

CuteLink PDH Optical Multiplexer (OPTIMUX)

CL-FOM4104, FOM8104, FOM16104

Device Overview

CL-FOM4104, FOM8104, FOM16104 OPTIMUX is part of Multi E1 and Fast Ethernet transmission system family, used to build a 150Mb/s optical point-to-point link. Based on an ASIC chip; it performs the transportation of 4/8/16 E1 and a fast Ethernet at full speed. It also provides an order-wire and an auxiliary UART interface for Management. The OPTIMUX offers a highly integrated solution for the perfect function, stable performance and convenience with low power consumption.



Device Feature

- Merges the Ethernet and time-division multiplex (TDM) transmission to the same pipe.
- Provides 4/8/16 E1 and a 100Mb/s Fast Ethernet interface.
- The standard E1 interfaces comply with ITU-T G.703, G.823 and G.742.
- Supports either auto-negotiation or hardware configuration selection of the Ethernet operation.
- The Ethernet interface supports VLAN and Flow Control function.
- Real-time Monitoring and all necessary alarm display for easy management.
- Supports Local and Remote Loop-back Test.
- Uses standard telephone set as order-wire.
- Provides one transparent RS232 interface for user's data links.
- Provides RS232 interface for Network Management.
- Extends the fiber link up to 120 km without any repeater.
- Compact single board Terminal.

- 100~220V Ac and -48VDC power supply is optional.

OPTIMUX series of Multi E1 & Fast Ethernet Optical Terminal is a product combining of a PDH optical transport system and an Ethernet transceiver, as illustrated in Figure:



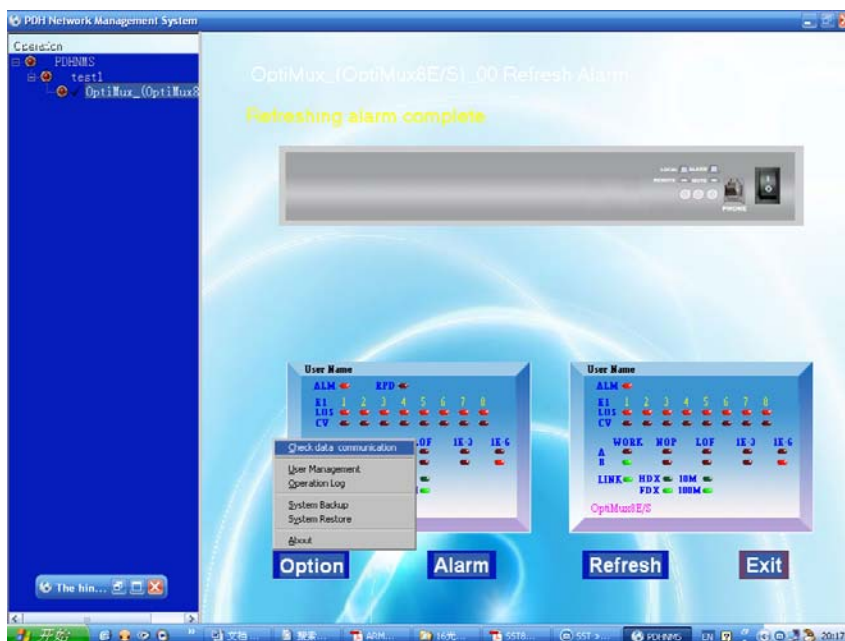
OPTIMUX can provide up to 16 E1 interfaces and 4 Fast Ethernet interface. The Ethernet interface can be operated in 10M/100M, half duplex or full duplex mode by either auto-negotiation or manual setting.

