



Overview

- [Overview, on page 1](#)

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This switch chassis includes the following modules:

- Supervisor modules (one or two) in slots SUP 1 and SUP 2 (numbered from left to right on the chassis)
- System controllers (two) (N9K-SC-A) in slots SC 1 and SC 2 (numbered from left to right on the chassis)
- Line cards (up to eight) in slots LC 1 to LC 8 (numbered from top to bottom on the chassis) supported by the same type of fabric module

For compatibility information, please refer to the [Line Card and Fabric Module Compatibility](#) data sheets.



Note Do not mix ACI-mode line cards with NX-OS mode line cards in the same switch.

- Fabric modules in slots FM 1 to FM 6 (numbered from left to right on the chassis)

See the following table for the compatibility of fabric modules, fans, and fabric module blanks or fan power cards.

Table 1: Compatibility of Fabric Modules, Fans, and Fabric Module Blanks/Fan Power Cards

Fabric Module	Fan	Fabric Module Blank or Fan Power Card
N9K-C9508-FM	N9K-C9508-FAN	N9K-C9508-FM-Z
N9K-C9508-FM-E	N9K-C9508-FAN	N9K-C9508-FM-Z
N9K-C9508-FM-E2	N9K-C9508-FAN	N9K-C9508-FM-Z
N9K-C9508-FM-G	N9K-C9508-FAN2	N9K-C9508-FAN-PWR

See the following table for the required fabric module types and quantities for maximum bandwidth.

Table 2: Supported Fabric Modules and Line Cards

Fabric Module	Fabric Modules Required for Maximum Bandwidth	Supported Line Cards
N9K-C9508-FM	6	N9K-X9736PQ
N9K-C9508-FM-E	4	N9K-X9732C-EX
	5	N9K-X9736C-FX
	5	N9K-X9736Q-FX
N9K-C9508-FM-E2	4	N9K-X9732C-EX
	5	N9K-X9736C-FX
	5	N9K-X9736Q-FX
N9K-C9508-FM-G ¹	5	N9K-X9736Q-FX
	5	N9K-X9736C-FX
	4	N9K-X9716D-GX

¹ Note that -G fabric modules require the N9K-C9508-FAN2 fan trays for operation.



Note The fabric modules must be installed in specific slots as follows (installing fabric modules in other slots can cause a module mismatch condition):

- For three modules, they must be in slots FM 2, FM 4, and FM 6
- For four modules, they must be in slots FM2, FM 3, FM 4, and FM 6
- For five modules, they can be in slots FM 2, FM 3, FM 4, FM 5, and FM 6.
- For six modules, they are in slots FM 1, FM 2, FM 3, FM 4, FM 5, and FM 6

See the following table for information about line card and fabric module compatibility.

Table 3: FM-25 Feature Support Matrix for Cisco Nexus 9000 Series line cards and fabric modules

	Line cards				
	X9736PQ	X9736Q-FX	X9732C-EX	X9736C-FX	X9716D-GX
Fabric modules					
C9508-FM	Yes	No	No	No	No
C9508-FM-E	No	Yes	Yes	Yes	No
C9508-FM-E2	No	Yes	Yes	Yes	No

C9508-FM-G	No	Yes	No	Yes	Yes
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Note Fabric module slots FM 2, FM 4, or FM 6 must be filled with functioning fabric modules in order to provide power to the fan trays covering those modules.

If fabric module slots FM 1, FM 3, or FM 5 are not filled with a fabric module, you must make sure that they have a blank module (N9K-C9508-FM-CV) installed to preserve the designed airflow.



Note When using FM-G fabric modules, any empty slots should be filled with FAN-PWR modules



Note For more information about Line card and fabric module compatibility, see the [Cisco Nexus 9500 Platform Line Cards and Fabric Modules Data Sheet](#)

- Fan trays (three) (N9K-C9508-FAN) in slots FAN 1 to FAN 3 (numbered from left to right on the chassis)
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- Power supplies (up to four with the combined power mode, up to five with the $n+1$ power redundancy mode, or up to eight with the $n+n$ power redundancy mode) in slots PS 1 to PS 8 (numbered from left to right on the chassis)
 - Cisco Nexus 9500 Series 3-kW AC power supply (N9K-PAC-3000W-B)
 - Cisco Nexus 9500 Series 3-kW Universal AC/DC power supply (N9K-PUV-3000W-B)
 - Cisco Nexus 9500 Series 3.15-kW Dual Input Universal AC/DC power supply (N9K-PUV2-3000W-B)
 - Cisco Nexus 9500 Series 3-kW (-48 V) DC power supply (N9K-PDC-3000W-B)

