



## Cisco MDS 9000 Series Compatibility Matrix, Release 9.x

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## Preface

### Audience

To use this installation guide, you need to be familiar with electronic circuitry and wiring practices, and preferably be an electronic or electromechanical technician.

### Document Conventions

This document uses the following conventions:



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**Note** Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.

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**Caution** Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

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Warnings use the following conventions:



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**Warning** This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device. Statement 1071.

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### Related Documentation

The documentation set for the Cisco MDS 9000 Series Switches includes the following documents.

#### Release Notes

<http://www.cisco.com/c/en/us/support/storage-networking/mds-9000-nx-os-san-os-software/products-release-notes-list.html>

#### Regulatory Compliance and Safety Information

<http://www.cisco.com/c/en/us/td/docs/switches/datacenter/mds9000/hw/regulatory/compliance/RCSI.html>

### **Compatibility Information**

<http://www.cisco.com/c/en/us/support/storage-networking/mds-9000-nx-os-san-os-software/products-device-support-tables-list.html>

### **Installation and Upgrade**

<http://www.cisco.com/c/en/us/support/storage-networking/mds-9000-nx-os-san-os-software/products-installation-guides-list.html>

### **Configuration**

<http://www.cisco.com/c/en/us/support/storage-networking/mds-9000-nx-os-san-os-software/products-installation-and-configuration-guides-list.html>

### **CLI**

<http://www.cisco.com/c/en/us/support/storage-networking/mds-9000-nx-os-san-os-software/products-command-reference-list.html>

### **Troubleshooting and Reference**

<http://www.cisco.com/c/en/us/support/storage-networking/mds-9000-nx-os-san-os-software/tsd-products-support-troubleshoot-and-alerts.html>

To find a document online, use the Cisco MDS NX-OS Documentation Locator at:

[http://www.cisco.com/c/en/us/td/docs/storage/san\\_switches/mds9000/roadmaps/doclocator.html](http://www.cisco.com/c/en/us/td/docs/storage/san_switches/mds9000/roadmaps/doclocator.html)

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### **Cisco Bug Search Tool**

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Revised: August 26, 2024,

# Cisco MDS 9000 Series Compatibility Matrix

This document provides compatibility information for the Cisco MDS 9000 Series Switches.

In the following “Support Matrix” tables:

- The term, “Yes” indicates the supported release versions.
- The “—” symbol indicates the unsupported release versions.

## New and Change History

**Table 1: Change History**

Date	Description
August 14, 2024	Updated the document for 9.4(2a).
August 18, 2023	Updated the document for 9.4(x).
May 17, 2023	Updated the document for 9.3(x).
January 12, 2023	Updated the document for 64G Transceivers Firmware.
February 1, 2022	Updated the document for 9.2(x).
August 25, 2021	Initial release.

## Software Support Matrix

The following table lists the NX-OS software part numbers supported by the Cisco MDS 9000 Series.

**Table 2: Cisco MDS 9000 Series Software Support Matrix**

<b>Software Part Number</b>	<b>Description</b>	<b>Applicable Product</b>	<b>9.2(x)</b>	<b>9.3(x)</b>	<b>9.4(x)</b>
M97S3K9-9.4.2a	MDS 9700, NX-OS software	MDS 9700 Series	—	—	Yes
M97S3K9-9.4.2			—	—	Yes
M97S3K9-9.4.1a			—	—	Yes
M97S3K9-9.4.1			—	—	Yes
M97S3K9-9.3.2a			—	Yes	—
M97S3K9-9.3.2			—	Yes	—
M97S3K9-9.3.1			—	Yes	—
M97S3K9-9.2.2			Yes	—	—
M97S3K9-9.2.1a			Yes	—	—
M97S3K9-9.2.1			Yes	—	—
M9396VK9-9.4.2a	MDS 9396V, NX-OS software	MDS 9396V Switch	—	—	Yes
M9396VK9-9.4.2			—	—	Yes
M9396VK9-9.4.1a			—	—	Yes
M9396VK9-9.4.1			—	—	Yes
M93S2K9-9.4.2a	MDS 9396T, NX-OS software	MDS 9396T Switch	—	—	Yes
M93S2K9-9.4.2			—	—	Yes
M93S2K9-9.4.1a			—	—	Yes
M93S2K9-9.4.1			—	—	Yes
M93S2K9-9.3.2a			—	Yes	—
M93S2K9-9.3.2			—	Yes	—
M93S2K9-9.3.1			—	Yes	—
M93S2K9-9.2.2			Yes	—	—
M93S2K9-9.2.1a			Yes	—	—
M93S2K9-9.2.1			Yes	—	—

