

# FMUX160 FMUX80

**16E1/T1 + 4x FE, RJ45 Fiber Managed Multiplexer**  
**8E1/T1 + 4x FE, RJ45 Fiber Managed Multiplexer**  
*(SNMP, Order Wire optional)*



The FMUX160/FMUX80 is 1U 19" rack mountable, PDH fiber optical Multiplexer that transmits up to 16/8 E1/T1 + 4 x 10/100Base-TX Fast Ethernet over a single fiber optic link. The FMUX160/FMUX80 chassis is available in five different power configurations; single AC, single DC, dual AC, dual DC, or AC+DC. The AC supplies operate from 90 ~ 240VAC while DC supplies operate from 18~72VDC. 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. The FMUX160/FMUX80 gives you the fiber cabling connector ST SC FC, 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 FMUX160/FMUX80 configuration may be viewed or set via serial VT-100 terminal connection or SNMP card with web, telnet, and SNMP management

## Features

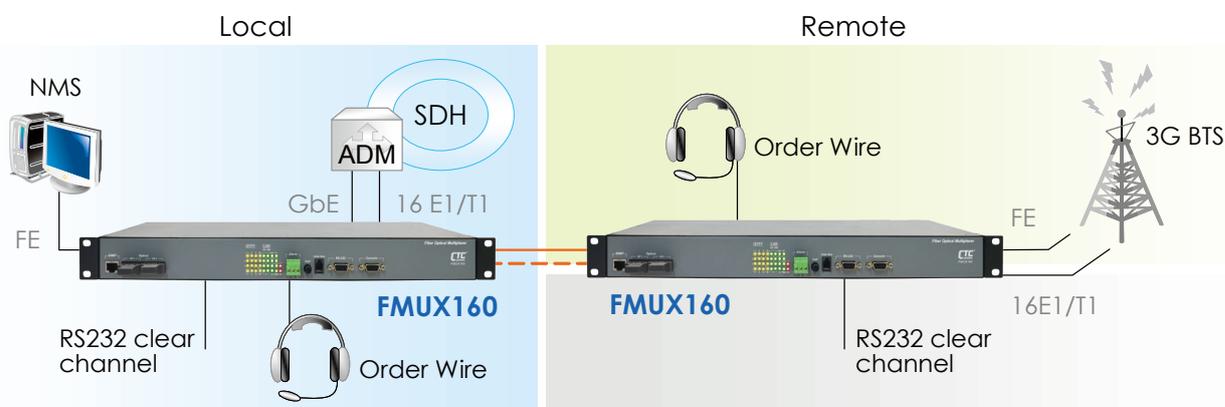
- Provides 16/8 E1/T1 G.703 transparent transmission over fiber
- Provide 4 x 10/100 Mbit/s Ethernet Ports (100Mbps aggregate)
- Provides one RS232 channel
- Loopback test on E1/T1 fiber port
- Provides one hotline channel (order-wire)
- Supports full/half duplex, 10M/100M, auto-Negotiation
- Forward 1792 byte 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	ST, SC, FC	
	Data rate	155.52Mbps	
	Bit Error Rate	Less than 10 <sup>-11</sup>	
	Distance	MM 2km, SM 15/30/50/80/120km WDM 20/40/60/80km	
	Wavelength	1310nm, 1550nm, CWDM 1471nm~1611nm	
<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
	Data Rate	2.048 Mbps ± 50 ppm	
	Line Code	HDB3/AMI	
	Connector	RJ-45 for 120 ohms BNC for 75 ohms Wire wrap for 120 ohm	

<b>T1 Interface</b>	Standards	ITU-T G.703, G.704, AT&T TR-62411, ANSI T1.403
	Ports	8/16 ports
	Data Rate	1.544 Mbps ± 50 ppm
	Line Code	B8ZS / AMI
	Connector	RJ-45 for 100 ohms Wire wrap 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	
<b>Indications</b>	Power, Alarm, LBK, RD, LCK, RNG, ACO, Port, channel	
<b>Power Input</b>	100 ~ 240VAC, 20~60VDC, 36~72VDC	
<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)	

## Application



Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.

## Ordering Information

### Two Fiber model

Model Name	Description
FMUX160B-AD-2SC002	16x E1 BNC + 4 x 10/100Base-T Ethernet Fiber Multiplexer, with two MM 2km SC fiber, AC+DC Power
FMUX160R-AD-2SC002	16x E1 RJ45 + 4 x 10/100Base-T Ethernet Fiber Multiplexer, with two MM 2km SC fiber, AC+DC Power
FMUX80B-AD-2SC002	8x E1 BNC + 4 x 10/100Base-T Ethernet Fiber Multiplexer, with two MM 2km SC fiber, AC+DC Power
FMUX80R-AD-2SC002	8x E1 RJ45 + 4 x 10/100Base-T Ethernet Fiber Multiplexer, with two MM 2km SC fiber, AC+DC Power

### One Fiber model

Model Name	Description
FMUX160B-AD-SC002	16x E1 BNC + 4 x 10/100Base-T Ethernet Fiber Multiplexer, with one MM 2km SC fiber, AC+DC Power
FMUX160R-AD-SC002	16x E1 RJ45 + 4 x 10/100Base-T Ethernet Fiber Multiplexer, with one MM 2km SC fiber, AC+DC Power
FMUX80B-AD-SC002	8x E1 BNC + 4 x 10/100Base-T Ethernet Fiber Multiplexer, with one MM 2km SC fiber, AC+DC Power
FMUX80R-AD-SC002	8x E1 RJ45 + 4 x 10/100Base-T Ethernet Fiber Multiplexer, with one MM 2km SC fiber, AC+DC Power

### Optional modules

Model Name	Description
FMUX160-SNMP	SNMP Card with 10/100Base-TX Ethernet Port
FMUX80-SNMP	SNMP Card with 10/100Base-TX Ethernet Port
FMUX-Phone-2	2 Wires Order Wire with RJ9 to RJ11 cable
FMUX-Phone-4	4 Wires Order Wire

