

NEW



FMUX101

**Modularized 16E1/T1 + 4x FE
Managed Fiber 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

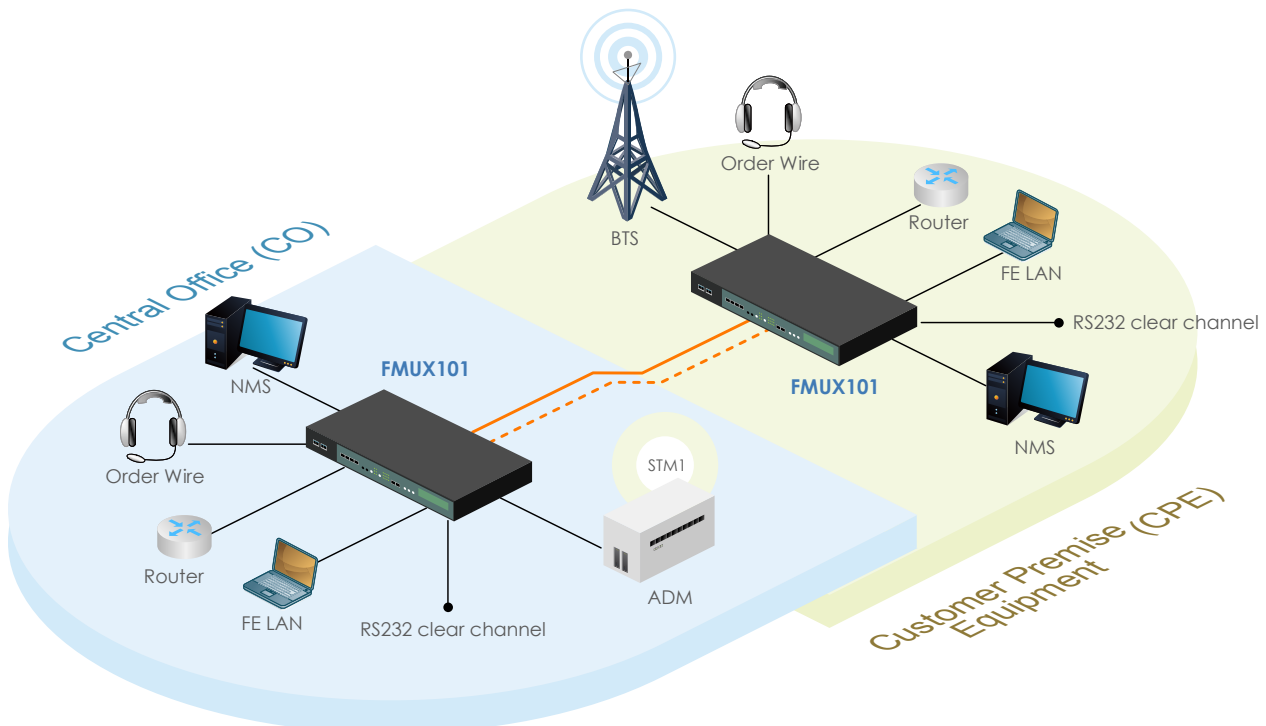
- 1U, 19 (23)" 4-slot chassis
- 16 E1 (2.048Mb/s) Multiplexer, 10/100Mbps Ethernet and RS-232 data (async)
- RS-232 port for system console
- One alarm output port, one Order Wire port
- 4x 10/100Base-TX Ethernet ports
- SNMP management
- LCD plus menu keys for local configuration
- Port based VLAN, 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

| | | |
|-----------------------------|----------------|---------------------------------------------------|
| Optical Interface | Connector | SFP- LC |
| | Data rate | 155Mbps |
| | Bit Error Rate | Less than 10 ⁻¹¹ |
| | 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 |
| Electrical Interface | Console, SNMP | RJ45 |
| | Ethernet | 4x RJ45 |
| | Alarm | RS232 (DB9F) |

| | |
|--------------------------|------------------------------------------------------|
| Standards | E1:ITU-T, T1:ITU-T, AT&T, ANSI, Ethernet: IEEE802.3x |
| Indications | PWR, Alarm, LBK, RD, LCK, RNG, ACO, Port, Channels |
| Power Input | AC : 100 ~240V |
| | DC24 : 20 ~ 60V, DC48 : 36 ~ 72V |
| Power Consumption | < 40W |
| Dimensions | 250 x 438 x 43mm (D x W x H) |
| Weight | 3.58kg |
| Temperature | 0 ~ 50°C (Operating), 0 ~ 70°C (Storage) |
| Humidity | 10 ~ 90% non-condensing |
| Certification | CE, FCC, RoHS compliant |
| MTBF | 75,000 hrs |

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 \pm 50 ppm E1: 2.048 Mbps \pm 50 ppm |
| Line code | T1: B8ZS / AMI E1: HDB3 / AMI |
| Receive Level | Short haul - 15dB |
| Line impedance | T1: 100 ohms \pm 5% E1: 120 ohms \pm 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 \pm 50 ppm |
| Line code | HDB3/AMI |
| Receive Level | Short haul - 15dB |
| Line impedance | 75 ohms \pm 5% / 120 ohms \pm 5% |
| Connector | RJ-45 for 120 ohms BNC for 75 ohms Wirewrap for 120 ohm |

Ordering Information

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

| Power Module Type | Line Card I/F Type | | |
|----------------------|--------------------|-----------------|-----------------|
| AC, DC, AC2, DC2, AD | 0 : Empty | D : Quad V35 | H : Quad RS-449 |
| | A : Quad E1 BNC | E : Quad RS-232 | I : Quad FXO |
| | B : Quad E1 RJ-45 | F : Quad RS-530 | J : Quad FXS |
| | C : Quad T1 RJ-45 | G : Quad X.21 | K : Quad E&M |

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