Software Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
M93S5K9-9.4.2a	MDS 9396S, NX-OS software	MDS 9396S Switch	—	—	Yes
M93S5K9-9.4.2			—	—	Yes
M93S5K9-9.4.1a			—	—	Yes
M93S5K9-9.4.1			—	—	Yes
M93S5K9-9.3.2a			—	Yes	—
M93S5K9-9.3.2			—	Yes	—
M93S5K9-9.3.1			—	Yes	—
M93S5K9-9.2.2			Yes	—	—
M93S5K9-9.2.1a			Yes	—	—
M93S5K9-9.2.1			Yes	—	—
M92S7K9-9.4.2a	MDS 9220i NX-OS software	MDS 9220i Switch	—	—	Yes
M92S7K9-9.4.2			—	—	Yes
M92S7K9-9.4.1a			—	—	Yes
M92S7K9-9.4.1			—	—	Yes
M92S7K9-9.3.2a			—	Yes	—
M92S7K9-9.3.2			—	Yes	—
M92S7K9-9.3.1			—	Yes	—
M92S7K9-9.2.2			Yes	—	—
M92S7K9-9.2.1a			Yes	—	—
M92S7K9-9.2.1			Yes	—	—

Software Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
M92S5K9-9.4.2a	MDS 9250i NX-OS software	MDS 9250i Switch	—	—	Yes
M92S5K9-9.4.2			—	—	Yes
M92S5K9-9.4.1a			—	—	Yes
M92S5K9-9.4.1			—	—	Yes
M92S5K9-9.3.2a			—	Yes	—
M92S5K9-9.3.2			—	Yes	—
M92S5K9-9.3.1			—	Yes	—
M92S5K9-9.2.2			Yes	—	—
M92S5K9-9.2.1a			Yes	—	—
M92S5K9-9.2.1			Yes	—	—
M9148S6K9-9.4.2a	MDS 9148T, NX-OS software	MDS 9148T Switch	—	—	Yes
M9148S6K9-9.4.2			—	—	Yes
M9148S6K9-9.4.1a			—	—	Yes
M9148S6K9-9.4.1			—	—	Yes
M9148S6K9-9.3.2a			—	Yes	—
M9148S6K9-9.3.2			—	Yes	—
M9148S6K9-9.3.1			—	Yes	—
M9148S6K9-9.2.2			Yes	—	—
M9148S6K9-9.2.1a			Yes	—	—
M9148S6K9-9.2.1			Yes	—	—



Software Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
M91S5K9-9.4.2a	MDS 9148S, NX-OS software	MDS 9148S Switch	—	—	Yes
M91S5K9-9.4.2			—	—	Yes
M91S5K9-9.4.1a			—	—	Yes
M91S5K9-9.4.1			—	—	Yes
M91S5K9-9.3.2a			—	Yes	—
M91S5K9-9.3.2			—	Yes	—
M91S5K9-9.3.1			—	Yes	—
M91S5K9-9.2.2			Yes	—	—
M91S5K9-9.2.1a			Yes	—	—
M91S5K9-9.2.1			Yes	—	—
M91S6K9-9.4.2a	MDS 9132T, NX-OS software	MDS 9132T Switch	—	—	Yes
M91S6K9-9.4.2			—	—	Yes
M91S6K9-9.4.1a			—	—	Yes
M91S6K9-9.4.1			—	—	Yes
M91S6K9-9.3.2a			—	Yes	—
M91S6K9-9.3.2			—	Yes	—
M91S6K9-9.3.1			—	Yes	—
M91S6K9-9.2.2			Yes	—	—
M91S6K9-9.2.1a			Yes	—	—
M91S6K9-9.2.1			Yes	—	—
M9124VS8K9-9.4.2a	MDS 9124V, NX-OS software	MDS 9124V Switch	—	—	Yes
M9124VS8K9-9.4.2			—	—	Yes
M9124VS8K9-9.4.1a			—	—	Yes
M9124VS8K9-9.4.1			—	—	Yes
M9124VS8K9-9.3.2a			—	Yes	—
M9124VS8K9-9.3.2			—	Yes	—
M9124VS8K9-9.3.1			—	Yes	—

Software Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
M9148VS8K9-9.4.2a	MDS 9148V, NX-OS software	MDS 9148V Switch	—	—	Yes
M9148VS8K9-9.4.2			—	—	Yes
M9148VS8K9-9.4.1a			—	—	Yes
M9148VS8K9-9.4.1			—	—	Yes
M9148VS8K9-9.3.2a			—	Yes	—
M9148VS8K9-9.3.2			—	Yes	—
M9148VS8K9-9.3.1			—	Yes	—

## Licenses Support Matrix

The following table lists the NX-OS licenses supported by the Cisco MDS 9000 Series.

