

## 4 Channel E1/T1, Order wire Plus 100M Ethernet Multiplexer FMUX04E



FMUX04E is a modular design for 4xE1 + Fast Ethernet multi-service to dual strand fiber PDH multiplexer. FMUX04E provides E1 transmission transparently, pure 100Mbps Fast Ethernet simultaneously. The fiber optic line is based on the SFP technology that allows a flexible use of Multimode or Single mode lines and enable the support of different wavelengths and distances. The use of bi-directional SFPs maximizes the utilization of the fiber optic line and results in saving line costs. The multiplexer is equipped by default with redundant AC and DC power supplies for redundant operation. With SNMP and Web-based management in the FMUX04E, the Network administrator can monitor, configure and control the activity remotely.

### Features

- 4 channels unframed E1/T1
- 3 CH 10/100Base-TX Ethernet
- Auto MDI/MDIX
- Auto-Negotiation or Force mode
- Supports flow control
- Supports 1552 packets (max)
- One clear channel RS232 up to 250Kbps(Async)
- 1+1 fiber protection, less than 50ms
- Supports Digital Diagnostics Monitoring Interface (DDMI)
- AIS on signal loss on E1/T1 and fiber port
- VLAN function
- Loopback test on E1/T1, LAN, RS232, fiber ports
- Supports Dying Gasp
- Supports local or remote In-band management
- Optional SNMP management
- Supports Order wire Ear / Microphone port.
- Supports On-Line F/W upgrade (local or remote) by the SNMP manager.
- Two power internal 1AC+1DC

### E1/T1 ports

Framing: Unframed (transparent)  
 Bit Rate: E1: 2.048 Mb/s, T1: 1.544Mb/s  
 Line Code: E1: AMI/HDB3, T1: AMI/B8ZS  
 Line Impedance:  
 E1: Unbalanced 75 ohms (BNC)  
 E1: Balanced 120 ohms (RJ-45)  
 T1: Balanced 120 ohms (RJ-45)  
 Receiver sensitivity: Short haul  
 "Pulse" Amplitude:  
 Nominal 2.37V +/-10% for 75 ohms  
 Nominal 3.00V +/-10% for 120 ohms  
 Nom  
 "Zero" Amplitude: +/-0.3V  
 Transmit Frequency Tracking:  
 w/external clock card option  
 Internal Timing: +/-30 ppm  
 Jitter Performance: According to ITU-T G.823  
 Performance monitoring:  
 According to ITU-T G.821

### Ethernet

Standard: ITU-T G.703, G.704, G.706 and G.732  
 Interface Connectors: RJ-45, Wire wrap, BNC  
 Test Loops:  
 LLB (Local Loop Back)  
 NELB (Near End Loop Back)  
 RLB (Remote Loop Back)  
 RRLB (Request Remote Loop Back)  
 Interface Type: 10/100Base-TX  
 Connector: 4xRJ-45  
 Standard: IEEE 802.3, 802.3u  
 Duplex modes: full/half  
 Test: Loop back test  
**Indication**  
 FX1 link, FX2 link, E1/T1 Mode/Link/Loopback test, Order wire phone indicator, LAN Link/Speed.  
**Power Input**  
 AC : 100-240VAC  
 DC : 18-75 VDC

### Dimensions

236.4x195.2x44mm(DxWxH)

### Operating Temperature

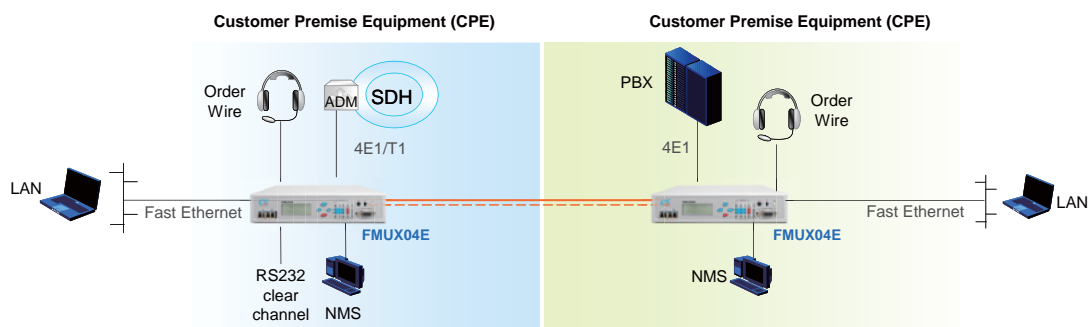
0~50°C (Operating), -10~20°C (Storage)

### Humidity

10~90% non-condensing

### Certifications

CE, FCC, RoHS



### Ordering Information

- FMUX04E : 4 Channel E1/T1, Order wire Plus 100M Ethernet Multiplexer
- FMUX04E-AC: 4 Channel E1/T1, Order wire Plus 100M Ethernet Multiplexer with AC power
- FMUX04E-DC: 4 Channel E1/T1, Order wire Plus 100M Ethernet Multiplexer with DC power