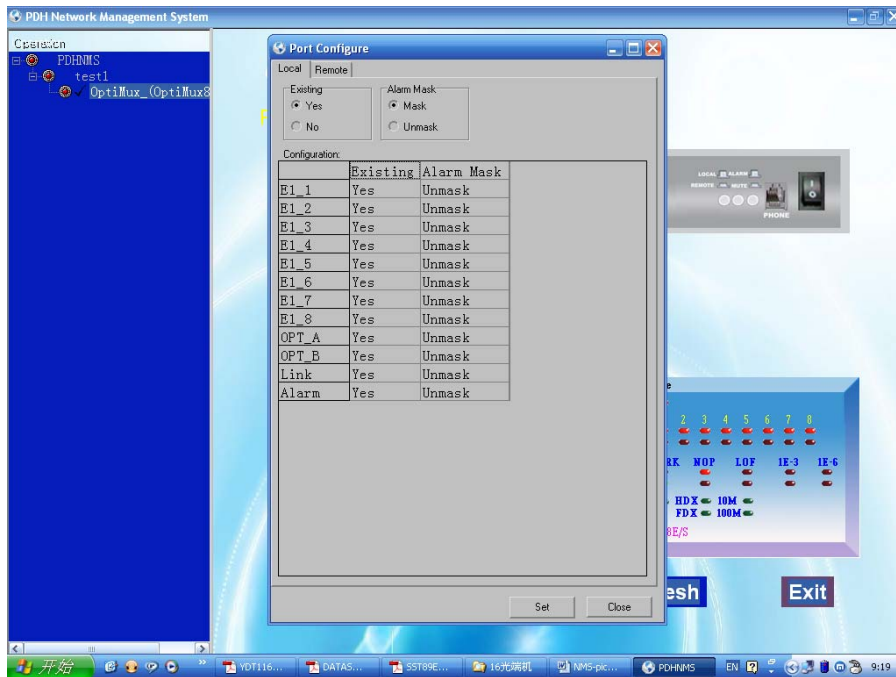
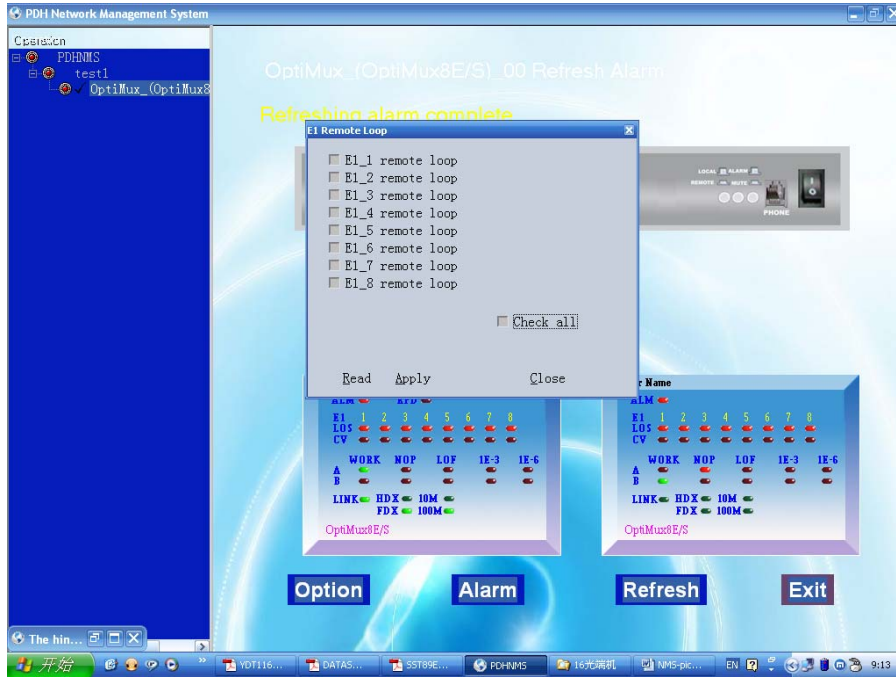
OPTIMUX also provides an order-wire for which a standard telephone can be used.

OPTIMUX also provides a user RS232 transparent data link with a RJ45 connector.

