

OSD8020 NETWORK CONCENTRATOR CARD

Overview

The OSD Network Management System (NMS) is designed to be implemented in an SNMP (Simple Network Management Protocol) or Web Browser Based environment, in order to remotely check running status or to configure an OSD optical modem product.

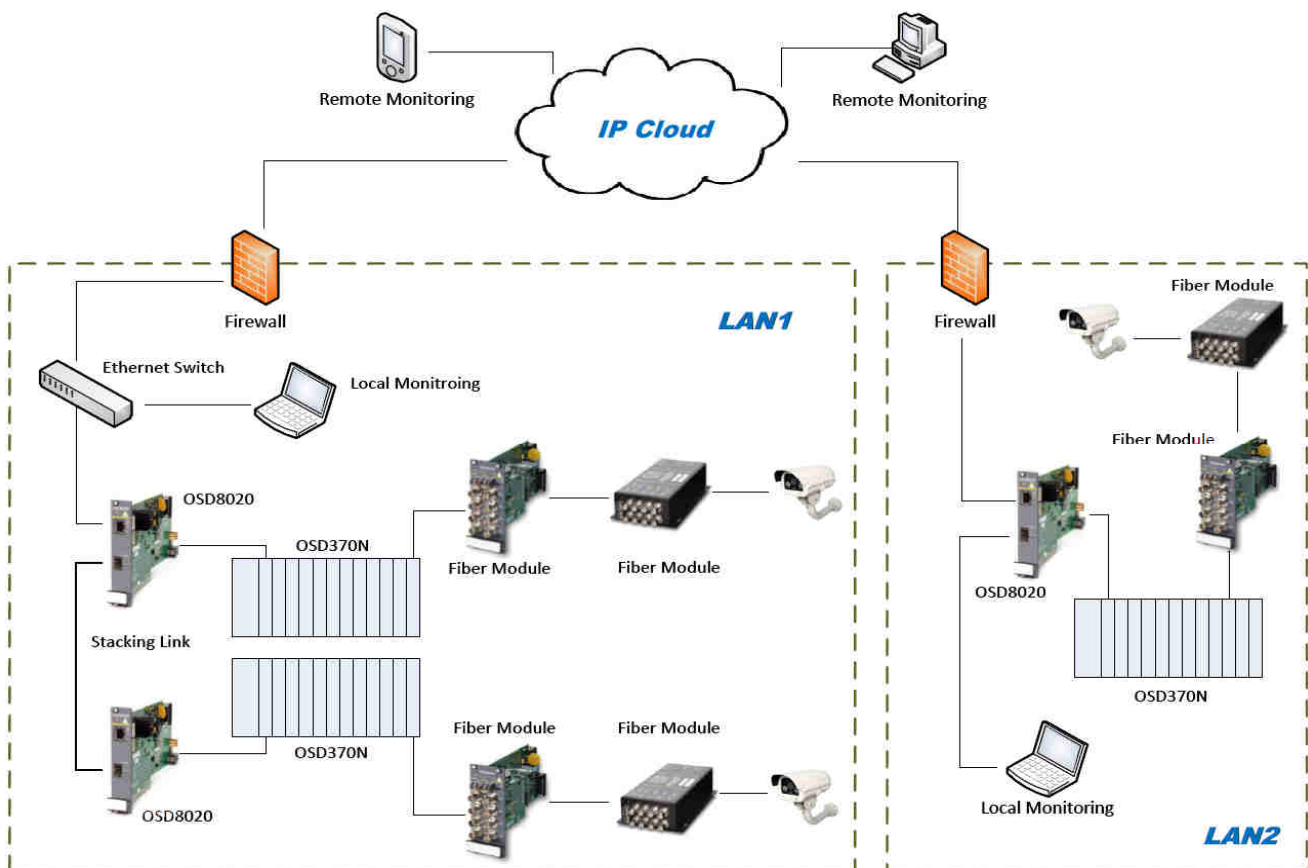
The OSD8020 Concentrator Card can be plugged into any slot of the OSD350N or OSD370N chassis, connecting with other modem cards through a data bus on the backplane. The OSD8020 Concentrator is responsible for collecting running status from all other modem cards in the same chassis, responding to the data demands from the NMS Server (NMS Manager), and automatically sending notifications to the NMS Server once an alarm event occurs.

The OSD8020 has an embedded Linux Operating System with a pre-assigned IP address and an individual MAC address and supports full TCP/IP protocols. An authorized administrator can access an OSD8020 locally from the VCP port on the rear of the unit, or remotely via the Fiber or Copper Ethernet port.



