

# EMC Connectrix MDS 9134 Switch

The EMC® Connectrix® MDS 9134 Fibre Channel switch supports up to 34 ports capable of speeds of 10, 4, 2, and 1 gigabit (Gb) per second and offers cost-effective high availability, security, and ease-of-use in a compact 1-rack-unit (1RU) form factor. In addition, the MDS 9134 supports intelligent network services such as Virtual SANs (VSANs), PortChannels, quality of service (QoS), and security. The base configuration has 24 active ports with the flexibility to upgrade to 32 4 Gb/s Fibre Channel ports in an eight-port increment. In addition, the MDS-9134 supports two 10 Gb/s Fibre Channel ports, for a total of 34 ports. The MDS 9134 is suitable as a stand-alone departmental switch and as an edge switch in core-edge SANs.

## System Architecture

### Fibre Channel Standards

FC-PH, FC-PH-2, FC-PH-3, FC-GS-2, FC-GS-3, FC-FLA, FC-FG, FC-SW-2, FC-AL, FC-AL-2, FC-PDLA, FC-VI, FCP, FCP-2, FC-SB-2, FC-BB, FC-FS, FC-P1, FC-MI, FC-TAPE

### Fibre Channel Ports

Up to 34 ports; base unit ships with 24 active ports; upgrade to 32 4 Gb/s ports in 8-port increments and/or two 10 Gb

### Cascade maximum

Up to 24 switches, 3 hops, depending on configuration

### Virtual SAN (VSAN) Support

Up to 16 VSANs

### Performance

4 Gb/s, full duplex  
10 Gb/s dedicated ports

### Switch Core

Non-blocking

### Classes of Service

Class 2, Class 3, Class F

### Fibre Channel Port Types

F\_Port, FL\_Port, E\_Port

### Media Types

Hot-pluggable, industry-standard LC Small Form-factor Pluggable (SFPs). Short-wave laser up to 1,640 ft/500 meters. Long-wave laser up to 6.21 miles/10 km, 300 meters for 2 Gb/s

### Fabric Services

Simple Name Server, Registered State Change Notification (RSCN), Login Services, Public Loop, Broadcast, In-order Delivery, Name Server Zoning

### Hot-swappable Components

Power Supply, SFPs

### Installation Options

19" EIA-compliant rack

### Optional Features

Enterprise Package  
Fabric Manager Server

### Availability Features

Redundant AC Input  
Hot-swappable power supplies  
Hot swappable fans and SFPs  
Non-disruptive firmware upgrades  
Stateful process restart  
Per VSAN fabric services



## Diagnostics and Troubleshooting Tools

Power-on-self-test (POST) diagnostics, online diagnostics, internal loopbacks, SPAN, Fibre Channel Traceroute capability, Fibre Channel Ping, Fibre Channel Debug, Cisco Fabric Analyzer, Syslog, Port-level statistics

## Supported Operating Systems

AIX, HP/UX, Microsoft Windows, Linux

Refer to the EMC Support Matrix on [www.EMC.com](http://www.EMC.com) for complete details.

## Management

### Interface

- Cisco Fabric Manager and Device Manager
- Cisco Fabric Manager Server (Optional license)
- SNMP support
- Scriptable CLI

**Access Methods** Out-of-band 10/100 Ethernet port, EIA/TIA-232 serial console port, In-band IP over Fibre Channel

**Access Protocols** CLI, SNMP, SMI-S

**Security** RBACL using RADIUS or TACACS+ authentication and accounting (AAA) functions, VSAN-based roles, SSHv2, SSHv3

### Physical Specifications

Dimension	Height (in/cm)	Width (in/cm)	Depth (in/cm)	Weight (lb/kg)
	1.76/4.47	17.16/43.59	18.89/47.98	20/44

### Environmental Specifications

Ambient Operating Temperature	32 to 104°F (0 to 40°C)
Ambient Non-operating Temperature	-40 to 158°F (-40 to 70°C)

### Power

Power supplies (300 W AC) (maximum 2 per switch)

Input: 100 to 240 VAC nominal (+/- 10% for full range)

Input current maximum 20 A

Input current steady state: 4 A @110 VAC, 2 A @ 220 VAC, 50 to 60 Hz nominal (+/- 3 Hz for full range)

Output: 300 W @100 VAC, 300 W @ 220 VAC

Airflow: Front to rear

### Safety

- UL 60950 -1
- CAN/CSA-C22.2 No. 60950 -1
- EN 60950 -1
- IEC 60950 -1
- AS/NZS 60950
- IEC 60825
- EN 60825
- 21 CFR 1040

### EMC

- FCC Part 15 (CFR 47) Class A
- ICES-003 Class A
- EN55022 Class A
- CISPR22 Class A
- AS/NZS CISPR22 Class A
- VCCI Class B
- EN55024
- ETS300 386
- EN50082-1
- EN61000-3-2
- EN61000-3-3
- EN61000-6-1
- CISPR24

### NEBS

- GR-63-Core NEBS Level 3
- GR-1089-Core NEBS Level 3
- ETSI
- ETS 300 019 Storage Class 1.1
- ETS 300 019 Transportation Class 2.3
- ETSI 300 019 Stationary Use Class 3.1



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Specification Sheet  
H4084

### Regulatory Specifications

#### Product Ecology

- Restriction of Hazardous Substances in Electrical and Electronic Equipment (ROHS) Directive 2002/95/EC
- Waste Electrical and Electronic Equipment (WEEE) Directive (2002/96/EC)