**Table 3: Cisco MDS 9000 Series Licenses Support Matrix**

Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
DCNMANM9K9	Cisco Prime Data Center Network Manager	MDS 9700 Series	Yes	Yes	Yes
M97ENTK9	Enterprise Package for one Cisco MDS 9700 Series Multilayer Director	MDS 9700 Series	Yes	Yes	Yes
M97FIC1K9	Cisco MDS 9700 Mainframe Package license for one Cisco MDS 9700 Series Multilayer Director	MDS 9700 Series	Yes	Yes	Yes
M9300ENT1K9	Cisco MDS 9300 Series Enterprise Package	MDS 9396S Switch	Yes	Yes	Yes
M9396T-PL16	Cisco MDS 9396T 16-port On-Demand Activation license	MDS 9396T Switch	Yes	Yes	Yes
M9396S-PL12	Cisco MDS 9396S 12-port On-Demand Activation license	MDS 9396S Switch	Yes	Yes	Yes
DCNMANM9K9	Cisco Prime Data Center Network Manager	MDS 9396S Switch	Yes	—	—
M9200ENT1K9	Cisco MDS 9200 Series Enterprise Package	MDS 9250i Switch	Yes	—	—
M9200FIC1K9	Cisco MDS 9200 Series Mainframe Package	MDS 9250i Switch	Yes	Yes	Yes
DCNMANM9K9	Cisco Prime Data Center Network Manager	MDS 9250i Switch	Yes	—	—
M9220URGK9	Cisco MDS 9220i On-Demand Activation license	MDS 9220i Switch	Yes	Yes	Yes

Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
M9250IIOA	Cisco MDS 9250i I/O Accelerator Services package	MDS 9250i Switch	Yes	Yes	Yes
M9200XRC	Cisco XRC Acceleration	MDS 9250i Switch	Yes	Yes	Yes
M9250I20-16G	MDS 9250i 20-port Fibre Channel Upgrade License, spare	MDS 9250i Switch	Yes	Yes	Yes
DCNSANM9K9	Cisco Prime Data Center Network Manager	MDS 9148S Switch	Yes	Yes	Yes
M9148T-PL8	Cisco MDS 9148T 8-port On-Demand Activation license	MDS 9148T Switch	Yes	Yes	Yes
M9148S-PL12	Cisco MDS 9148S 12-port On-Demand Activation license	MDS 9148S Switch	Yes	Yes	Yes
M9100ENTIK9	Enterprise Package for one Cisco MDS 9148S Switch	MDS 9148S Switch	Yes	—	—
M9132T-PL8	Cisco MDS 9132T 8-port On-Demand Activation	MDS 9132T Switch	Yes	Yes	Yes
M9100FICIEK9	FICON license	MDS 9100 Series	—	—	—
M9124V-PL8	Cisco MDS 9124V 8-port On-Demand Activation license	MDS 9124V Switch	—	Yes	Yes
M9148V-PL8	Cisco MDS 9148V 24-port On-Demand Activation license	MDS 9148V Switch	—	Yes	Yes

## Chassis Support Matrix

The following table lists the chassis support matrix for Cisco MDS 9000 Series Switches.

**Table 4: Cisco MDS 9000 Series Chassis Support Matrix**

Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
DS-C9718	Cisco MDS 9718 Multilayer Director (18-slot multilayer director with 2 half-width slots for Supervisor modules, and 16 slots available for switching modules — SFPs sold separately)	MDS 9718 Switch	Yes	Yes	Yes
DS-C9710	Cisco MDS 9710 Multilayer Director (10-slot multilayer director with 2 half-width slots for Supervisor modules, and 8 slots available for switching modules — SFPs sold separately)	MDS 9710 Switch	Yes	Yes	Yes

