

# FMUX04A

4E1/T1 + 3× FE Fiber Multiplexer

The 4x E1/T1 plus 3x 10/100Base-TX Ethernet switch PDH Fiber Optical Multiplexer, FMUX04A is fixed type design that provides simultaneous multi-service through dual (1+1) fiber. The fiber optic line is based on 155Mbps SFP technology that allows the flexible use of Multimode or Single mode optics and enables support for different wavelengths and distances. The use of bi-directional SFPs maximizes the utilization of fiber optic line and results in saving fiber line costs. The multiplexer can be equipped with AC and DC dual power supplies for redundant operation. With optional SNMP and Web-based management in the FMUX04A, the administrator can monitor, configure and control both the local and remote device.

#### **Features**

- 4 channels unframed E1/T1 with both E1 BNC(75 $\Omega$ ) and E1/T1 RJ45 (120 $\Omega$ ) ports
- 3× 10/100Base-TX Ethernet RJ45 ports with 100Mbps throughput)
- Auto MDI/MDIX, Auto-Negotiation or Force mode
- Supports flow control
- RS-232 port with DB9 for system console
- One alarm output port
- Port based VLAN
- 2 plug-in SFP slot for optical 155Mbps SFP module

- Forward 1536 byte packets on Ethernet port
- 1+1 fiber protection, less than 50ms
- One RS232 clear channel with RJ45 port up to 250Kbps(Async)
- Supports Digital Diagnostics Monitoring Interface (DDMI)
- AIS on signal loss on E1/T1 and fiber port
- Loopback test on E1/T1, RS-232, fiber ports
- Supports local or remote In-band management
- SNMP and web based management (Options)

#### **Specifications**

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E1/T1	Framing: Unframed (transparent)		
	Bit Rate: E1:2.0	)48 Mb/s , T1: 1.544Mb/s	
	Line Code: E1:	AMI/HDB3, T1: AMI/B8ZS	
	Line Impedan	ice:	
	E1: Unbalanced 75 ohms (BNC)		
	E1: Balanced 1	20 ohms (RJ-45)	
	T1: Balanced 1	20 ohms (RJ-45)	
	Receiver sens	itivity: Short haul	
	Jitter Perform	ance: According to ITU-T G.823	
	Standard: ITU	-T G.644, G.703, G.704, G.706 and G.732	
	Interface Con	nectors: RJ-45, BNC	
	Test Loops:	LLB (Local Loop Back)	
		RLB (Remote Loop Back)	
		RRLB (Request Remote Loop Back)	
Optical nterface	Bandwidth in optical Line: 155 Mbps		
	Optical Connector: LC (SFP module)		
	Distance: 20/40/80 Km		

Optical Interface	Optical Wavelength: 1310nm, 1550nm, WDM Tx1310/Rx1550nm (Type A), WDM Tx1550/Rx1310nm (Type B)		
Ethernet	Interface Type: 10/100Base-TX		
	Connector: 3x RJ-45		
	Standard: IEEE 802.3, 802.3u		
	Duplex modes: full/half		
Indication	FX1/FX2, E1/T1, LAN, Power Alarm, RDI		
Power Input	AC : 100~240VAC, DC : 18-75 VDC		
Dimensions	215 × 248 × 43mm (W×D×H)		
Operating	0 ~ 50°C (Operating)		
Temperature	-10 ~ 20°C (Storage)		
Humidity	10 ~ 90% non-condensing		
Certifications	CE, FCC, RoHS compliant		
MTBF	75,000 hrs		

### **Application**

#### 4E1/T1+FE over fiber p to p connection Application



## **Ordering Information**

Model Name	Description
FMUX04A	Standalone 4x E1/T1+3x FE Fiber Multiplexer with built-in AD (AC+DC) power, optional SNMP and SFP
FMUX04A-SNMP	SNMP management card with 10/100Base-TX Ethernet port