



FRM220-NMC-R3

Network Management Controller

The Network Management Controller card (FRM220-NMC-R3) is 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 SNMPv1, v2c protocols and 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. Easy software update means the management card will always support the latest FRM220 Series cards, such as **transponders, EDFA, CWDM/DWDM** and the latest **FRM220A-2000EAS series**. 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-R3 card provides central management for FRM220-CH20, FRM220-CH08, FRM220-CH04A, CH02/SMT 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 & CH02/SMT only)
- Provides upgrade feature for most line card types
- SNMP agent for complete management by enterprise MIB
- 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

// Specifications

Protocol	IP, UDP, SNMP V1/V2c, TCP, ARP, ICMP, TFTP, HTTP
Ports	DB9-F (x1), RJ45(x1)
Indicators	PWR1, PWR2, FAN1, FAN2, ALM1, ALM2, STK, ACT, LAN LNK/SPD
MIB Supported	MIB II, Enterprise MIB
Management	Web GUI, Telnet, Console, SNMP
Power	12VDC, 150mA
Dimensions	159.5 × 20.8 × 88mm (D×W×H)
Weight	120g
Temperature	0~60 (Operating), -10 ~70 (storage)
Humidity	5 ~ 90% (non-condensing)
MTBF	65000 hrs

// Ordering Information

Model Name	Type	Description
FRM220-NMC-R3	Card	Network Management Controller card, support web, telnet, console, SNMP functions