

Humidity: 0~95%(no condensation)

Application:

