4E1+1*LAN Fiber Optical Multiplexer

Model name: FMO-120-ETH

Function Description

FMO-120-ETH fiber optical multiplexer can multiplex to 4 E1 +1*LAN signals for transmission over an optical fiber, resulting in reaching a longer distance without a repeaters and superior performance compared to copper media.

FMO-120-ETH fiber optical multiplexer is the point-to-point optical transport equipment that uses the FPGA chips and it is easy to upgrade. It is single board structure and the largest transmission capacity is 4E1. The outer design use the standard 19 inches rack, so the volume is little, weight is light and operation is convenient and credit.

FMO-120-ETH fiber optical multiplexer, is use the PDH fiber transmission technologies. The 2M (E1) interfaces can connect with the exchanger, light loop device and multi-diplexer directly to form the mircomidi or the special network. Complete alarm function for 4E1, it is stable and easy to maintenance, install and small in size. It has one digital service telephone.

Features

Below lists the features for 4E1 fiber optical multiplexer:

- Offer 4*E1 X 2Mb/s digital interfaces
- Offer one 10/100M Ethernet channel for option on fiber
- The supervisory control interface implements centralized monitoring and export the monitor and control information of this port and opposite port.
- One link to service telephone for duty contract
- 90-260VAC & -48VDC power options and the positive and negative of DC-48V can be optional because there is the self-test circuit for the polarity inside th1e device
- Standard 19/9.5 inches rack, little volume, light weight, steady capacity and convenient setup
- Digital clock recovery circuit and digital smooth DPLL adopted for 2.048Mb/s port

- LED indicators
- Has 1+1 fiber uplink protection for optional
- Power supply redundancy : AC220 and DC-48V

characteristic

- ✧ provides 4 E1 The G.703 connection (namely provides 120 roadbeds groups telephone channel) ,also provides an 10/100M Ethernet channel for option
- ✧ realizes long-distance monitoring of this end equipment to the far-end equipment (two-row indicating lamp, upper row indicates local status, lower row indicates far-end status)
- ✧ provides function of ordering 4 E1 to loop return from the remote end, fiber self-loop at local end; Ethernet to loop at remote end and provides a group service telephone interface (for option)
- ✧ transmitting range: 2-120Km
- ✧ the double filament bidirectional and the single filament
- ✧ bidirectional type may select
- ✧ conforms to the telecommunication level operation
- ✧ requirement, and does not have the fault time equally (MTBF) above 70,000 hours
- ✧ has the redundant reliability, provides installment of 19 "rack,

◆ **Optical interface**

Optical wavelength: 850nm/1310nm for multi- mode optical interface,
1310nm/1550nm for single-mode optic interface
Optical interface: SC/FC
Receiving and dispatching module: >-6dBm
Optical receiver receiving sensitivity <-36 (BER<10):
Dynamic range receiving: >-30dB
Transmitting range: Multi-mode 2 Km, single-mode 20Km,single-mode 40Km, single-mode 60 Km, single-mode 120Km
Vibration characteristic: Satisfies G.742 and the G.823 standard

◆ **E1 interface**

Interface code: HDB3 code
Line speed: 2.048Mbp/S ±50ppm
Interface standard: ITU-T G 703
Interface impedance: 75Ω/unbalanced or 120 Ω/ balanced
Interface characteristic: supports rack (19 inches, 6U high), can reach up to 24 directions

◆ **10/100M Base-T interface:**

Interface rate:10/100Mbps

Interface characteristic: satisfies IEEE802.3, IEEE802.1Q
Connector: RJ45

Working condition:

Input voltage: AC220V; AC 110V; DC－48V; DC+24V
Power consumption: ≤5W

Operating temperature: 0°C ~ 50°C
Storing temperature: －40°C ~ +70°C
Relative humidity: 95 %

Dimension

19inch rackmount Type:433 mm（L）×138mm（W）× 44 mm（H）

Ordering information:

FMO-120-ETH/AC	75 Ω/120 Ω, dual fiber,AC220V
FMO-120-ETH/DC	75 Ω/120 Ω, dual fiber, DC48V
FMO-120-ETH/AC+DC	75 Ω/120 Ω, dual fiber ,AC220V+DC48V
FMO-120-ETH-SF1310/AC	75 Ω/120 Ω, WDM,Tx1310,RX1550,AC220V
FMO-120-ETH SF1550/AC	75 Ω/120 Ω, WDM,Tx1550,RX13100,AC220V
FMO-120-ETH-SF1310/DC	75 Ω/120 Ω,WDM,Tx1310,RX1550,DC48V
FMO-120-ETH-SF1550/DC	75 Ω/120 Ω, WDM,Tx1550,RX13100,AC220V+DC48V
FMO-120-ETHSF1310/AC+DC	75 Ω/120 Ω,WDM,Tx1310,RX1550,AC220V+DC48V
FMO-120-ETH-SF1550/AC+DC	75 Ω/120 Ω, WDM,Tx1550,RX13100,AC220V+DC48V

Application