Overview

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The Cisco Nexus 92304QC switch (N9K-C92304QC) is a 2-RU switch with the following ports:

- 56 fixed 40-Gigabit QSFP+ (optical) interface ports supporting 1-, 10-, and 40-Gigabit speeds

  16 of these ports support breakout cables for connections to 64 1- and 10-Gigabit ports on other devices.
- 8 QSFP28 ports supporting 40- and 100-Gigabit speeds
- 1 console port
- 1 management port
- 2 software-defined ports (labeled as S1-65 and S1-66)
- 1 USB port

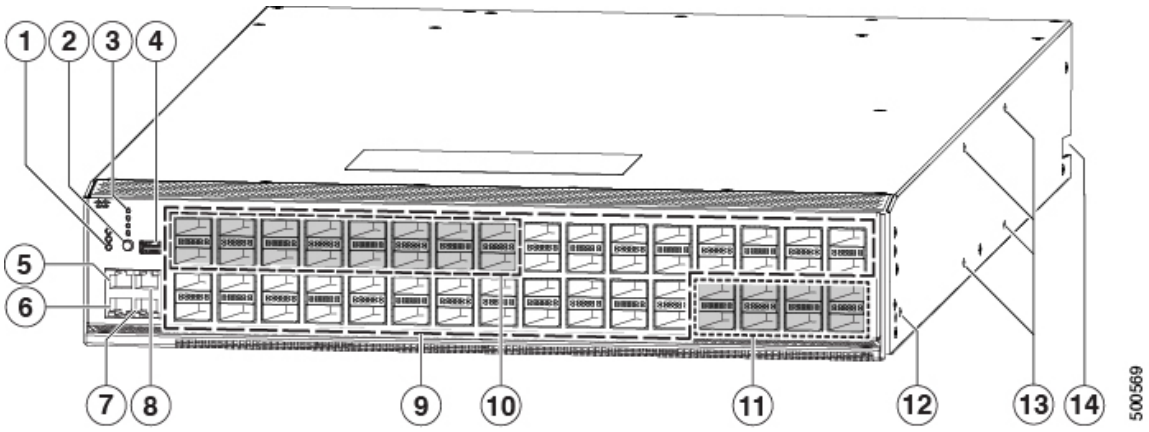
The chassis for this switch includes the following user-replaceable components:

- Fan modules (two) with the following airflow choices:
  - Port-side intake airflow with burgundy coloring (N9K-C9300-FAN3)
  - Port-side exhaust airflow with blue coloring (N9K-C9300-FAN3-B)
- Power supply modules (two—one for operations and one for redundancy [1+1]) with the following choices:
  - 650-W port-side intake AC power supply with NEBS compliance with red coloring (NXA-PAC-650W-PI)
  - 650-W port-side exhaust AC power supply with NEBS compliance with blue coloring (NXA-PAC-650W-PE)
  - 1200-W HVAC/HVDC dual-direction airflow power supply with white coloring (N9K-PUV-1200W)
  - 930-W port-side intake DC power supply with green coloring (UCSC-PSU-930WDC)
  - 930-W port-side exhaust DC power supply with gray coloring (UCS-PSU-6332-DC)

Note Both power supplies should be the same type. Do not mix AC, DC, or HVAC/HVDC power supplies.

Note All fan modules and power supplies must use the same airflow direction during operations. If you are using the 1200-W HVAC/HVDC power supplies, those power supplies automatically use the same airflow direction as used by the other modules in the switch.

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



1	Chassis LEDs (Beacon [BCN], Status [STS], and Environment [ENV])	8	Software defined port

2	Port lane switch button (used for ports 1 to 16)	9	56 40-Gigabit QSFP+ (optical) ports (ports 1 to 56) supporting 1-, 10-, and 40-Gigabit Ethernet connections to other devices. **Note** Ports 1 to 32 have a standard orientation so you install their transceivers right side up (labels on bottom). Ports 33 to 56 are upside down so you must install their transceivers upside down (labels on top).
3	Port lane LEDs	10	16 40-Gigabit QSFP+ (optical) ports (ports 1 to 16) supporting 1-, 10-, and 40-Gigabit Ethernet and breakout cables each of which have a QSFP+ transceiver on one end and 4 SFP+ transceivers supporting 1- and 10-Gigabit Ethernet on the other ends.
4	USB port used for saving configurations	11	8 100-Gigabit QSFP28 (optical) ports (ports 57 to 64) supporting 40- and 100- Gigabit Ethernet connections to other devices. **Note** These ports are upside down so you must install their transceivers with their labels on top.

