



Overview

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This switch chassis includes the following modules:

- Supervisor modules (one or two) in slots SUP 1 and SUP 2 (reported as modules 27 and 28) (numbered from left to right on the chassis)
- System controllers (two) (N9K-SC-A) in slots SC 1 and SC 2 (reported as modules 29 and 30) (numbered from left to right on the chassis)
- Line cards (up to eight) in slots LC 1 to LC 8 (reported as modules 1 to 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 (reported as modules 21 to 26) (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

Fabric Module	Fan	Fabric Module Blank or Fan Power Card
N9K-C9508-FM-R	N9K-C9508-FAN	N9K-C9508-FM-Z
N9K-C9508-FM-R2	N9K-C9508-FAN2	N/A

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	3	N9K-X9536PQ N9K-X9564PX N9K-X9564TX
	4	N9K-X9408PC-CFP2 N9K-X9432PQ N9K-X9464PX N9K-X9464TX N9K-X9464TX2
	6	N9K-X9636PQ
N9K-C9508-FM-E	4	N9K-X97160YC-EX
	4	N9K-X9732C-EX
	4 (plus 1 for redundancy)	N9K-X9732C-FX
	4	N9K-X9736C-EX
	5	N9K-X9736C-FX
	5	N9K-X9736Q-FX
	4	N9K-X9788TC-FX

Fabric Module	Fabric Modules Required for Maximum Bandwidth	Supported Line Cards
N9K-C9508-FM-E2	4	N9K-X97160YC-EX
	4	N9K-X9732C-EX
	4 (plus 1 for redundancy)	N9K-X9732C-FX
	4	N9K-X9736C-EX
	5	N9K-X9736C-FX
N9K-C9508-FM-G	5	N9K-X9736Q-FX
	4	N9K-X9788TC-FX
	4	N9K-X9732C-EX
	4	N9K-X9736C-EX
	4	N9K-X97160YC-EX
	4	N9K-X9732C-FX
	5	N9K-X9736C-FX
N9K-C9508-FM-R	4	N9K-X9788TC-FX
	4	N9K-X9716D-GX
	6	N9K-X9636C-RX
N9K-C9508-FM-R2	5 (plus 1 for redundancy)	N9K-X9636C-R
	5 (plus 1 for redundancy)	N9K-X9636Q-R
	6	N9K-X96136YC-R
N9K-C9508-FM-S	4	N9K-X9432C-S



Note You can see the status of only 1 to 30 modules.

```
switch# sh module ?
<CR>
<1-30>   Enter module number
```



Note All of the fabric modules in a modular switch must be of the same type.



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
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Note When using FM-G fabric modules, any empty fabric module slots should be filled with N9K-C9508-FAN-PWR cards.



Note When using any fabric modules other than N9K-C9508-FM-G, any empty slots should be filled with N9K-C9508-FM-CV cards.



Note When using N9K-C9508-FM-R2, no fabric module slots shall be left empty.



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) or (N9K-C9508-FAN2) in slots FAN 1 to FAN 3 (numbered from left to right on the chassis)
- Power supplies (up to eight) 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)

