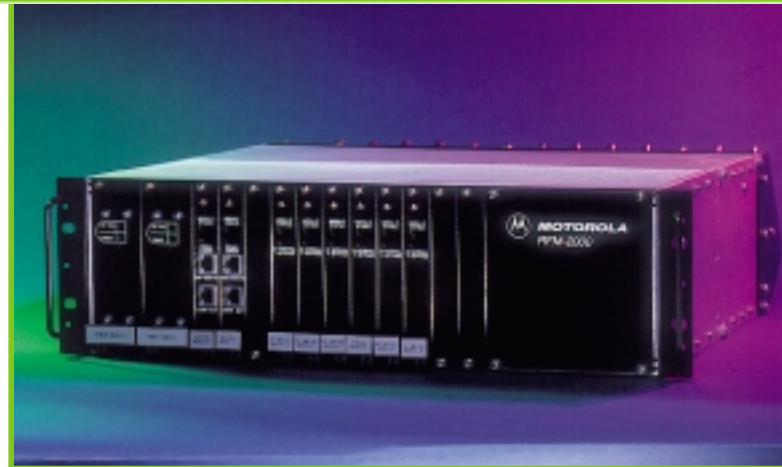


**The foundation for system redundancy is built around the Motorola RF Module.** With dual redundant controllers, dual redundant power supplies and advanced circuitry switching, combined with six 9 port RF connections, the Motorola RFM 2000 is one of the most technically advanced RF Switches on the market today. The RFM 2000, designed to connect a cluster of up to five active DOCSIS Cable Modules (DCM or eDCMs) and one spare DCM, provides a high availability DOCSIS solution. The Motorola RFM 2000 is controlled by the spare DCM, and when instructed, will switch HFC RF connections between modules. Switch-over from a failed DCM to a backup DCM occurs in milliseconds so that all voice and data connections are maintained with no loss of service.



► **Features**

- Dual controllers and dual power supplies
- Five primary switch cards and one bypass switch card with advanced switching circuitry
- Hot-swappable cards for in-service replacement
- Compact 3U form factor

► **Benefits**

- Provides a fully redundant, hot-swappable solution to RF switching that eliminates system downtime supporting 99.999% product availability
- Allows one spare DCM 2000 to backup up to five DCM 2000s providing a cost effective N+1 system redundant solution
- Fail-safe design to avoid any single points of failure
- Compatible with DOCSIS and EuroDOCSIS standards
- Supports Cable Management System for ease of installation and replacement



When combined as part of the CAS 2000, the Motorola RFM 2000 delivers a complete high availability CMTS solution. A single RFM 2000 will support up to five active DCMs or eDCMs and provides a fully redundant high availability CMTS network.

## RFM 2000 SPECIFICATIONS

### UPSTREAM

Frequency Range..... 5 - 65 MHz  
Input Impedance..... 75  $\Omega$  (nominal)  
Bandwidth..... 200, 400, 800, 1600, 3200 KHz

### DOWNSTREAM

Frequency Range..... 88 - 860 MHz  
Output Impedance..... 75  $\Omega$  (nominal)  
Bandwidth..... 6 or 8 MHz

### ENVIRONMENTAL

Operating Temperature..... 0° C to +40° C  
(+32° F to +104° F)  
Storage Temperature Range .. -40° C to 70° C  
Operating Humidity..... 10% to 95%  
(non-condensing)  
Storage Humidity..... 5% to 95%  
Operating Altitude..... 0 to 10,000 Feet  
Storage Altitude..... 0 to 35,000 Feet  
Power Consumption..... 35 W TYP  
Power Source..... 90 - 264 VAC;  
50/60 Hz  
50 W  
-48V DC  
Safety Approvals..... UL 1950;  
CSA C22.2  
No. 950-95;  
IEC 950; EN60950;  
AS/NZS 3260  
Emissions..... FCC Part 15, Class A;  
ICES-003, Class A;  
CISPR 22, Class A;  
EN55022, Class A;  
AS/NZS 3548, Class A;  
EN50083-2  
Immunity..... EN50082-1

### GENERAL

Dimensions..... 17.19" W x 5.25" H x 18.25" D  
Weight..... 21 lbs.  
LEDs (Front Panel)  
Power Module ..... DC Fail, Power  
Control Module..... Module Status, Comm. Error  
RF Module ..... Module Status, Normal/Bypass  
Bypass Module..... Module Status, Normal/Bypass  
Connectors..... BNC Connection to HFC  
Network, MCX/BNC  
Connection to DCM 2000  
or eDCM 2000

## CONCLUSION

The Motorola RFM 2000, the "foundation of system redundancy," provides advanced circuitry switching and fail-safe design to deliver guaranteed service for all data, voice and video applications over the HFC network. When combined with up to five primary DCMs and a spare DCM, the RF Module offers a complete high availability DOCSIS solution.

With the introduction of the CAS 2000 system, Motorola continues to offer proven access solutions, above and beyond DOCSIS 1.1, to meet the changing needs of the high speed data market.



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Specifications subject to change.

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