



# FRM220-NMC

## Network Management Controller

The FRM220-NMC is a Network Management Controller card that can be placed in a compatible FRM220 series chassis to provide device management functions. The management interface supports a local RS-232 serial console or remote TCP/IP management by Telnet, HTTP and SNMP protocols. The card is designed to be hot swapped so that it may be field replaced without affecting any online service of any other rack cards. The card also supports online firmware upgrade from TFTP server, using any user interface, without affecting any other inserted line card's transmissions. Support for any standard NMS is provided by the included enterprise MIB file. CTC Union also provides and maintains our own EMS (Element Management System) which is a Java based client/server manager for monitoring and maintaining a large number of network elements over a long period of time.

### Features

**NMC provides central management for FRM220-CH20, FRM220-CH08, FRM220-CH04A and CH02-NMC**

- User interfaces for serial console, Telnet & Web
- Configure, monitor and provide fault management for all installed line cards
- Monitor power and fan status in chassis (CH20 & CH08 only)
- Provides upgrade feature for most line card types
- SNMP agent for complete management by enterprise software
- Running System log with time stamping for SNTP (time server)
- Parameter management for quick configuration, configuration copy/backup/restore
- Card alias and inventory by type and serial number
- Linux Kernel based for high stability and reliability



◀ FRM220-NMC



( 2U/19" rack mountable, 20 slots )



◀ FRM220-NMC



( 1U/19" rack mountable, 8 slots )



◀ FRM220-NMC



( 1U, rack mountable, 4 slots )

## Web GUI

The local area screen (Figure 1) is also the home page for the Web management of the NMC. An overview of all installed network interface cards (NIC) is shown with real-time status of LEDs. To enter the configuration screen for a NIC, simply click on the card.

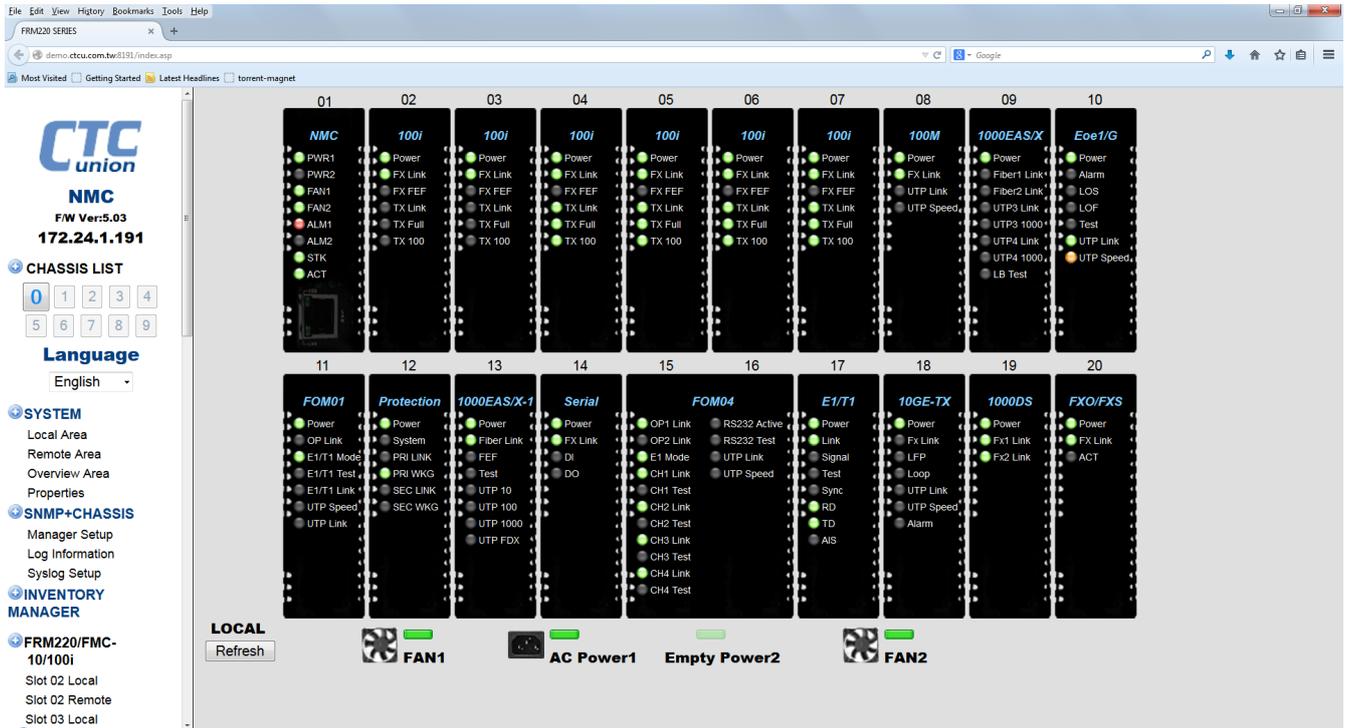


Figure 1

The SNMP+CHASSIS screen (Figure 2) gives a quick overview of the power and fan status in the chassis. This page is also used to assign the alarm conditions for the two programmable alarms. These alarms activate the electrical relays, display messages in the system log and can generate SNMP traps when a trap receiver is configured.

