



Highlights

- Gain “pay-as-you-grow” scalability in a high-density switch, supporting up to 48 16 Gbps Fibre Channel ports
 - Provide autosensing Fibre Channel ports, delivering up to 16 Gbps of high-speed, dedicated bandwidth for each port
 - Boost availability with In-Service Software Upgrades (ISSU), enabling the switch to be upgraded without impacting network traffic
-

Cisco MDS 9148S 16G Multilayer Fabric Switch for IBM System Storage

Powerful, compact switch that combines high performance, flexibility and cost effectiveness

Cisco MDS 9148S 16G Multilayer Fabric Switch for IBM® System Storage® is the latest generation of the highly reliable, flexible and low-cost Cisco MDS 9100 Series switches. It combines high performance with exceptional flexibility and cost effectiveness. This powerful, compact one rack-unit (1RU) switch scales from 12 to 48 line-rate 16 Gbps Fibre Channel ports.

Cisco MDS 9148S is excellent for:

- A standalone storage area network (SAN) in small departmental storage environments
- A top-of-the-rack switch in medium-sized redundant fabrics
- An edge switch in enterprise data center core-edge topologies

MDS 9148S, powered by Cisco NX-OS software and Cisco Data Center Network Manager (DCNM) software, delivers advanced storage networking features and functions, combined with ease of management and compatibility with the entire Cisco MDS 9000 Family portfolio for reliable end-to-end connectivity.



High performance and outstanding flexibility at low cost

MDS 9148S provides up to 48 autosensing Fibre Channel ports, capable of speeds of 2, 4, 8 and 16 Gbps—resulting in 16 Gbps of dedicated bandwidth for each port. The switch comes with 12 enabled ports, and it can be scaled up by adding one or more 12-port MDS 9148S On-Demand Port Activation licenses. In fact, it is one of the few switches that scales from 12 to 48 high-performance Fibre Channel ports in a single 1RU form factor.

High-availability platform for mission-critical deployments

In environments in which downtime is intolerable, MDS 9148S offers ISSUs. This means that Cisco NX-OS software can be upgraded while the Fibre Channel ports carry traffic. MDS 9148S includes dual-redundant, hot-swappable power supplies and fan trays, PortChannels for Inter-Switch Link (ISL) resiliency, and F-port channeling for resiliency on uplinks from an MDS 9148S operating in N-Port virtualization (NPV) mode. New hardware-based slow port detection and mitigation capabilities provide enhanced performance and monitoring.



Cisco MDS 9148S 16G Multilayer Fabric Switch for IBM System Storage

Simplified storage management with sophisticated diagnostics

MDS 9148S offers built-in storage network management and SAN plug-and-play capabilities. All features are available through a command-line interface (CLI) or Cisco DCNM for SAN Advanced Edition, a centralized management tool. DCNM task-based wizards simplify management of single or multiple switches and fabrics. For virtual infrastructure, it manages the entire path: from the virtual machine and switch to the physical storage. MDS 9148S also provides intelligent diagnostics, protocol decoding, network analysis tools and the Cisco Call Home feature for added reliability, faster problem resolution and reduced service costs.

Intelligent network services and advanced traffic management

MDS 9148S uses virtual SAN (VSAN) technology for hardware-enforced, isolated environments within a physical fabric. It offers access control lists (ACLs) for hardware-based, intelligent frame processing. Advanced traffic management features, such as fabric-wide quality of service (QoS) and Inter-VSAN Routing (IVR), are included in the optional Cisco MDS 9100 Enterprise Package.¹

Comprehensive network security framework

An extensive set of innovative and powerful security features and functions is available with the optional Cisco MDS 9100 Enterprise Package. It offers Inter VSAN Routing (IVR), per-VSAN role-based authentication, authorization, and accounting (AAA) services using Remote Authentication Dial-In User Service (RADIUS), Lightweight Directory Access Protocol (LDAP), Microsoft Active Directory (AD), and Terminal Access Controller Access-Control System (TACACS+)—as well as other security-related features and functions.¹

Cisco MDS 9148S 16G Multilayer Fabric Switch at a glance

Product number	9711-S48
Hot-swappable components	Power supplies, fan modules, small form-factor pluggable
Warranty	One-year, customer-replaceable unit (CRU) and onsite; next-business-day response; warranty-service upgrades are available
Dimensions	43.70 mm (1.72 in.) H x 435.90 mm (17.16 in.) W x 415.00 mm (16.34 in.) D, 1RU; all units rack-mountable in standard 19-inch Electronic Industries Alliance [EIA] rack
Weight	Fully configured chassis: 9.00 kg (19.84 lb)
Airflow	Back to front (toward ports)
Link speeds	Port speed: 2/4/8/16 Gbps autosensing, optionally configurable
Optional features	MDS 9100 Enterprise Package (FC 7210), MDS 9100 DCNM Advanced Edition (FC 7211) and MDS 9148S 12-port On-Demand activation (FC 7212)

Why IBM?

IBM offers a vast portfolio of hardware, software and services that can help organizations of all sizes address their IT infrastructure requirements in a comprehensive and integrated way. With IBM, organizations can create a more flexible, robust and resilient infrastructure to support critical business operations.

For more information

To learn more about Cisco MDS 9148S 16G Multilayer Fabric Switch for IBM System Storage, please contact your IBM representative or IBM Business Partner, or visit the following website: ibm.com/systems/storage/san/ctype/9148S/

Additionally, IBM Global Financing can help you acquire the IT solutions that your business needs in the most cost-effective and strategic way possible. We'll partner with credit-qualified clients to customize an IT financing solution to suit your business goals, enable effective cash management, and improve your total cost of ownership. IBM Global Financing is your smartest choice to fund critical IT investments and propel your business forward. For more information, visit: ibm.com/financing



© Copyright IBM Corporation 2015

IBM Systems
Route 100
Somers, NY 10589

Produced in the United States of America
February 2015

IBM, the IBM logo, ibm.com, and System Storage are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at ibm.com/legal/copytrade.shtml

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

The performance data discussed herein is presented as derived under specific operating conditions. Actual results may vary.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.

Cisco MDS 9148S 16G Multilayer Fabric Switch and other Cisco products are not IBM products or offerings. Cisco MDS 9148S 16G Multilayer Fabric Switch and other Cisco products are sold or licensed, as the case may be, to users under Cisco's terms and conditions, which are provided with the product or offering. Availability, and any and all warranties for Cisco MDS 9148S 16G Multilayer Fabric Switch and other Cisco products are the direct responsibility of, and are provided directly to users by, Cisco.

¹ Please refer to the [Cisco MDS 9148S 16G Multilayer Fabric Switch for IBM® System Storage® Redbooks Product Guide](#) for additional information.



Please Recycle