<b>Part Number</b>	<b>Description</b>	<b>Applicable Product</b>	<b>9.2(x)</b>	<b>9.3(x)</b>	<b>9.4(x)</b>
DS-C9706	Cisco MDS 9706 Multilayer Director (6-slot multilayer director with 2 half-width slots for Supervisor modules, and 4 slots available for switching modules — SFPs sold separately)	MDS 9706 Switch	Yes	Yes	Yes
DS-C9396V-K9	Cisco MDS 9396V Fibre Channel Switch (2RU FC switch with 96 (48 active) 64-Gbps Fibre Channel ports, 2 bidirectional PSUs)	MDS 9396V Switch	—	—	Yes
DS-C9396T-K9	Cisco MDS 9396T Fibre Channel Switch (2RU FC switch with 96 (48 active) 32-Gbps Fibre Channel ports, 2 bidirectional PSUs, and three line card extension modules)	MDS 9396T Switch	Yes	Yes	Yes
DS-C9396S-K9	Cisco MDS 9396S 96-Port Multilayer Fabric Switch (2RU fixed-configuration multilayer fabric switch with 96 16-Gbps Fibre Channel ports)	MDS 9396S Switch	Yes	Yes	Yes
DS-C9220I-K9	Cisco MDS 9220i Fabric Switch is a powerful and compact 1 rack unit (1RU) SAN fabric switch that provides 12 x 32 Gbps line rate Fibre Channel ports and 6 x IPS ports	MDS 9220i Switch	Yes	Yes	Yes
DS-C9250I-K9	Cisco MDS 9250i offers up to forty 16-Gbps Fibre Channel ports, two 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	MDS 9250i Switch	Yes	Yes	Yes
DS-C9148T-K9	Cisco MDS 9148T Fibre Channel Switch (1RU FC switch with 48 (24 active) 32-Gbps Fibre Channel ports, 1 port side intake PSU, 1 port side exhaust PSU)	MDS 9148T Switch	Yes	Yes	Yes
DS-C9148S-K9	Cisco MDS 9148S 48-Port Multilayer Fabric Switch (1RU fixed-configuration multilayer fabric switch with 48 16-Gbps Fibre Channel ports)	MDS 9148S Switch	Yes	Yes	Yes
DS-C9132T-K9	Cisco MDS 9132T Fibre Channel Switch (1RU FC switch with 32 (8 active) 32-Gbps Fibre Channel ports, 1 port side exhaust PSU, and a line card extension module)	MDS 9132T Switch	Yes	Yes	Yes

Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
DSC9132FMK9	Cisco MDS 9132T Fibre Channel Switch (1RU FC switch with 32 (8 active) 32-Gbps Fibre Channel ports, 1 port side intake PSU, and a line card extension module)	MDS 9132T Switch	Yes	Yes	Yes
DSC9124V-K9	Cisco MDS 9124V SAN Fabric Switch (1RU switch with 24 x 8/16/32/64-Gbps multi-speed ports)	MDS 9124V Switch	—	Yes	Yes
DSC9148V-K9	Cisco MDS 9148V SAN Fabric Switch (1RU switch with 48 x 8/16/32/64-Gbps multi-speed ports)	MDS 9148V Switch	—	Yes	Yes

## Supervisor Modules Support Matrix

The following table lists the supervisor modules supported on Cisco MDS 9000 Series Switches.

**Table 5: Cisco MDS 9000 Series Supervisor Modules Support Matrix**

Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
DS-X97-SF1E-K9	Cisco MDS 9700 Series Supervisor-1E Module	MDS 9718 Switch	Yes	Yes	Yes
DS-X97-SF1-K9	Cisco MDS 9700 Series Supervisor-1 Module	MDS 9710 Switch MDS 9706 Switch	Yes	Yes	Yes
DS-X97-SF4-K9	Cisco MDS 9700 Series Supervisor-4 Module	MDS 9718 Switch <sup>1</sup> MDS 9710 Switch MDS 9706 Switch	Yes	Yes	Yes

<sup>1</sup> Cisco MDS 9700 Series Supervisor-4 Module (DS-X97-SF4-K9) is introduced for the Cisco MDS 9718 Multilayer Director starting from Cisco MDS NX-OS Release 8.4(2a).

## Switching Modules Support Matrix

The following table lists the switching modules supported on Cisco MDS 9000 Series Switches.

**Table 6: Cisco MDS 9000 Series Switching Modules Support Matrix**

Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
DS-X9748-3072K9	Cisco MDS 9000 Series 48-port 64-Gbps Fibre Channel Switching Module	MDS 9700 Series	Yes	Yes	Yes

Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
DS-X9648-1536K9	Cisco MDS 9000 Series 48-Port 32-Gbps Fibre Channel Switching Module	MDS 9700 Series	Yes	Yes	Yes
DS-X9334-K9	Cisco MDS 9000 Series 24/10 SAN Extension Module	MDS 9700 Series	Yes	Yes	Yes
DS-X9824-960K9	Cisco MDS 9000 Series 24-port 40-Gbps Fibre Channel over Ethernet Module with QSFP+ connectors	MDS 9700 Series	Yes	Yes	Yes
DS-X9448-768K9	Cisco MDS 9000 Series 48-port 16-Gbps Fibre Channel Switching Module with SFP LC connectors	MDS 9700 Series	Yes	Yes	Yes
DS-X9848-480K9	Cisco MDS 9000 Series 48-Port 10-Gigabit Fibre Channel over Ethernet (FCoE) Module with SFP LC connectors	MDS 9700 Series	Yes	Yes	Yes

## Crossbar Switching Fabric Modules Support Matrix

The following table lists the crossbar switching fabric modules supported on Cisco MDS 9000 Series Switches.

