## a 4E1 + 4 Ethernet Smart PDH 11

Fiber Optic Multiplexer

# AN-FM-120-4ETH fiber Optic Multiplexer

AN-FM-120-4ETH is state-of-art 4 x E1 G.703 + Ethernet 10/100BaseT fiber multiplexer with logical bandwidth control, QoS, and dot1Q VLAN's which allows effective transmission of those protocols over fiber optical cable over distances more than 120 km. Single mode, dual mode and WDM (BiDi) versions. AN-FM-120-4ETH can provide up to 4 E1 interfaces and 4 Fast Ethernet interface. The Ethernet interface can be operated in 10M/100M, half duplex or full duplex mode by either auto-negotiation or manual setting. The AN-FM-120-4ETH is a fiber media transport for 4E1 + 4 x 10/100BaseT transmission. The BNC model provides unbalanced 75 Ohm coaxial connections while the RJ-45 model provides balanced 120 Ohm connections over twisted pair wiring.

All media muxes are available with either multi-mode or single-mode optical tranceivers and with connectors for SC, ST, or FC. In single mode they are available in up to 120 km versions reach, which will provide the ability to transmit and receive data using only a single optical fiber pair. AN-FM-120-4ETH provides RS232 interface for Network Management. Supported by AN-NM-PDH GUI network manager utility, users can observe the status of Local and Remote, as well as other alarm information unable to be displayed by LEDs in the front panel. Also, with AN-NM-PDH, user can make certain E1 loop back for testing purpose.

#### Features

- Provides 4 x E1 G.703 transparent transmission over the fiber; \_
- Provide 4 x 100 Mbit/s Ethernet ports: •
- 0 Provides one RS232 channel for option;
- Provide one hotline channel for option (enginering ordewire);
- Speed of optical port is 155Mbps, transmission range can reach 25KM, 40KM, 60KM, 80KM or 100km, 120KM;
- 0 E1 interface code is HDB3; E1 vibration characteristic conforms to ITU-T G.703, G.823 and G.742;
- Ethernet port supports full/half duplex, 10M/100M auto-ataptable, 0 throughput is full duplex 100 Mubit/s;
- 0 Ethernet port supports dot1Q VLAN setting possibility and port based VLAN's.
- Simultaneous 4 E1 & 100 Mbit/s full duplex operation; 0
- Complete alarm function and can monitor remote device status; 0 Supports E1 loop from remote so as to detect and manage device conveniently:
- The combination AC220V and DC-48V for redundant options;

### **Specifications**

Optical interface:	Channel capacity: 4 Channels Bit Rate: 2.048 Mb/s ±50 ppm Line Code: HDB3 Line Impedance: 120 Ohm / 75 Ohm Connector: RJ-45 or BNC Pulse Shape: ITU-T G.703 Jitter Performance: ITU-T G.823
Ethernet interface:	Interface Rate: 10/100Mbps Interface characteristic: match IEEE802.3, IEEE802.1 Q Connector: RJ45
Optical interface parameter:	Optical wavelength: 850/1310nm for multi-mode fiber, 1310/1550nm for single-mode fiber Optical interface: SC/FC/ST (Optional) Transceiver module: > -6dBm Optical receiver sensitivity: <-36(BER<10) Receive range: >-30dB Transmission distance: multi-mode 2 Km, single-mode 20/ 40 / 80 / 120 Km, WDM versions available
Power:	DC: -48V (-36 to -72V); +24 V (Optional) AC: 90 to 260 VAC ; 47 ~ 63Hz Power Interface: DC power terminal/AC socket Power Consumption: 10 W maximum
Working environment:	Operating temperature: 0 to 50°C Storage temperature: -20 to +70°C Relative humidity: 5% to 90% (25°C no condense)



#### Ordering information

- AN-FM-120-4ETH/AC(DC)-MM 4\*E1 G.703 + 4 Ethernet PDH Fiber Multiplexer 19" ,75ohm BNC or 120ohm RJ-45 ,1\*orderwire phone, • FC/ST/SC Multimode 2 km, AC or DC power supply. 1+1 double power supply as ordering option
- 4\*E1 + 4 Ethernet G.703 PDH Fiber Multiplexer 19" ,75ohm BNC or 120ohm RJ-45 ,1\*orderwire phone, AN-FM-120-4ETH/AC(DC)-Sxx FC/ST/SC Single Mode Dual Fiber XX = (40,60,80,100,120) km, AC or DC power supply. 1+1 double power supply as ordering option
- AN-FM-120-4ETH/AC(DC)-WDMxx 4\*E1 G.703 + 4 Ethernet PDH Fiber Multiplexer 19" ,75ohm BNC or 120ohm RJ-45 ,1\*orderwire phone, FC/ST/SC Single Mode Single Fiber XX = (20,40,60) km, AC or DC power supply. 1+1 double power supply as ordering option