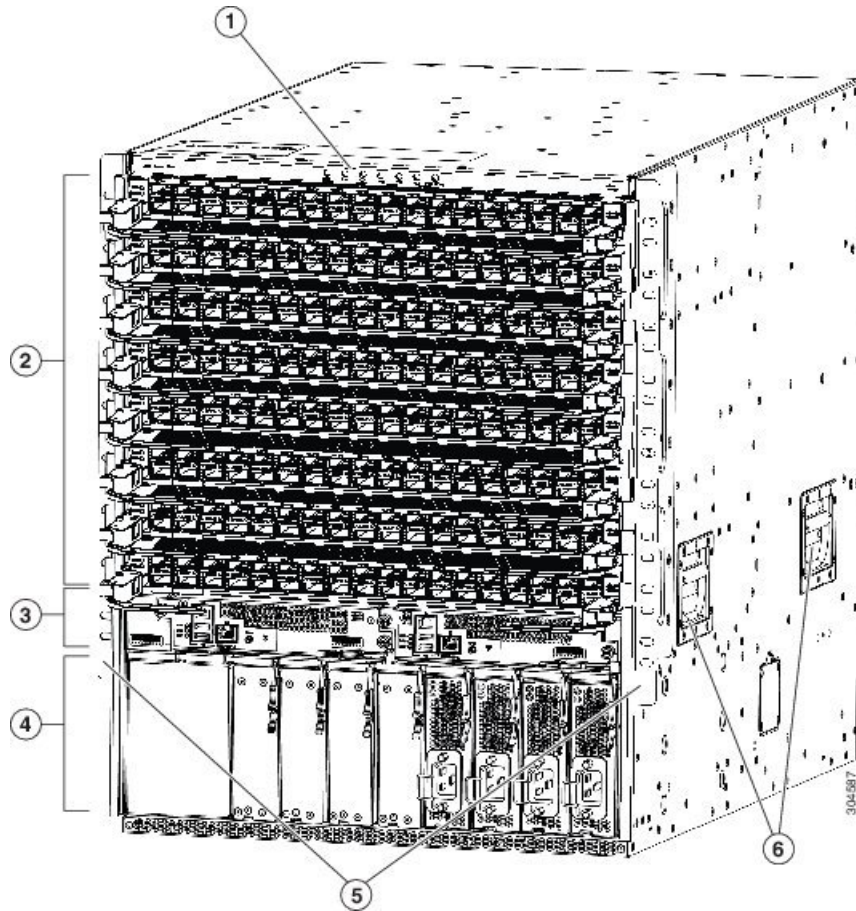


Note The switch can be powered by a mix of AC, DC, HVAC/HVDC power sources.



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

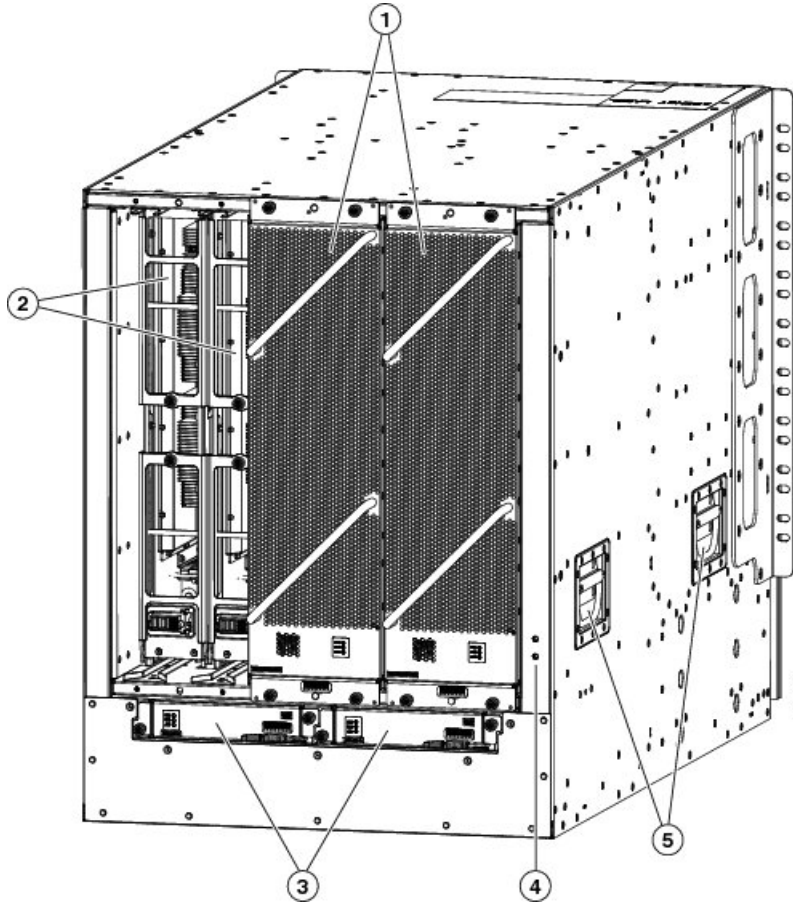
The following figure shows the hardware features seen from the front of the chassis.



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).
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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- or 400-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)		