#### Modular Integrated Optical Transmission Multiplexer

#### **Product Overview**

TheModularIntegratedTransmissionMultiplexercanprovide full speed 100Mbpsfast Ethernet(FE)interfaceininterfaceinaccordantIEEE802.3and E1interface



with 16-channel standard. At the same time, it also provides sufficient network management interface function and realizes SNMP network management or device management via hyper terminal. The device itself is supplied with a LCD displayer for user to carry out configuration and management. The whole system adopts modularized structure. 16 channels of 2M services are divided into four modular slots, with four channels for each. Different interface modules can be applied based on networking requirements of requirements for application environment different users. and different user and business growth can be met through addition or replacement of interface modules. The equipment can cater to the network application of general scale.

#### Main Features



The modular integrated optical transmission multiplexer is created with optical path interoperability, flexible structure and modular design. Its

function modules are independent of each other but easy for assembly, which enables it to derive a series of optical multiplexer products with multi-service interfaces. The equipment is furnished with four modular slots. According to the networking requirements of different users, various kinds of interface modules can be employed. Users can also add or interface modules accommodate of different replace to to the requirements environments existing investment. Meantime, the application to protect their equipment allows users to activate expandable interfaces to adjust the scale of network interfaces based on business growth, so as to help realize real-time follow up of network to business.

### Network Access

#### **Product Catalog**

◆1+1 Optical Redundancy Backup: Protection of dual optical interface available to ensure that business will not be interrupted when one pair of optical fibers is confronted with failure. Supporting hot add/drop of optical interface, and fulfill switching without error code during hot add/drop.

◆ Flexible Configuration: 4/8/12/16E1 optical multiplexers and multi-service interfaces are derivable from main system board and different functional modules, to meet different user requirements and customizations.

♦ Various Functional

Modules: User interface modules (N\*64K V.35, FV.35, FXO/FXS, E/M, RS232/RS485,



and etc.), order wire module, network management module (RS232, and Ethernet Interface, etc.), and alarm output terminal module, etc. available.

### Service Interface Card

# / G.703 Interface Card

4 channels of G.703 interface available DB37 Interface, to provide corresponding external interface through adapter Fully compliant with ITU-T G.703 recommended standards Interface Code Type: HDB3 Bit Rate: 2.048Mbit/s ± 50ppm



## √ Dual V.35 Interface Card

Two channels of V.35 interface available Interface Electric Level: In compliance with CCITT V.35 standard Physical Interface: DB25

- - 2 - -



## **Product Catalog**

Interface Bit Rate: 2.048Mbit/s

## √ 4-Channel V.35 Interface Card

4 channels of V.35 Interface to be framed Interface Electric Level: In Compliance with CC ITT V.35 Standard Physical Interface: DB37 Speed of Interface: N\*64Kbit/s

#### ✓ **FXO/FXS** Voice Channel Interface Card

Physical interface: RJ45
FXO interface card: to provide 4-channel or
8-channel FXO interface connected with switch..
FXS interface card: to provide 4-channel or
8-channel FXS interface connected with ordinary
telephone sets.
Supports display of incoming calls.
Supports billing function of inverted polarity.



#### **RS232 Interface Card**

Physical interface: RJ45 Four RS232 transmission channels available Transmission Speed: 110~115.2K bps Transmission Mode: Full-Duplex

## RS422/RS485 Interface Card

Physical interface: RJ45 Four RS422/RS485 transmission channels available Transmission Speed 110~115.2K bps

Transmitting Mode: full/half duplex









--3--

#### Network management system

Network management Unit is designed to control all settings on the control panel and to realize communications between multiplexer and computer. The unit can send commands (such as alarm-off, remote bypass loop-back and so on) to nodes through computer. Users can directly query and set the status of a pair of devices with Hypber Terminal software Via RS232 crosswire. NM-ETH interface (10/100M auto-negotiating, to be configured) can be directly connected with a computer via a crosswire or with a HUB via a straight-through wire to fulfill management. It can realize ALS (Automatic Laser Shutdown/Automatic Laser Reduction) to prevent personnel from fiber injury. The user can select network management functions according to its actual requirements.

