



## Network Management Card

**Part Number: F616-NMS**



NMS Card for CH08, CH16



NMS Card for CH04

### Overview

The NMS performs monitoring and control of the F616 chassis and modules. This management module is a multiport Ethernet Switch Router functioning as an SNMP agent and reporting to a central NMS.

Accordingly, the management module can be remotely accessed by any SNMP NMS either in-band or out-of-band in a switched or routed topology. With its Linux-based system software and state-of-the-art hardware design, the management module provides many advanced features and delivers an exceptional level of performance, including extensive setup and control of the full range of F616 products.

### Features

- Advanced Optical Service Channel (OSC) protocol
  - \* Fast and reliable link failover protection
  - \* Point-to-point (P2P)
  - \* WDM ring
  - \* SFP interfaces Single-span support 40dB loss
  - \* Cluster Discovery Protocol – access every shelf in a WDM cluster from any shelf without the need for a static network map or address table
- Alarm Management
  - \* The current alarm query and display
  - \* Historical alarm information query and display
  - \* Alarm reporting shield
  - \* Alarm Display Filter
  - \* Alarm acknowledgment
  - \* Alarm Severity Table Management
  - \* Voice alarms, e-mail alerts, SMS alerts
  - \* Mobile Client Management



- Security
  - \* Linux operating system, open source advanced management methods
  - \* High security management environment
  - \* Multiple users can concurrently access, without compromising overall security.
  - \* Support online upgrade, future module upgrades are installed easily through remote firmware and programmable logic microcode downloads.
- Multiple management mode
  - \* SNMPv1, SNMPv2, Web, Telnet Etc. secure remote in-band management mode
  - \* Out-of-band CLI management
- Graphical User Interface(GUI) management
  - \* Complete Java-based embedded management GUI
  - \* Fully graphical interface management
  - \* Realistic simulation of the actual network topology of the whole network, real-time reflection of the whole network running, the whole network running at a glance
  - \* Device panel view, the view interfaces, LED lights, and other information with the device actually consistent view of the panel, easy management, device status at a glance.
  - \* Supports manual and automatic topology discovery topology rendering, and can be modified topology attribute
  - \* Support electronic map downloads
- Multiple front panel ports for management access
  - \* One RS-232 port provides local out-of-band serial access
  - \* Four 10/100Base-TX management interface port with auto negotiation and auto MDI/MDIX – easy integration into existing Ethernet networks, provide in-band access remotely from any network workstation.
  - \* Dual 100Base-FX SFP-based interfaces – easy integration into 'gray' or CWDM/DWDM optical networks, able to direct East-West WDM ring OSC, provide in-band access remotely from any network workstation.
- Extensive management features
  - \* F616 chassis, module, and port management
  - \* Secure end-to-end network management
  - \* Installed module types, Link status,
  - \* Optical performance monitoring (including OSNR monitoring)
  - \* Fully supports Digital Diagnostics information
  - \* Monitors the devices' operating temperature, power supply status, fan status
  - \* Remote laser shutoff and remote module reset
  - \* Enables loop-back functionality for troubleshooting
  - \* Configuration of data rate and wavelength selection as well as other module specific parameter settings.
  - \* SNMP traps Settings,
  - \* Syslog – automatic logging of system events
  - \* Editable ASCII configuration files – easily create, edit and save configuration settings
  - \* System configuration TFTP upload and download – save configurations on remote servers for easy retrieval and restoration
  - \* Remote configuration and software maintenance
    - System configuration FTP upload/download with easy- to-use editable ASCII configuration files

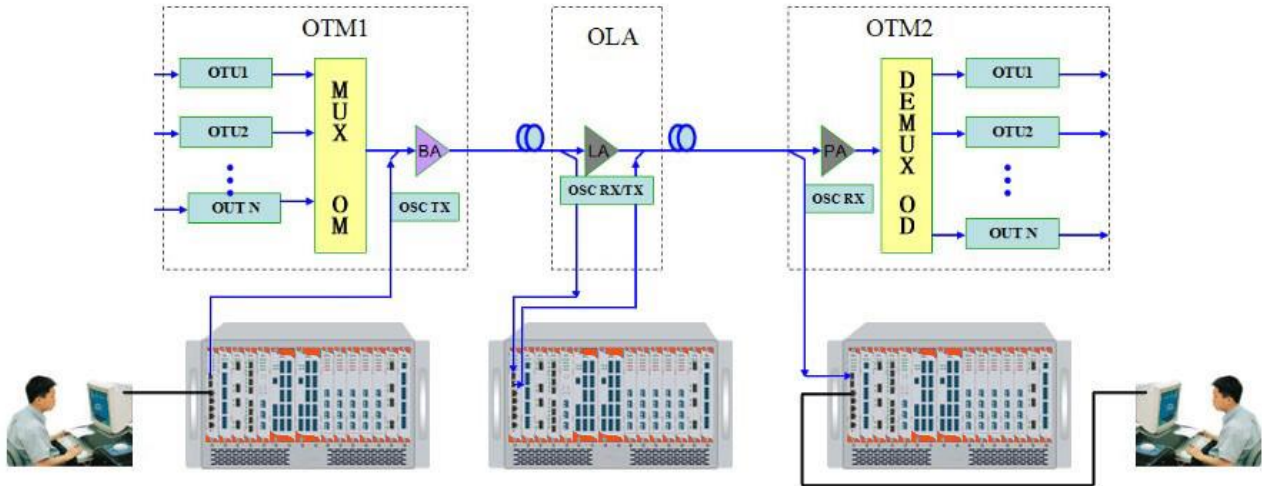


## Specification

Parameter		Technical indicators
Management mode		SNMP/Web/Telnet/ console Topology management, graphical management interface, CLI management
Management access		1x RS-232 4x 10/100Base-TX 2x100Base-FX SFP
Management features		Fault Management Performance Management Security Management Configuration Management Event Management Log Management Alarm Management Topology management User Management
Size (mm)	NMS	26.5(W) x 195(D) x 252(H)
	NMS-CH04	146(W) x 52(D) x 140(H)
Environment	Operating Temperature	-5 ~ 60 °C
	Storage Temperature	-40 ~ 80 °C
	Relative Humidity	5 ~ 95 RH%
Power Consumption		≤15W



## Application Scheme



## Ordering Information

Part No.	Description	Ports
NMS	Network Management Module for CH08, CH16 Linux-based system interface, MegavisionJ embedded.	1x RS-232 4x RJ45 2x SFP
NMS-CH04	Network Management Module for CH04 Linux-based system interface, MegavisionJ embedded.	1x RS-232 4x RJ45 2x SFP