Features

- ▲ Intelligent remote monitoring and configuration, being compatible with standard SNMPv1, v2c and v3, and any third party SNMP software.
- ▲ Accessible through any standard Internet Web-Browser from any location, with a graphical rack display.
- ▲ Chassis level and device level dynamical virtual panel display on Web-Browser based GUI.
- ▲ Alarm notification functions.
- ▲ Configuration of OSD8020 can be changed locally or remotely.
- ▲ Multiple chassis can be stacked together via the concentrators in each chassis.
- ▲ Ethernet switching function among the three Ethernet ports on the front panel.



NMS Management Interface

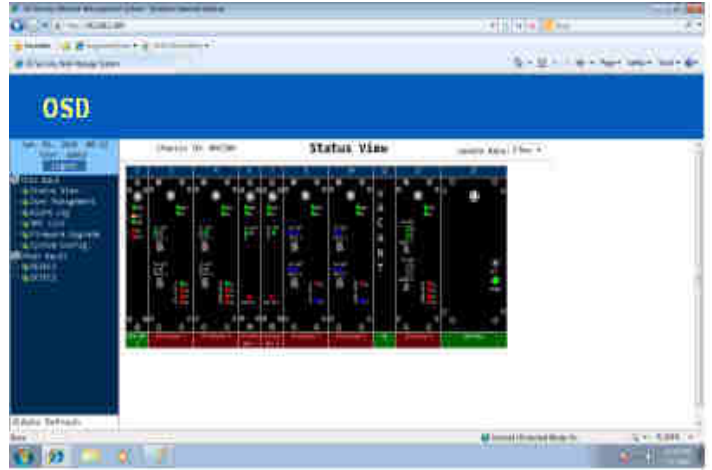
SNMP Interface: SNMPv1, v2c and v3,
Web Browser Interface: IE, Firefox, Chrome, Safari, Opera, etc

MIB (Management Information Base)

OSD's MIBs are compatible with (SMIv2), as described in RFC 2578 and RFC 2579.

OSD has three types of MIBs available:

- ▲ System level MIB: OSD-TOP-MIB
- ▲ Concentrator MIB: OSD8020-MIB
- ▲ Optical Modem MIB (one MIB per each product):
e.g. OSD8817-MIB



NMS Management Functions

The OSD8020 Concentrator continuously monitors the running status of each modem in the same chassis and is able to offer two types of data responses to the NMS Server, for both SNMP or Web-Browser based NMS:

- ▲ Responds to a demands received from the NMS Server
e.g. "GET" or "SET" operations of SNMP
- ▲ Sends a notification to the NMS Server when an alarm event occurs
e.g. send notification of "Card IN" or "Card OUT" to a "TRAP" receiver of SNMP.

Electrical

Data Interface	IEEE802.3ab, IEEE802.3u, IEEE802.3i, Base-T Ethernet at 10, 100 or 1000Mbps
Data Connector	RJ45 on the two fixed copper ports
Operating Mode	Half or full duplex for 10/100Mbps, Full duplex for 1000Mbps
Flow control	Pause frames for full-duplex, back pressure for half-duplex

Contact Closure Transmission	Buffered input, optically isolated MOSFET output (1.5A @ 24V(max))
Contact Closure Connector	RJ11 (6-way cage clamp connector)

Optical

Optical Interface	100Base-Fx/Sx
Optical Port Connector	SFP (LC connectors for 2-fiber operation and SC for 1-fiber operation)
SFP Options	Short haul, long haul, single fiber operation, etc. Please consult OSD datasheet #1021000X or contact OSD

NMS Physical Interface

SNMP or Web browser based GUI	Via Ethernet Copper or Fiber port on the front panel
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CLI (Command Line Interface)	Option1: VCP (Virtual COM Port, type B USB port on back) Option2: SSH remote CLI via Ethernet Copper or Fiber port
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LED Indicators

Network Link Activity (for both Copper and Fiber port)	Off – no link, Solid On – linked up, Blinking – link activity
Duplex Mode (for Copper port only)	Off – half duplex, On – full duplex
Power	Off – power off, On – power on

Physical

Operating Temperature Range	-20 to +75°C
Relative Humidity	0 to 95% non-condensing
Dimensions of Card (mm)	25W x 208D x 100H
Weight of Card (kg)	0.3
Chassis Current Consumption (CCC)	0.90 Amp when fully optioned