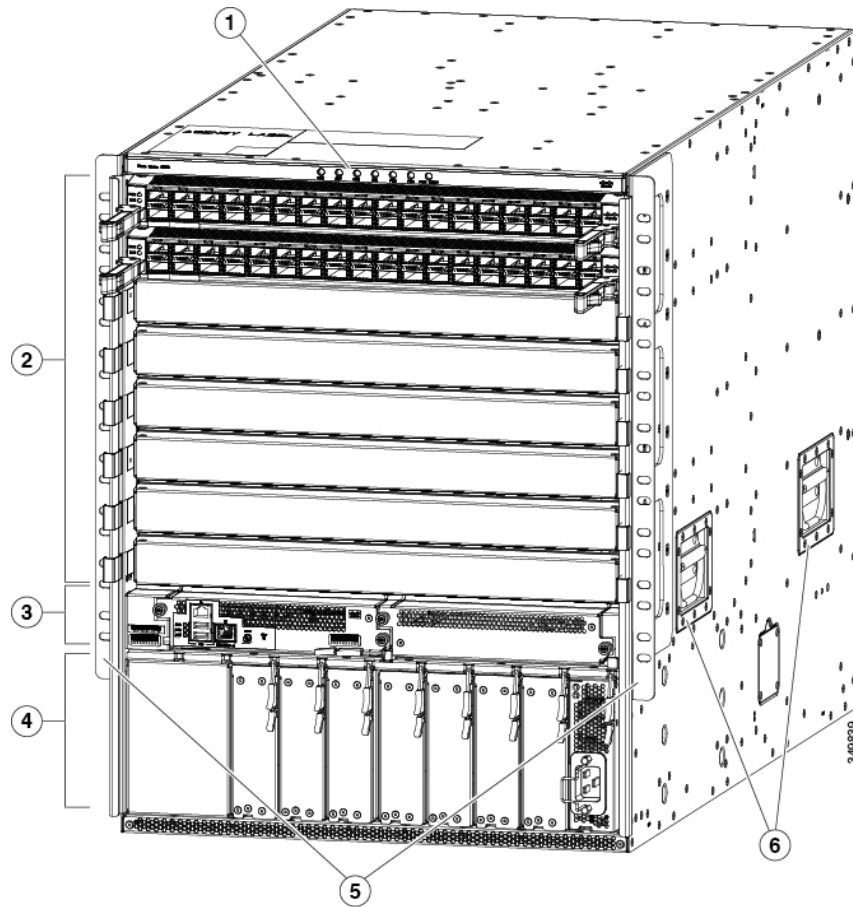


Note The switch can be powered by a mix of AC, DC, HVAC/HVDC power sources.



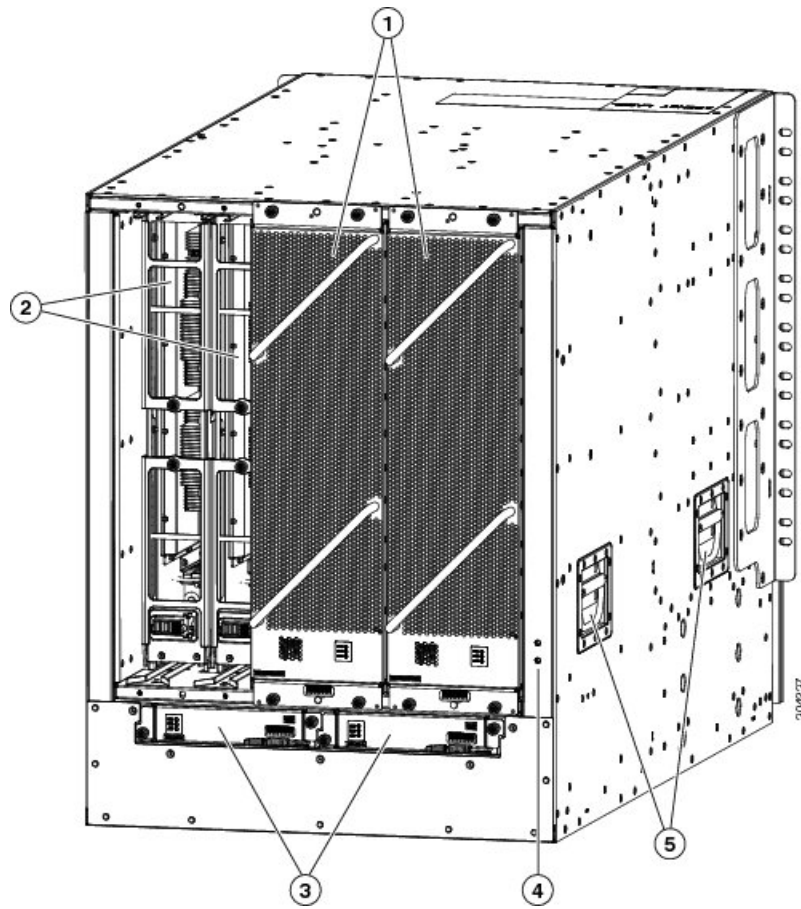
Note All chassis slots are numbered from left to right or from top to bottom.

The following figure shows the hardware features seen from the front of the chassis.



1	Chassis LEDs	4	3-kW AC, Universal AC/DC, or DC power supplies (AC power supplies shown).
2	Line cards (up to 8)	5	2 vertical mounting brackets that are used to mount the chassis onto a rack
3	Supervisor modules (1 or 2)	6	Chassis handles (used only for positioning the chassis on the bottom support rails—do not use these handles for lifting the chassis).

The following figure shows the hardware features seen from the rear of the chassis (one fan tray has been removed to show the fabric modules behind the fan trays).



1	Fan trays (3—left fan tray that is not shown in order to display the fabric modules that are located behind the fan trays).	4	Grounding pad
2	Fabric modules (3 to 6 40-Gigabit modules or 4 100-Gigabit modules)	5	Chassis handles (used only for positioning the chassis on the bottom support rails—do not use these handles for lifting the chassis).
3	System controllers (2)		

