

**NEW**



## FMUX101

**Modularized 16E1/T1 +  
4x FE Fiber Managed Multiplexer  
(E1/T1, Data, Voice, Ethernet)**

The FMUX101 is a 1U, 19" rack mountable, PDH fiber optic multiplexer that transmits up to 16 channels plus a 10/100Base-TX Fast Ethernet channel over a single fiber optic link. The FMUX101 chassis supports redundant power and hot swappable design. The AC supplies operate from 90~260VAC while DC supplies operate from 36~72VDC or 20~60VDC. From the rear of the chassis, one to four hot swappable quad E1 or T1 line cards, serial data communications (V.35, X.21, RS-530) or FXO/FXS voice cards are supported. The standard FMUX101 configuration may be viewed or set via the front panel LCD/menu keys, serial VT-100 terminal connection, Telnet, web HTTP or SNMP.

### Features

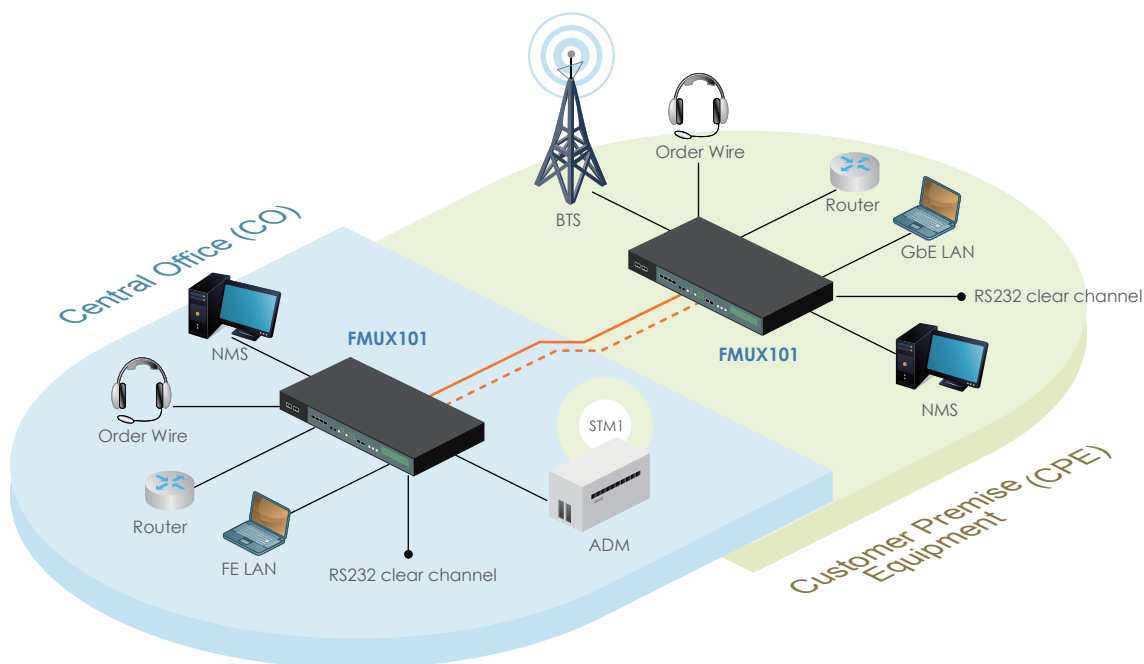
- 1U, 19 (23)" 4-slot chassis
- 16 E1 (2.048Mb/s) Multiplexer, 10/100Mbps Ethernet and RS-232 data (async )
- RS-232 port for system console
- One alarm output port, one Order Wire port
- SNMP management
- LCD plus menu keys for local configuration
- Port based VLAN, tag based VLAN & bandwidth control
- Telnet and web based remote configuration
- 2 plug-in SFP slot in I/O slots for optical SFP module

### Specifications

<b>Optical Interface</b>	Connector	SFP - LC
	Data rate	155Mbps
	Bit Error Rate	Less than 10 <sup>-11</sup>
	Fiber	MM 62.2/125μm, 50/125μm SM 9/125μm
	Distance	MM 2km. SM 15/30/50/80/120km WDM 20/40/60/80km
	Wavelength	1310, 1550nm
<b>Electrical Interface</b>	Console, SNMP	RJ45
	Ethernet	4 x RJ45
	Alarm	RS232 (DB9F)

