



# CONNECTRIX MDS-9250i SWITCH

## Multipurpose Switch

The Connectrix® MDS-9250i Multilayer Switch offers up to forty 16 Gigabit per second (Gb/s) Fibre Channel ports, two 1/10 Gigabit Ethernet IP storage services ports and eight 10 Gigabit Ethernet Fibre Channel over Ethernet (FCoE) ports in a fixed two-rack-unit (2RU) form factor. The SAN Extension over IP application package is enabled as standard on the two fixed Gigabit Ethernet IP storage services ports, enabling features such as Fibre Channel over IP (FCiP) and compression on the switch without the need for additional licenses.

### Specifications

System Architecture	
Features	Technical Specification
Multi-protocol Ports	Up to 40 8Gb or 16Gb Fibre Channel Ports, two 1/10 Gigabit Ethernet ports and eight 10 Gigabit Fibre Channel over Ethernet ports
Supported Optics	Choice of: 16Gb shortwave and long wave Fibre Channel optics 8Gb shortwave or long wave Fibre Channel optics 10Gb or 1Gb Ethernet optics Note: The 16Gb optics will negotiate between 8/10/16Gb and the 8Gb optics negotiate between 2/4/8Gb
Cascade Maximum	5
Virtual SANs	Up to 80 VSANs per Fabric
Performance	Full line rate 16G Fibre Channel
Switch Core	Non-blocking, cross-bar design
Frame Size	Maximum 2112 Bytes
Class of Service	Class 2, 3, and F
Fabric Services	Simple Name Server, Registered State Change Notification (RSCN), Login Services, Broadcast, Name Server Zoning
Fibre Channel Port Types	Standard: E, F, FL and B Enhanced: SD, ST and TE
Media Types	Hot-swappable enhanced Small Form-Factor Pluggable (SFP+) transceivers
Advanced Functions	VSAN, IVR, PortChannel, QoS, NPV

System Architecture Cont'd	
Features	Technical Specification
Hot Swappable Components	SFPs, power supplies and fans
Installation Options	19-inch EIA-compliant rack
Minimum Software Revisions	NX-OS version 6.2.2 or higher
Optional Licenses	<p>Enterprise License – includes advanced traffic engineering and network security features such as IVR, QoS, zoned based QoS, Fibre Channel Security Protocol (FC-SP), port security, VSAN-based access control and fabric binding.</p> <p>Mainframe Package - Includes features required for mainframe environments. FICON supports high-speed connectivity between mainframes and I/O devices. Features include VSAN for FICON and FCP intermixing, FICON Control Unit Port (CUP), Fabric Binding, Switch Cascading, FICON Native Mode Channel-to-Channel Operation, Persistent FICON FCID assignment, Port Swapping for host channel cable connectors, FICON Tape Acceleration.</p> <p>Data Center Network Manager (DCNM) Server-based SAN License – includes advanced management capabilities such as vCenter integration, performance trending, advanced provisioning, backup and dashboards. License is hosted on a server.</p> <p>Data Center Network Manager (DCNM) Switch-based SAN License – includes advanced management capabilities such as vCenter integration, performance trending, advanced provisioning, backup and dashboards. License is hosted on the switch.</p>

Availability
Features
Redundant AC Input
Redundant, hot-swappable power supplies
Online, non-disruptive software upgrades and activation
Non-disruptive subsystem maintenance
Stateful process restart
E-mail home capability

Interoperability
Features
For complete details, refer to EMC Support Matrix (ESM)

## Management

### Features

Data Center Network Manager (DCNM)

Access: Ethernet (RJ-45), RS-232 Console CLI (RJ-45)

## Network Security

### Features

Per-VSAN RBAC using RADIUS and TACACS+-based authentication, authorization, and accounting (AAA) functions

VSAN Fabric Isolation

Intelligent packet inspection at the port level

Fibre Channel Security Protocol (FC-SP) host-to-switch and switch-to-switch authentication

Secure File Transfer Protocol (SFTP)

Secure Shell Version 2 (SSHv2) with Advanced Encryption Services (AES)

Simple Network Management Protocol Version 3 (SNMPv3) with Advanced Encryption Services (AES)

Other built-in security features: Control-plane security, logical unit number (LUN) zoning and read-only zones, hardware-enforced zoning, broadcast zones, and management access, FIPS 140-2 compliance. Other enhanced security features are available with the Enterprise Package.

## Physical Specifications

### Features

Dimensions (H x W x D): 3.84 x 17.22 x 21.4 in. (9.75x43.74x54.36 cm), 2RU

Weight Fully Configured - 22.4 pounds (10.2 kg)

## Power

### Features

Power supply: 300W AC

Power cord: Notched C15 socket connector connecting to C16 plug on power supply

AC input characteristics

100 to 240V AC (10% range)

50 to 60 Hz (nominal)

Airflow (front to back)

200 linear feet per minute (LFM) through system fan assembly

Recommend maintaining a minimum air space of 2.5 in. (6.4 cm) between walls and chassis air vents and a minimum horizontal separation of 6 in. (15.2 cm) between two chassis to prevent overheating

## Environment Specifications

### Features

Temperature, ambient operating: 32 to 104°F (0 to 40°C)

Temperature, ambient non-operating and storage: 40 to 158°F (-40 to 70°C)

Relative humidity, ambient (noncondensing) operating: 10 to 90%

Relative humidity, ambient (noncondensing) non-operating and storage: 10 to 95%

Altitude, operating: -197 to 6500 ft (-60 to 2000m)

## Regulatory Compliance

### Features

### Technical Specification

Safety

- CE Marking
- UL 60950
- CAN/CSA-C22.2 No. 60950
- EN 60950
- IEC 60950
- TS 001
- AS/NZS 3260
- IEC60825
- EN60825
- 21 CFR 1040

EMC

- FCC Part 15 (CFR 47) Class A
- ICES-003 Class A
- EN 55022 Class A
- CISPR 22 Class A
- AS/NZS 3548 Class A
- VCCI Class A
- EN 55024
- EN 50082-1
- EN 61000-6-1
- EN 61000-3-2
- EN 61000-3-3



[Learn more](#) about Dell  
EMC Connectrix



[Contact](#) a Dell EMC Expert



[View more](#) resources



Join the conversation  
with #GetModern