**Table 7: Cisco MDS 9000 Series Crossbar Switching Fabric Modules Support Matrix**

Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
DS-X9718-FAB1	Cisco MDS 9718 Crossbar Switching Fabric 1 Module	MDS 9718 Switch	Yes	Yes	Yes
DS-X9710-FAB1	Cisco MDS 9710 Crossbar Switching Fabric 1 Module	MDS 9710 Switch	Yes	Yes	Yes
DS-X9706-FAB1	Cisco MDS 9706 Crossbar Switching Fabric 1 Module	MDS 9706 Switch	Yes	Yes	Yes
DS-X9718-FAB3	Cisco MDS 9718 Crossbar Switching Fabric 3 Module	MDS 9718 Switch	Yes	Yes	Yes
DS-X9710-FAB3	Cisco MDS 9710 Crossbar Switching Fabric 3 Module	MDS 9710 Switch	Yes	Yes	Yes
DS-X9706-FAB3	Cisco MDS 9706 Crossbar Switching Fabric 3 Module	MDS 9706 Switch	Yes	Yes	Yes

## Power Supply Units Support Matrix

The following table lists the power supply units supported on Cisco MDS 9000 Series Switches.

**Table 8: Cisco MDS 9000 Series Power Supply Units Support Matrix**

Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
DS-CAC97-3KW	3000W AC power supply for Cisco MDS 9700 Series	MDS 9700 Series	Yes	Yes	Yes
DS-CDC97-3KW	3000W DC power supply for Cisco MDS 9700 Series	MDS 9700 Series	Yes	Yes	Yes
DS-CHV-3.5KW	3500W HV AC/DC power supply for Cisco MDS 9700 Series	MDS 9700 Series	Yes <sup>2</sup>	Yes	Yes
DS-CAC-1400W-E	1400W AC port-side exhaust power supply	MDS 9396V Series	—	—	Yes
DS-CAC-1400W-I	1400W AC port-side intake power supply	MDS 9396V Series			
DS-CHV-2000W-I	2000 W HVAC/HVDC port-side intake power supply	MDS 9396V Series			
DS-CAC-1200W-E	1200W AC power supply	MDS 9396S Switch	Yes	Yes	Yes
DS-CAC-1200W	1200W AC/DC power supply	MDS 9396S Switch	Yes	Yes	Yes
		MDS 9396T Switch	Yes	Yes	Yes
		MDS 9220i Switch	Yes	Yes	Yes
DS-CAC-500W-E	500W AC power supply, port side exhaust	MDS 9220i Switch	Yes	Yes	Yes
		MDS 9124V Switch	—	Yes	Yes
		MDS 9148V Switch	—	Yes	Yes
DS-CAC-500W-I	500W AC power supply, port side intake	MDS 9220i Switch	Yes	Yes	Yes
		MDS 9124V Switch	—	Yes	Yes
		MDS 9148V Switch	—	Yes	Yes
DS-C50I-300AC	300W AC power supply	MDS 9250i Switch	Yes	Yes	Yes
DS-C48S-300AC	300W AC power supply	MDS 9148S Switch	Yes	Yes	Yes
DS-CAC-650W-I	650W AC power supply, port side intake	MDS 9132T Switch	Yes	Yes	Yes
		MDS 9148T Switch	Yes	Yes	Yes
DS-CAC-650W-E	650W AC power supply, port side exhaust	MDS 9132T Switch	Yes	Yes	Yes
		MDS 9148T Switch	Yes	Yes	Yes

<sup>2</sup> This power supply unit is supported starting from Cisco MDS NX-OS Release 8.1(1b).

## Fan Modules and Fan Trays Support Matrix

The following table lists the fan trays supported on Cisco MDS 9000 Series Switches.

**Table 9: Cisco MDS 9000 Series Fan Modules and Fan Trays Support Matrix**

Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
DS-C9718-FAN	Cisco MDS 9718 Fan tray	MDS 9718 Switch	Yes	Yes	Yes
DS-C9710-FAN	Cisco MDS 9710 Fan tray	MDS 9710 Switch	Yes	Yes	Yes
DS-C9706-FAN	Cisco MDS 9706 Fan tray	MDS 9706 Switch	Yes	Yes	Yes
DS-C96V-FAN-I	Cisco MDS 9396V Fan module, port side intake	MDS 9396V Switch	—	—	Yes
DS-C96V-FAN-E	Cisco MDS 9396V Fan module, exhaust side intake	MDS 9396V Switch	—	—	Yes
DS-C96S-FAN-I	Cisco MDS 9396S Fan module, port side intake	MDS 9396S Switch	Yes	Yes	Yes
	Cisco MDS 9396T Fan module, port side intake	MDS 9396T Switch	Yes	Yes	Yes
DS-C96S-FAN-E	Cisco MDS 9396S Fan module, port side exhaust	MDS 9396S Switch	Yes	Yes	Yes
	Cisco MDS 9396T Fan module, port side exhaust	MDS 9396T Switch	Yes	Yes	Yes
DS-C32S-FAN-I	Cisco MDS 9220i Fan module, port side intake	MDS 9220i Switch	Yes	Yes	Yes
DS-C32S-FAN-E	Cisco MDS 9220i Fan module, port side exhaust	MDS 9220i Switch	Yes	Yes	Yes
DS-C50I-FAN	Cisco MDS 9250i Fan module	MDS 9250i Switch	Yes	Yes	Yes
DS-C48S-FAN	Cisco MDS 9148S Fan module	MDS 9148S Switch	Yes	Yes	Yes



Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
DS-C32S-FAN-I	Cisco MDS 9132T Fan module, port side intake	MDS 9132T Switch	Yes	Yes	Yes
	Cisco MDS 9148T Fan module, port side intake	MDS 9148T Switch	Yes	Yes	Yes
	Cisco MDS 9124V Fan module, port side intake	MDS 9124V Switch	—	Yes	Yes
	Cisco MDS 9148V Fan module, port side intake	MDS 9148V Switch	—	Yes	Yes
DS-C32S-FAN-E	Cisco MDS 9132T Fan module, port side exhaust	MDS 9132T Switch	Yes	Yes	Yes
	Cisco MDS 9148T Fan module, port side exhaust	MDS 9148T Switch	Yes	Yes	Yes
	Cisco MDS 9124V Fan module, port side exhaust	MDS 9124V Switch	—	Yes	Yes
	Cisco MDS 9148V Fan module, port side exhaust	MDS 9148V Switch	—	Yes	Yes

## Optics Support Matrix

The following table lists the optical components supported by the Cisco MDS 9000 Series.

**Table 10: Cisco MDS 9000 Series Optics Support Matrix**

Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
QSFP-40G-LR4-S	40GBASE-LR4 QSFP Module	MDS 9220i	Yes	Yes	Yes
QSFP-40GE-LR4	40GBASE-LR4 QSFP+ Module	DS-X9824-960K9	Yes	Yes	Yes
QSFP-40GE-ER4	40GBASE-ER4 QSFP+ Module	DS-X9824-960K9	Yes	Yes	Yes
SFP-10G-SR / DS-SFP-10GE-SR	10GBASE-SR SFP+ Module	MDS 9220i MDS 9250i MDS 9396S DS-X9448-768K9 DS-X9848-480K9 DS-X9334-K9	Yes	Yes	Yes
QSFP-40G-SR4	40GBASE-SR4 QSFP+ Module	DS-X9824-960K9	Yes	Yes	Yes

Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
SFP-10G-CSR-S	10GBASE-CSR SFP+ Module	MDS 9220i	Yes	Yes	Yes
QSFP-40G-CSR4	40GBASE-CSR4, QSFP+ Module	MDS 9220i DS-X9824-960K9	Yes	Yes	Yes
QSFP-40G-SR-BD	40GBASE-SR-BiDi, QSFP+ Module	DS-X9824-960K9	Yes	Yes	Yes
SFP-10G-LR-S	10GBASE-LR SFP+ Module	MDS 9220i	Yes	Yes	Yes
SFP-10G-LR / DS-SFP-10GE-LR	10GBASE-LR SFP+ Module	MDS 9220i MDS 9250i MDS 9396S DS-X9448-768K9 DS-X9848-480K9 DS-X9334-K9	Yes	Yes	Yes
SFP-10G-ER	10GBASE-ER SFP+ Module	MDS 9250i MDS 9396S DS-X9448-768K9 DS-X9848-480K9 DS-X9334-K9	Yes	Yes	Yes
SFP-H10GB-CU1M	10GBASE-CU SFP+ cable 1 meter	DS-X9334-K9 DS-X9848-480K9 MDS 9250i	Yes	Yes	Yes
SFP-H10GB-CU3M	10GBASE-CU SFP+ cable 3 meter	DS-X9334-K9 DS-X9848-480K9 MDS 9250i	Yes	Yes	Yes
SFP-H10GB-CU5M	10GBASE-CU SFP+ cable 5 meter	DS-X9334-K9 DS-X9848-480K9 MDS 9250i	Yes	Yes	Yes
SFP-H10GB-ACU7M	10GBASE-CU SFP+ active copper cable 7 meter	DS-X9334-K9 DS-X9848-480K9 MDS 9250i	Yes	Yes	Yes
SFP-H10GB-ACU10M	10GBASE-CU SFP+ active copper cable 10 meter	DS-X9334-K9 DS-X9848-480K9 MDS 9250i	Yes	Yes	Yes

Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
SFP-25G-SR-S(=)	25GBASE-SR SFP Module (Spare)	DS-C9220i-K9	—	Yes	Yes
SFP-10/25G-CSR-S(=)	Dual rate 10/25GBASE-CSR SFP Module (Spare)	DS-C9220i-K9	—	Yes	Yes




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**Note** For the latest information about supported transceivers (SFPs), see the [Cisco MDS 9000 Series Pluggable Transceivers](#) data sheet.

