Managed 16E1+ 4ETH PDH Optical Multiplexer

➢ Features

- Provides 16*E1 G.703 transparent transmission over the fiber;
- 1 Fiber or 1+1 Fiber back up optional;
- Provide 4 *100 Mbit/s Ethernet channels, Ethernet speed can be set for each port on based on any multiples of n*32 Kbit/s;
- Provides one RS232 channel for option;
- Provide one hotline channel for option (order wire);
- Speed of optical port is 155Mbps, transmission range can reach 20, 40, 60, 80,100,120Km;
- 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-adaptable, throughput is full duplex 100 Mbit/s;
- Ethernet port supports dot1Q VLAN setting possibility and port based VLAN;
- Layer2 intelligent switch possibilities for 4*Ethernet ports;
- Ethernet packet size supports 1916 byte and 4 Ethernet port could be set separately, jumbo frames are supported;
- Simultaneous 16 E1 & 100 Mbit/s full duplex operation;
- LED indicators for alarm function and can monitor remote device status;
- Support DIP switch management;
- Supports E1 local and remote loopback for installation;
- Broadcast Storm Protection, Port monitoring;
- Current alarm and alarm history database;
- GUI based RS232 NMS manager for easy and convenient monitoring and management;
- Support DC48V and AC 220V power supply;
- Support -5-65°C wide operating temperature range;
- Warranty:3years

➢ Introduction

HPOM-16E1-4ETH Optical multiplexer is 16*E1 G.703 + 4 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.

UPCOM HPOM-16E1-4ETH can provide up to 16E1 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.

HPOM-16E1-4ETH is a fiber media transport for 16E1 + 4*10/100BaseT transmission. The BNC model provides unbalanced 75 Ohm coaxial connections while the RJ-48C model provides balanced 120 Ohm connections over twisted pair wiring, it provides an order-wire for which a standard telephone can be used.

HPOM-16E1-4ETH provides a user RS232 transparent data link with a RJ45 connector which possesses complete operation monitoring function. Those indicators include Loss of optical signal, LOF, 10-3, 10-6 bit error rate, Loss of each E1 tributary signal and Ethernet status. Since some overhead bytes are taken as monitoring channel, all alarm and status of Remote can be display locally.

HPOM-16E1-4ETH provides RS232 interface for Network Management. Supported by GUI NMS 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 NMS software, user can make certain E1 loop back for testing purpose, 4 * 10/100 Ethernet ports support intelligent Layer 2 switch features, such as QoS, dot1Q and port based VLAN's, flow control per port with steps n*32 Kbit/s and more.
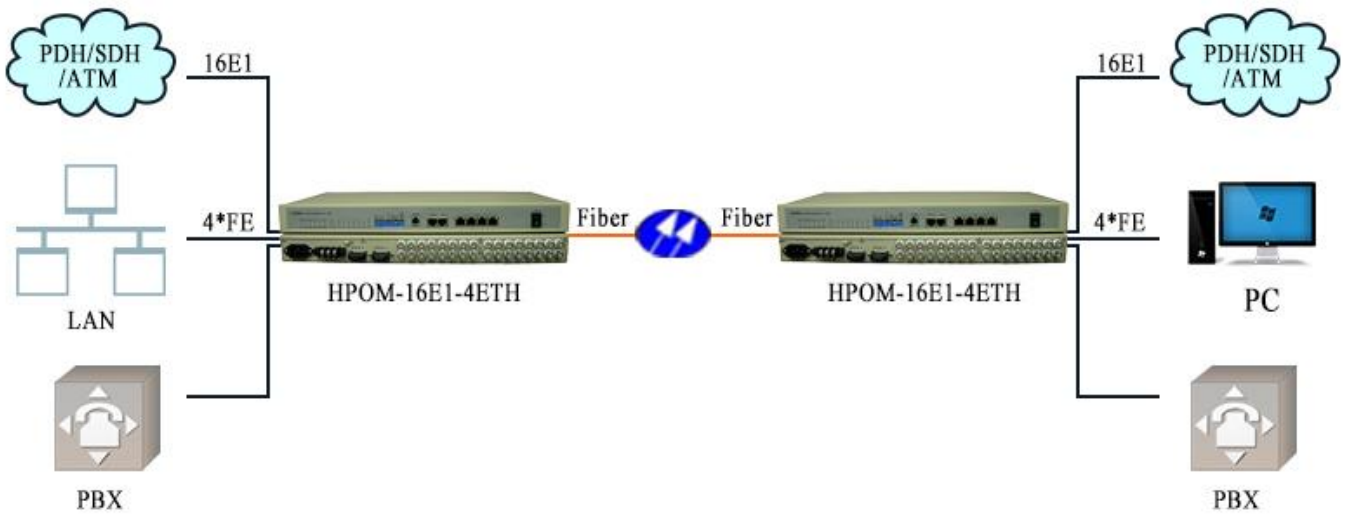
➢ Specification

Optical interface	
Line mode type	CMI
Bit rate	150Mb/s±50ppm
Wavelength	Multi-mode: 850/1310nm, Single-mode :20/40/60/80/120 Km
Optical output power	-2~-11dBm
Sensitivity	> -36dBm
Dynamic Range	34dB
Connector	FC/SC
E1 interface	
Channel capacity	16 Channels
Bit rate	2.048Mb/s±50ppm
Code format	HDB3
Impedance	75 Ohm BNC and 120 Ohm RJ45
Pulse Shape	ITU-T G.703
Jitter Performance	ITU-T G.823
Clock mode	Internal-clock, external-clock
Ethernet interface	
Interface Rate	10/100BaseTx
Duplex	Half/full duplex
Interface character	IEEE802.3U, IEEE802.3x, IEEE802.1Q
Connector	RJ45
Physical	
Dimension	483mm*44mm*200mm（width*height*depth）
Weight	5kg
Power consumption	5W
Power supply	DC 48V or AC96 -260V or DC&AC dual power
Operating temperature	0-50ºC
Storage temperature	-40-70ºC
Humidity	5%~95% (non-condensing)

➢ Dimension

➢ Application

➢ Ordering Information

Model NO.	Description
HPOM-4E1-4ETH	4E1 (75ohm&120ohm)+4*100M T(x) ,1+1 optical, FC/SC with RS232 GUI,AC220&DC48V
HPOM-8E1-4ETH	8E1 (75ohm&120ohm)+4*100M T(x) ,1+1 optical, FC/SC with RS232 GUI,AC220&DC48V
HPOM-16E1-4ETH	16E1 (75ohm or 120ohm)+4*100M T(x) ,1+1 optical, FC/SC with RS232 GUI,AC220&DC48V

➢ Packing List

- 16E1+ 4ETH PDH Optical Multiplexer *1
- User manual * 1
- Certificate of quality * 1
- Power cord*1
- Two plugs for Coaxial Cable
- Warranty card * 1