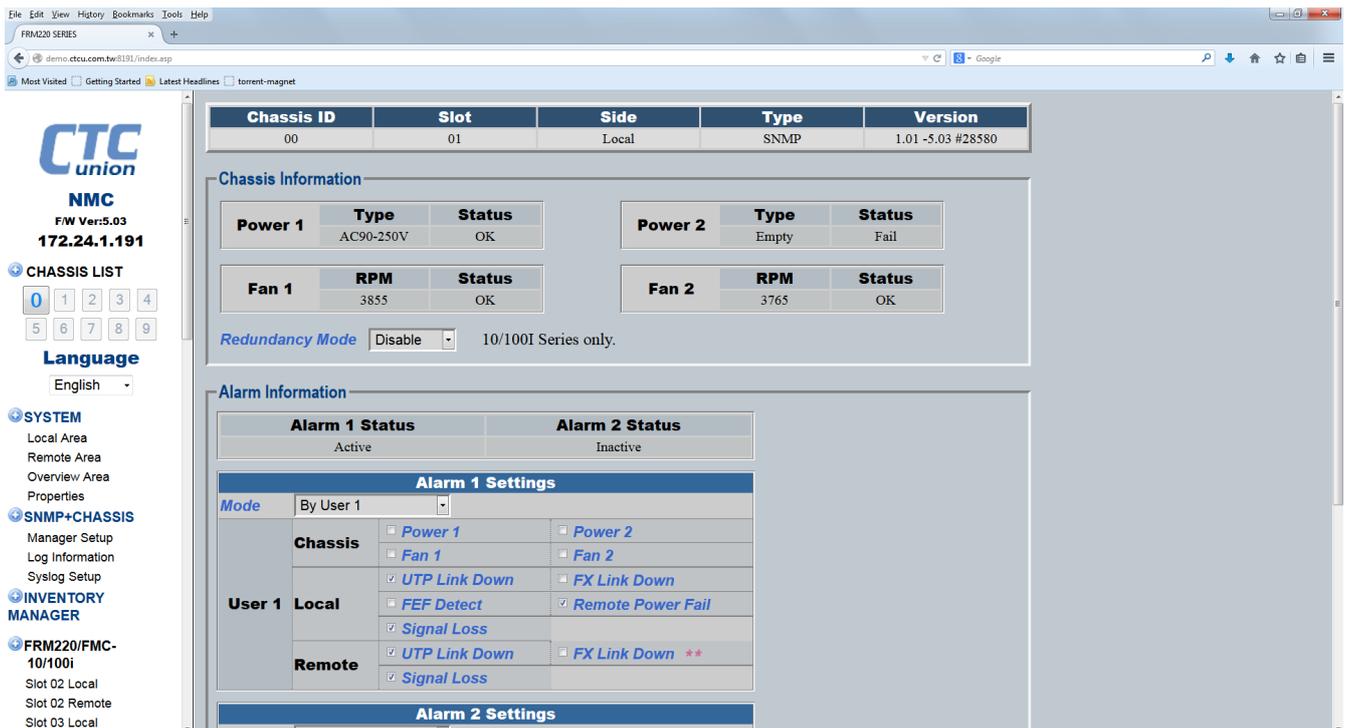


Figure 2

The system setting screen (Figure 3) has the functions for NMC upgrade, line card upgrade, system time and card parameter management.