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## Transceivers Support Matrix

The following table lists the transceivers supported by the Cisco MDS 9000 Series.

**Table 11: Cisco MDS 9000 Series Transceivers Support Matrix**

<b>Component</b>	<b>Part Number</b>	<b>Description</b>	<b>Applicable Product</b>	<b>9.2(x)</b>	<b>9.3(x)</b>	<b>9.4(x)</b>
LC-type fiber-optic SFP	DS-SFP-FC64G-SW	SFP+ optics (LC type) for 64-Gbps Fibre Channel for shortwave mode	DS-X9648-3072K9 MDS 9124V MDS 9148V MDS 9396V	—	Yes	Yes
	DS-SFP-FC32G-SW	SFP+ optics (LC type) for 32-Gbps Fibre Channel for shortwave mode	DS-X9648-3072K9 DS-X9648-1536K9 MDS 9220i MDS 9132T MDS 9148T MDS 9396T	Yes	Yes	Yes
			MDS 9124V MDS 9148V MDS 9396V	—	Yes	Yes
			DS-SFP-FC32G-LW	SFP+ optics (LC type) for 32-Gbps Fibre Channel for longwave mode	DS-X9648-3072K9 DS-X9648-1536K9 MDS 9220i MDS 9132T MDS 9148T MDS 9396T	Yes
	DS-SFP-FC32G-LW	SFP+ optics (LC type) for 32-Gbps Fibre Channel for longwave mode	MDS 9124V MDS 9148V MDS 9396V	—	Yes	Yes
			DS-SFP-FC32G-ELW	SFP+ optics (LC type) for 32-Gbps Fibre channel for longwave mode; (25km reach)	DS-X9648-3072K9 DS-X9648-1536K9 MDS 9220i MDS 9132T MDS 9148T MDS 9396T	Yes <sup>3</sup>
	DS-SFP-FC32G-ELW	SFP+ optics (LC type) for 32-Gbps Fibre channel for longwave mode; (25km reach)	MDS 9124V MDS 9148V MDS 9396V	—	Yes	Yes

Component	Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
	DS-SFP-FC16G-SW	SFP+ optics (LC type) for 16-Gbps Fibre Channel for shortwave mode	DS-X9648-3072K9	Yes	Yes	Yes
			DS-X9448-768K9			
			DS-X9648-1536K9			
			DS-X9334-K9			
			MDS 9220i			
			MDS 9250i			
			MDS 9148S			
			MDS 9396S			
			MDS 9132T			
			MDS 9148T			
			MDS 9396T			
			MDS 9124V	—	Yes	Yes
			MDS 9148V			
			MDS 9396V			
	DS-SFP-FC16G-LW	SFP+ optics (LC type) for 16-Gbps Fibre Channel for longwave mode (10km reach)	DS-X9448-768K9	Yes	Yes	Yes
			DS-X9648-3072K9			
			DS-X9648-1536K9			
			DS-X9334-K9			
			MDS 9220i			
			MDS 9250i			
			MDS 9148S			
			MDS 9396S			
			MDS 9132T			
			MDS 9148T			
			MDS 9396T			
			MDS 9124V	—	Yes	Yes
			MDS 9148V			
			MDS 9396V			
	DS-SFP-FC16G-ELW	SFP+ optics (LC type) for 16-Gbps Fibre channel for longwave mode; (25km reach)		Yes	—	—

Component	Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
			DS-X9648-3072K9 DS-X9448-768K9 DS-X9648-1536K9 DS-X9334-K9 MDS 9220i MDS 9250i MDS 9148S MDS 9396S MDS 9132T MDS 9148T MDS 9396T			
			MDS 9124V MDS 9148V MDS 9396V	—	Yes	Yes
	DS-SFP-FC10G-SW	SFP+ optics (LC type) for 10-Gbps Fibre Channel for shortwave mode	DS-X9448-768K9 DS-X9334-K9 MDS 9396S	Yes	Yes	Yes
	DS-SFP-FC10G-LW	SFP+ optics (LC type) for 10-Gbps Fibre Channel for longwave mode (10km reach)	DS-X9448-768K9 DS-X9334-K9 MDS 9396S	Yes	Yes	Yes
	DS-SFP-FC8G-SW	SFP+ optics (LC type) for 2-, 4-, or 8-Gbps Fibre Channel for shortwave mode	DS-X9448-768K9 DS-X9334-K9 MDS 9220i MDS 9250i MDS 9148S MDS 9396S MDS 9132T MDS 9148T MDS 9396T	Yes	Yes	Yes
	DS-SFP-FC8G-LW	SFP+ optics (LC type) for 2-, 4-, or 8-Gbps Fibre Channel for longwave mode; supports distances up to 10 km		Yes	Yes	Yes