OPTIMUX 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.

OPTIMUX provides RS232 interface for Network Management. Supported by EasyPDH™, 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 EasyPDH™, user can make certain E1 loop back for testing purpose.





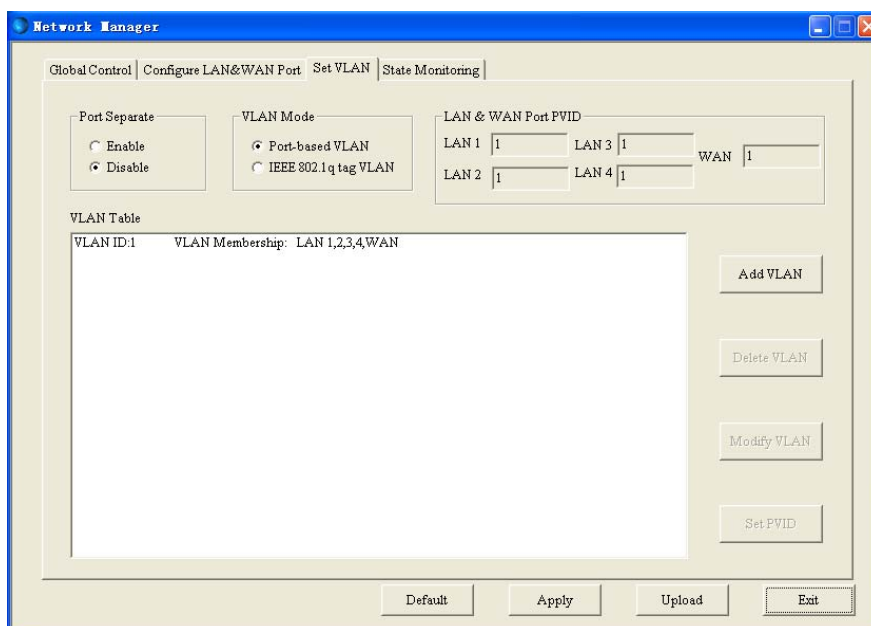
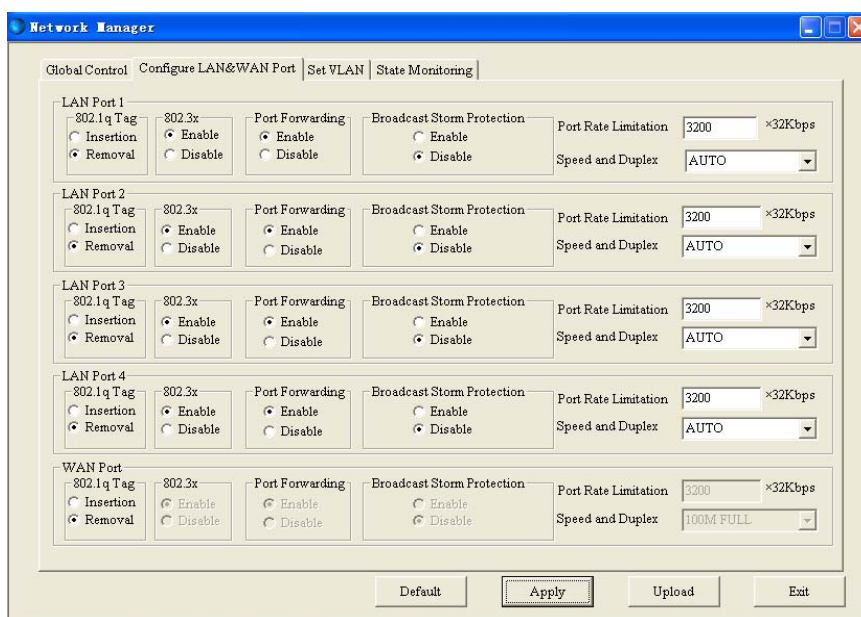
The hint of alarm

