

# FMUX1600 FMUX800

16 or 8x E1/T1 + 4x GbE, Managed  
Fiber Multiplexer



The FMUX1600/FMUX800 is 1U 19" rack mountable, PDH fiber optical Multiplexer that transmits up to 16/8 E1/T1 + 4x 10/100/1000 Base-T Gigabit Ethernet over a single fiber optic link. The FMUX1600/FMUX800 chassis is available in three different power configurations; single AC, single DC, or AC+DC. The AC supplies operate from 90 ~ 240VAC while DC supplies operate from 18~60VDC. On the rear of the chassis, the BNC model provides 32/16 unbalanced 75 Ohm coaxial connections with BNC connectors while the RJ-45 model provides 16/8 balanced 120 Ohm connections over twisted pair wiring with RJ45 connectors. With two SFP sockets on fiber ports, the FMUX1600/FMUX800 gives you the fiber cabling connector SFP-LC, both multi-mode and single-mode are available as well as BiDi which allows bi-directional transmissions using only a single fiber cable. 1+1 Automatic optical line protection is also supported for the aggregate fiber ports. The standard FMUX1600/FMUX800 configuration may be viewed or set via serial VT-100 terminal connection or SNMP card with web, telnet, and SNMP management

## Features

- Provides 16/8 E1/T1 G.703 transparent transmission over fiber
- Provides 4x 10/100/1000 Mbit/s Ethernet Ports and 1x RS232 ch.
- Provides one RS232 channel
- Loopback test on E1/T1 fiber port
- Provides one hotline channel (order-wire)
- Supports full/half duplex, 10M/100M/1000M, auto-Negotiation
- Forward 10K byte jumbo packets on Ethernet port
- Supports 1+1 fiber line protection. Less than 50ms
- Complete alarm function and can monitor remote device status
- Power combination AC220V and DC-48V for redundant options
- Supports RS232 local management; Supports on-line f/w upgrade
- Supports Web, Telnet, SNMP management (optional)

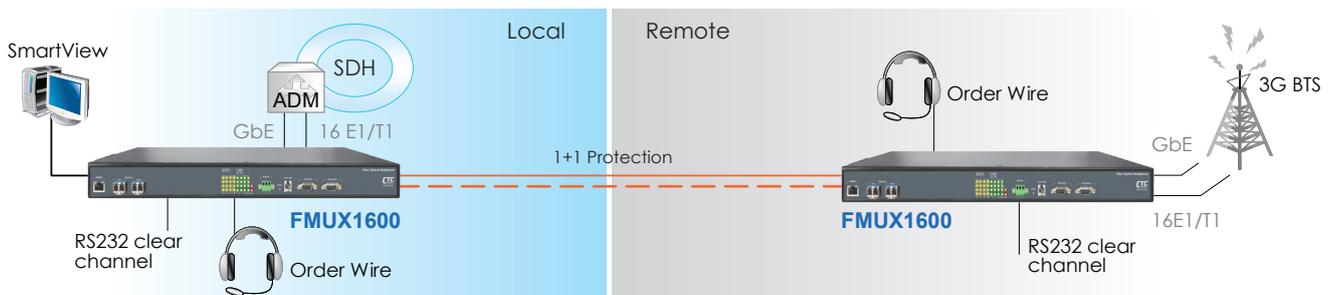
## Specifications

<b>Optical Interface</b>	Connector	SFP-LC
	Data rate	1.25Gbps
	Bit Error Rate	Less than 10 <sup>-11</sup>
	Distance	MM 2km, SM 15/30/50/80/120km
	Wavelength	WDM 20/40/60/80km
<b>Electrical Interface</b>	Connector	Console : RS232 / SNMP : RJ45 Ethernet : RJ45 (4-port) Alarm : RS232 / Order wire : RJ11
	<b>E1 Interface</b>	Standards ITU-T G.703, G.704, G.706, G.732
	Ports	8/16 ports
<b>T1 Interface</b>	Data Rate	2.048 Mbps ± 50 ppm
	Line Code	HDB3/AMI
	Connector	RJ-45 for 120 ohms BNC for 75 ohms
	Standards	ITU-T G.703, G.704, AT&T TR-62411, ANSI T1.403
Ports	8/16 ports	

<b>T1 Interface</b>	Data Rate	1.544 Mbps ±50 ppm
	Line Code	B8ZS / AMI
	Connector	RJ-45 for 100 ohms
<b>Certification</b>	CE, FCC, RoHS compliant	
<b>Standards</b>	ITU-T G.703, G.823 and G.742, ANSI, AT&T, IEEE803.2, IEEE802.3u, IEEE802.3ab	
<b>Indications</b>	Power, Alarm, LBK, RD, LCK, RNG, ACO, Port, channel	
<b>Power Input</b>	90 ~ 240VAC, 18~60VDC	
<b>Power Consumption</b>	<25W	
<b>Dimensions</b>	250 x 438 x 43mm (D x W x H)	
<b>Weight</b>	3.58kg	
<b>Temperature</b>	0 ~ 60°C (Operating), -10 ~ 70°C (Storage)	
<b>MTBF</b>	50,000 hrs	

## Application

### Remote 3G BTS connection Application



-Related Products: FMUX1001/101, FMUX160, FMUX04E (16x E1/T1 + 4x GbE/FE FOM, 4E1/T1 + 3x FE FOM)

## Ordering Information

Model Name	Description
FMUX1600B-AD	16x E1 BNC + 4 x 10/100/1000Base-T Ethernet Fiber Multiplexer, build-in AC + DC Power
FMUX1600R-AD	16x E1/T1 RJ-45 + 4 x 10/100/1000Base-T Ethernet Fiber Multiplexer, build-in AC + DC Power
FMUX800B-AD	8x E1 BNC + 4 x 10/100/1000Base-T Ethernet Fiber Multiplexer, build-in AC + DC Power
FMUX800R-AD	8x E1/T1 RJ-45 + 4 x 10/100/1000Base-T Ethernet Fiber Multiplexer, build-in AC + DC Power
FMUX1600-SNMP	SNMP Card with 10/100Base-TX Ethernet Port
FMUX800-SNMP	SNMP Card with 10/100Base-TX Ethernet Port
FMUX-Phone-2	2 Wires Order Wire
FMUX-Phone-4	4 Wires Order Wire

### Option Models

Model Name	Description
FMUX1600-SNMP	SNMP Card with 10/100Base-TX Ethernet Port
FMUX800-SNMP	SNMP Card with 10/100Base-TX Ethernet Port
FMUX-Phone-2	2 Wires Order Wire
FMUX-Phone-4	4 Wires Order Wire

**Note:** SNMP option only required in one unit of paired link

E1 Connector Type      Power Type  
**FMUX1600** – □ – □□  
 Example: FMUX1600 – B – DC

**FMUX-Phone** – □  
 Example: FMUX-Phone – 2