Component	Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
			DS-X9448-768K9 DS-X9334-K9 MDS 9220i MDS 9250i MDS 9148S MDS 9396S MDS 9132T MDS 9148T MDS 9396T			
	DS-SFP-FC8G-ER	SFP+ optics (LC type) for 2-, 4-, or 8-Gbps Fibre Channel for extended reach (40 km reach)	DS-X9448-768K9 DS-X9334-K9 MDS 9220i MDS 9250i MDS 9148S MDS 9396S MDS 9132T MDS 9148T MDS 9396T	Yes	Yes	Yes
	DS-SFP-FCGE-SW	SFP optics (LC type) for 1-Gbps Ethernet and 1- or 2-Gbps Fibre Channel for shortwave mode; not for use in 4-Gbps-capable ports	DS-X9334-K9 MDS 9250i	Yes	Yes	Yes
	DS-SFP-FCGE-LW	SFP optics (LC type) for 1-Gbps Ethernet and 1- or 2-Gbps Fibre Channel for longwave mode; not for use in 4-Gbps-capable ports	DS-X9334-K9 MDS 9250i	Yes	Yes	Yes
	DS-SFP-GE-T	SFP (RJ-45 connector) for Gigabit Ethernet over copper	DS-X9334-K9 MDS 9250i	Yes	Yes	Yes
	GLC-SX-MMD	SFP optics (LC type) for 1-Gbps Ethernet for shortwave mode	DS-X9334-K9 MDS 9250i MDS 9220i	Yes	Yes	Yes
	GLC-LH-MMD	1000BASE-LX/LH long-wavelength; with DOM		Yes	Yes	Yes

Component	Part Number	Description	Applicable Product	9.2(x)	9.3(x)	9.4(x)
			MDS 9220i MDS 9250i MDS 9148S MDS 9396S MDS 9132T MDS 9148T MDS 9396T			
Cisco Coarse Wavelength-Division Multiplexing (CWDM)	DS-CWDM8Gxxxx	CWDM 8-Gbps Fibre Channel SFP LC type, where product number xxxx = 1470, 1490, 1510, 1530, 1550, 1570, 1590 or 1610	DS-X9448-768K9 DS-X9648-1536K9 DS-X9334-K9 MDS 9396S MDS 9220i MDS 9250i MDS 9148S MDS 9132T MDS 9148T MDS 9396T	Yes	Yes	Yes
Dense Wavelength-Division Multiplexing (DWDM)	DWDM-SFP10G-xx.xx	10GBASE-DWDM SFP+	DS-X9848-480K9 DS-X9334-K9 MDS 9250i	Yes	Yes	Yes
Optical add/drop multiplexer (OADM)	DS-CWDMOADM4A	4-channel CWDM optical add/drop multiplexer (OADM) module (Cisco CWDM 1470, 1490, 1510, or 1530 NM)	MDS 9000 Series	Yes	Yes	Yes
	DS-CWDMOADM4B	4-channel CWDM OADM module (Cisco CWDM 1550, 1570, 1590, or 1610 NM)	MDS 9000 Series	Yes	Yes	Yes
	DS-CWDM-MUX8A	OADM for 8 CWDM wavelengths	MDS 9000 Series	Yes	Yes	Yes
CWDM Multiplexer Chassis	DS-CWDMCHASSIS	2-slot chassis for CWDM OADMs	MDS 9000 Series	Yes	Yes	Yes

<sup>3</sup> DS-SFP-FC32G-ELW SFP is supported from Cisco MDS NX-OS Release 8.4(2).





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**Note** Contact customer support for upgrading 64 Gbps FC transceivers firmware.

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## Determining Cisco MDS NX-OS Version Compatibility

This section lists the software versions that are compatible in a mixed SAN environment and the minimum software versions that are supported on switches directly connected over E\_ports or configured in NPV mode or connected using IVR. We suggest that you use the software release that is recommended by your vendor for all Cisco MDS 9000 Series products.

**Table 12: Software Release Compatibility for Cisco MDS NX-OS Release 9.x**

Cisco MDS NX-OS Software	Minimum MDS NX-OS
MDS NX-OS Release 9.x	MDS NX-OS Release 9.2(1) and later
	MDS NX-OS Release 8.4(2) and later

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