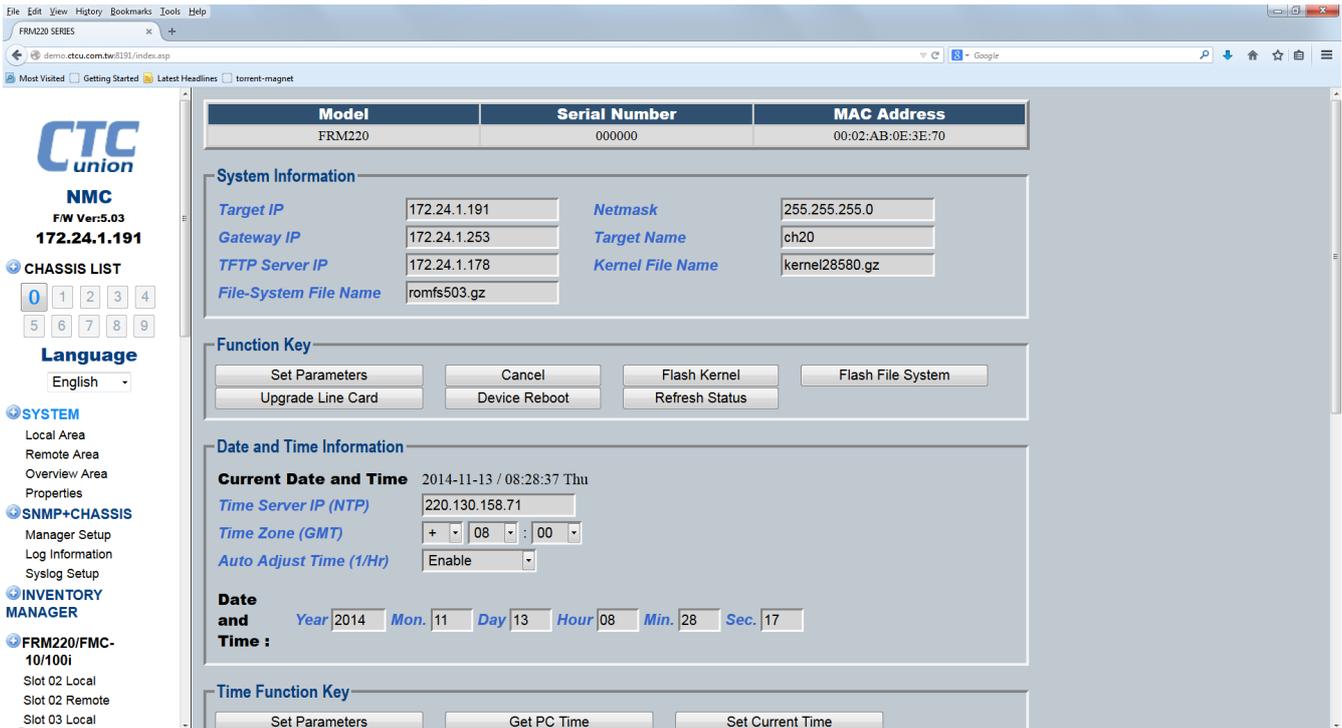


Figure 3

The management (Figure 4) can call up each line card to view detailed status and to make configuration changes to the card. By using a Web GUI, the settings can be made with simple mouse point and click actions.

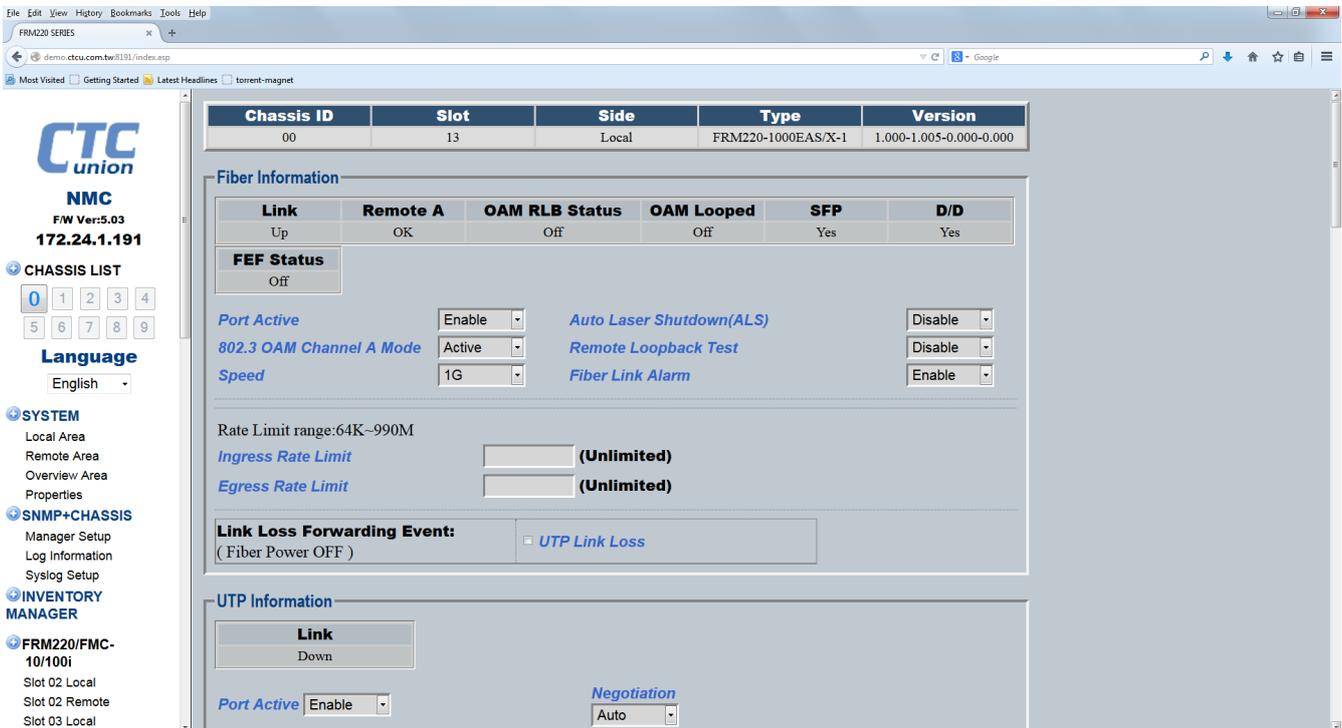


Figure 4

## Ordering Information

Model Name	Type	Description
FRM220-NMC	Card	Network Management Controller card, support web, telnet, console, SNMP functions