NMS of our device can support standard SNMP protocol, and can be compatible with NMS system of other manufacturers, and can offer WEB view, as followed pictures:

tapTreePanel.index	4/8/16E1+Eth+SNMP properties	4/8/16E1+Eth+SNMP pro	perties
😑 💼 Resources View	MainBoard properties	Information Set Status NM-ETH properties	
MAHADEV		Device Property Device IP address Local name Local description Remote name	Current Value 0.0.0.0 **4/8/16E1+Eth+Sh Local description: Remote name;
		Remote description Device Soft Version If Business Board Exists Local port 1 E1 alarm	Remote description 01.01 Exist True
	Local SonBoard1()) Local SonBoard2(II) Local SonBoard3(III) Local SonBoard4(IV)	Local port 2 E1 alarm Local port 3 E1 alarm Local port 4 E1 alarm	True True True True
		Local port 5 E1 alarm Local port 6 E1 alarm Local port 7 E1 alarm Local port 8 E1 alarm	False False False False
	2/105 13 4/105 14 14 4/105 14 19 4/105 14 19 4/105 14 19 4/105 14	Local port 9 E1 alarm Local port 10 E1 alarm Local port 11 E1 alarm	False False False
	Remote SonBoard1(I)Remote SonBoard2(II)Remote SonBoard3(IIIRemote SonBoard4(IV)	Local port 12 E1 alarm Local port 13 E1 alarm Local port 14 E1 alarm Local port 15 E1 alarm	False True True True
		Local port 16 E1 alarm Local port A light loss sy. Local port A light missin.	True True
Resources View		Local port A light E3 Alam Local port A light E6 Alam Local port B light loss sy	m False True
		Local port B light missin Local port B light E3 Alan Local port B light E6 Alan Presence of local NM-ET	m False m False

View of SNMP NMS

- - 4 - -

Fi	iber Optic Multip	ly Information
1	Return Io Home Page	Refresh Device Infor
	Software St	ate
Ne Property	Current Value(Local)	Current Value(Remote)
ALS	Open 💌	Open 💌
Mask Code Config State	Cancel Mask Code 🛩	Cancel Mask Code 🛩
Optical Switch State	STL Alarm Switch 💌	E3 Alarm Switch 🤜
Work Optical Port Force to Choose	Auto Switch 🐱	Auto Switch 💌
Rarning Sound Setting	Bute 💌	Nute 💌
Local/Remote Switch	Local Warning 👻	Local Warning 💌
Channell El Loop State	Cancel Loop	Cancel Loop 💌
Channel2 El Loop State	Loop	Cancel Loop 💌
Chammel3 E1 Loop State	Cannal Loop a	Cannal Long. w
Channel9 El Loop State	Cancel Loop 💌	Cancel Loop 💌
ChannellO B1 Loop State	Cancel Loop 💌	Cancel Loop 💌
Channell1 E1 Loop State	Cancel Loop 👻	Cancel Loop 👻
Channell2 El Loop State	Cancel Loop 💌	Cancel Loop 👻
Channell3 El Loop State	Cancel Loop 💌	Cancel Loop 👻
Channell4 Bl Loop State	Cancel Loop 💌	Cancel Loop 👻
Channel15 B1 Loop State	Cancel Loop 👻	Cancel Loop 👻
Channell6 El Loop State	Cancel Loop 💌	Cancel Loop 💌
STH1 Work Mode	suto-negotistion 👻	auto-megotiation 💌
TH2 Work Mode	suto-negotistion 👻	auto-megotistion 💌
LAN State	Disable 💙	Disable 🗸
ETH1 Speed Contral (Integer in 0-100)	5 N	100
ETH2 Speed Contral (Integer in 0-100)	100 1	100 1

View of WEB NMS

# **Product Catalog**

# Network Access

# Typical Networking Scheme