<b>Standards</b>	E1:ITU-T, T1:ITU-T, AT&T, ANSI, Ethernet: IEEE802.3x
<b>Indications</b>	PWR, Alarm, LBK, RD, LCK, RNG, ACO, Port, Channels
<b>Power Input</b>	AC : 100 ~240V
	DC24 : 20 ~ 60V, DC48 : 36 ~ 72V
<b>Power Consumption</b>	< 40W
<b>Dimensions</b>	250 x 438 x 43mm (D x W x H)
<b>Weight</b>	3.58 kg
<b>Temperature</b>	0 ~ 50°C (Operating), 0 ~ 70°C (Storage)
<b>Humidity</b>	10 ~ 90% non-condensing
<b>Certification</b>	CE, FCC, RoHS compliant
<b>MTBF</b>	57350 hours

### Application



## Specifications - Modules



### FXO/FXS I/F

FXO/FXS Module	
Standards	G.711 A-law (separate modules for FXO, FXS)
Voice channel transparent	T.38 and Group III Fax relay at 2.4 ~14.4kbps Fax application
Distance	2km
Bandwidth	64K voice channel
Connector	RJ11*4 (4 voice channel /per unit)
Internet application	Supports modem pass-through



### E1/T1 RJ-45 I/F

T1 Interface Module	
Standards	ITU-T G.703, G.704, AT&T TR-62411,ANSI T1.403
Ports	4 ports
Framing	Unframed ( clear channel )
Data rate	T1: 1.544 Mbps ±50 ppm E1: 2.048 Mbps ±50 ppm
Line code	T1: B8ZS / AMI E1: HDB3 / AMI
Receive Level	Short haul - 15dB
Line impedance	T1: 100 ohms ±5% E1: 120 ohms ±5%
Connector	RJ-45



### Datacom I/F

Datacom Interface Module	
Standards	ITU-T, E1A
Card Type	V.35/ RS-530 (Include X.21 and RS-449)/ RS-232 I/F
Bit rate	n x 64K, n = 1 to 32 V.35 & RS-530 up to 2Mbps RS-232 up to 115.2Kbps (ASYNC)
Line code	NRZ
Clock Mode	Transparent, Recovery External (From data port ETC) Internal (From oscillator)
Control Signal	CTS always On or follows RTS DSR constantly ON, except during test loops (RS-530 DSR always connect to DTR) DCD constantly ON,except during fiber signal loss
Test Loops	Local loop back, Remote loop back, V.54
Connector	Type Uses HD-68 pin D type Female with adapter cables



### E1 BNC I/F

E1 Module	
Standards	ITU-T G.703, G.704, G.706, G.732
Ports	4 ports
Framing	Unframed ( clear channel )
Data rate	2.048 Mbps ± 50 ppm
Line code	HDB3/AMI
Receive Level	Short haul - 15dB
Line impedance	75 ohms ± 5% / 120 ohms ± 5%
Connector	RJ-45 for 120 ohms BNC for 75 ohms Wirewrap for 120 ohm

## Ordering Information

Model Name	Type	Description
FMUX101	Chassis	1U 19" 4-Slot Rack Mount Chassis
FMUX101-AC	Powe	Chassis Power Module 110~240VAC
FMUX101-DC	Powe	Chassis Power Module 36~72VDC
FMUX101-E1/BNC	Card	4 x G.703 E1 BNC interface card
FMUX101-E1/RJ45	Card	4 x G.703 E1 RJ-45 interface card
FMUX101-T1/RJ45	Card	4 x G.703 T1 RJ-45 interface card
FMUX101-V35	Card	V35 interface card with one HD68M to 4 x MB34F cable
FMUX101-530	Card	RS-530 interface card with one HD68M to 4 x DB25F cable
FMUX101-449	Card	RS-449 interface card with one HD68M to 4 x DB37F cable
FMUX101-X21	Card	X.21 interface card with one HD68M to 4 x DB15F cable
FMUX101-232/Async	Card	RS-232 Async card with one HD68M to 4 x DB9F cable
FMUX101-FXO	Card	4 x FXO interface card
FMUX101-FXS	Card	4 x FXS interface card

Power Module Type	Line Card I/F Type			
AC, DC, AC2, DC2, AD	0 : Empty	D : Quad V.35	H : Quad X.21	K : Quad High-Speed V.35
	A : Quad E1 BNC	E : Quad RS-232	I : Quad RS-449	L : Quad High-Speed RS-530
	B : Quad E1 RJ-45	F : Quad RS-530	J : Wire-Wrap I/F for Quad E1/T1	
	C : Quad T1 RJ-45	G : Single port Fast Ethernet 10/100		

Power Type    Card Type  
**FMUX101** -  /   
 Example: FMUX101 - AC - AAAA