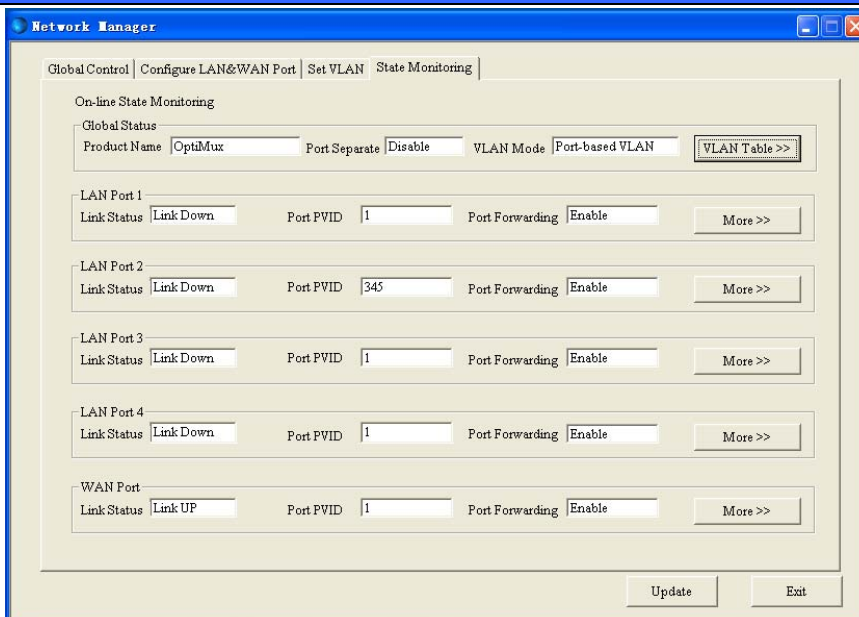
NO	NE_Name	Card_NO	Alarm_Content	Alarm_Occure_time	Alarm_Disappear_time
17	OptiMux		E1_6 LOS	2009-04-15 20:15:10	
18	OptiMux		E1_7 LOS	2009-04-15 20:15:10	
19	OptiMux		E1_8 LOS	2009-04-15 20:15:10	
20	OptiMux		LINK LOS	2009-04-15 20:12:41	2009-04-15 20:15:10
21	OptiMux		OPT_A NOP	2009-04-15 20:11:38	
22	OptiMux		OPT_B IE-3	2009-04-15 20:13:07	

Select All Confirm Delete All Close Total record: 22

OPTIMUX also offers ETH NMS, which can configure ETH port like intelligent L2 switch, it has followed functions:

- Separation based on port;
- VLAN based on port;
- VLAN based on TAG;
- Flow control based on 32K (32K~100M).
- Port monitoring.
- Broadcast Storm Protection, etc.





For detail, see ETH NMS and EasyPDH™ manual.

Specification

1. Power
 - AC Input: 100~250V
 - DC Input: -48V(-32~-72)
 - Power Consumption: ≤30W
2. E1 interface
 - Compliance with ITU-T G.703
 - Data rate: 2.048Mbps
 - Impedance: 75ohm(BNC)/120ohm(BLANCE)
 - Line Code: HDB3
 - Frequency deflection: 2.048MHz ±100PPM
 - Jittering: compliance with ITU-T G.742、G.823
3. Fiber interface
 - Rate: 155Mbps
 - Line code: 1B1C
 - Wavelength: 850nm/1310nm/1550nm
 - Connector: FC/SC
 - Distance: 0-120Km
4. Ethernet ports
 - Compliant with: IEEE802.3
 - Rate: 10/100Mbps Full/Half duplex auto-negotiation
 - Physical connector: RJ45
 - MDI/MDI-x auto-negotiation
 - Ethernet port: 4 ports
5. RS232 Interface :
 - Transmission Rate: 19.2k~115.2k bps