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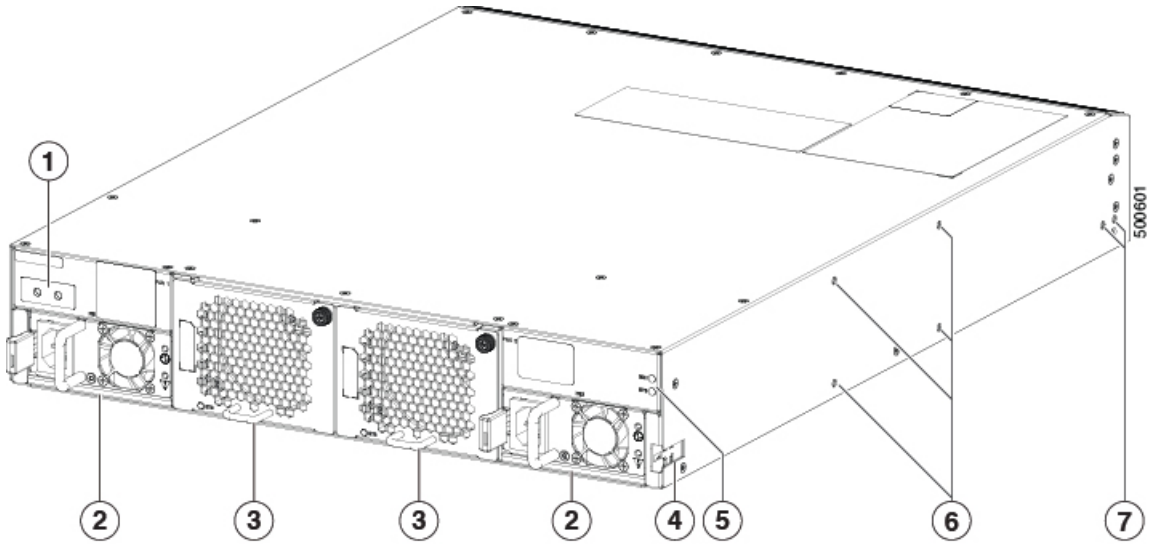
5	Console port	12	Screw holes (2) for attaching a front-mount bracket for 4-post racks (1 bracket on each of 2 sides)
6	Management port	13	Screw holes (4) for attaching a center-mount rack bracket for 2-post racks (1 bracket for each of 2 sides)
7	Software defined port	14	Notch in both sides of the chassis for locking the power supply end of the chassis to the bottom-support rails

To determine which transceivers, adapters, and cables are supported by this switch, see the Cisco Transceiver Modules Compatibility Information document.

The following figure shows the hardware features seen from the power supply side of the chassis.



1	Screw holes (2) for attaching the grounding lug to both sides of the chassis.	5	Chassis LEDs include the following: • Beacon (BCN) • Status (STS)

2	2 power supplies (1 used for operations and 1 used for redundancy) with power supply slot 1 on the left and slot 2 on the right (AC power supplies shown). Power supplies are positioned upside down (with release latches on the left) compared to the power supplies in other switches (release latches on the right).	6	Screw holes (4) for attaching a center-mount rack bracket for 2-post racks (1 bracket for each of 2 sides).
3	2 fan modules with fan slot 1 on the left and fan slot 2 on the right. **Note** For this product, the power supplies are oreinted upside down with their release latches on the left.	7	Screw holes (2) for attaching a front-mount bracket for 4-post racks (1 bracket on each of 2 sides).
4	Notch in both sides of the chassis (right notch shown in this figure) for locking the fan side of the chassis to the bottom-support rails.		

Depending on whether you plan to position the ports in a hot or cold aisle, you can order the fan and power supply modules with port-side intake or port-side exhaust airflow. To determine the airflow direction of the modules installed in your switch, see the following table.

Replaceable Modules	Port-Side Intake Airflow Coloring	Port-Side Exhaust Airflow Coloring
Fans	Burgundy	Blue
AC power supplies	Burgundy	Blue
HVAC/HVDC power supplies	White	
DC power supplies	Green	Gray

The fan and power supply modules are field replaceable and you can replace one fan module or one power supply module during operations so long as the other modules are installed and operating. If you have only one power supply installed, you can install the replacement power supply in the open slot before removing the original power supply.

Note All of the fan and power supply modules must have the same direction of airflow. Otherwise, the switch can overheat and shut down. If you are installing a dual-direction power supply, that module will automatically use the same airflow direction as the other modules in the switch.

Caution If the switch has port-side intake airflow (burgundy coloring for fan modules), you must locate the ports in the cold aisle. If the switch has port-side exhaust airflow (blue coloring for fan modules), you must locate the ports in the hot aisle. If you locate the air intake in a hot aisle, the switch can overheat and shut down.