



Overview

- [Overview, on page 1](#)

Overview

The Cisco Nexus 9364C-H1 switch (N9K-C9364C-H1) is a 2-rack unit (RU), fixed-port switch designed for Top-of-Rack deployment in data centers. This switch has the following ports:

- Ports 1 to 48 support 40G-/100-Gigabit speeds and QSFP-to-SFP adapters for 10-Gigabit connections.
- Ports 49 to 64 support 40G-/100-Gigabit speeds and are colored green to indicate hardware support for MACsec encryption. (see the following figure to see how these 64 ports are numbered)
- Port 1-64 support 25G speed by using CVR-QSFP28-SFP25G, and support 10G speed by using CVR-QSFP-SFP10G

Figure 1: Numbering of the 64 40/100-Gigabit Ports on the Cisco Nexus 9364C-H1 Switch

1	5	9	13	17	21	25	29	33	37	41	45	49	53	57	61
2	6	10	14	18	22	26	30	34	38	42	46	50	54	58	62
3	7	11	15	19	23	27	31	35	39	43	47	51	55	59	63
4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64



40-/100-Gigabit ports

40-/100-Gigabit ports supporting MACsec

- 2 1-/10-Gigabit SFP+ interface ports (Ports 65 - 66)
- 1 console port
- 1 management ports (one RJ-45 port or one SFP port)
- 1 USB port

This switch includes the following user-replaceable components:

- Fan modules (four) with the following airflow choices:
 - Port-side exhaust fan module with blue coloring (NXASFAN-160CFM2PE)
 - Port-side intake fan module with burgundy coloring (NXASFAN-160CFM2PI)



Note *Table 1: Fan Speeds for this Switch*

	Port-Side Intake Fan Speed %	Port-Side Exhaust Fan Speed %
Typical/Minimum	45%	45%
Maximum	80%	80%



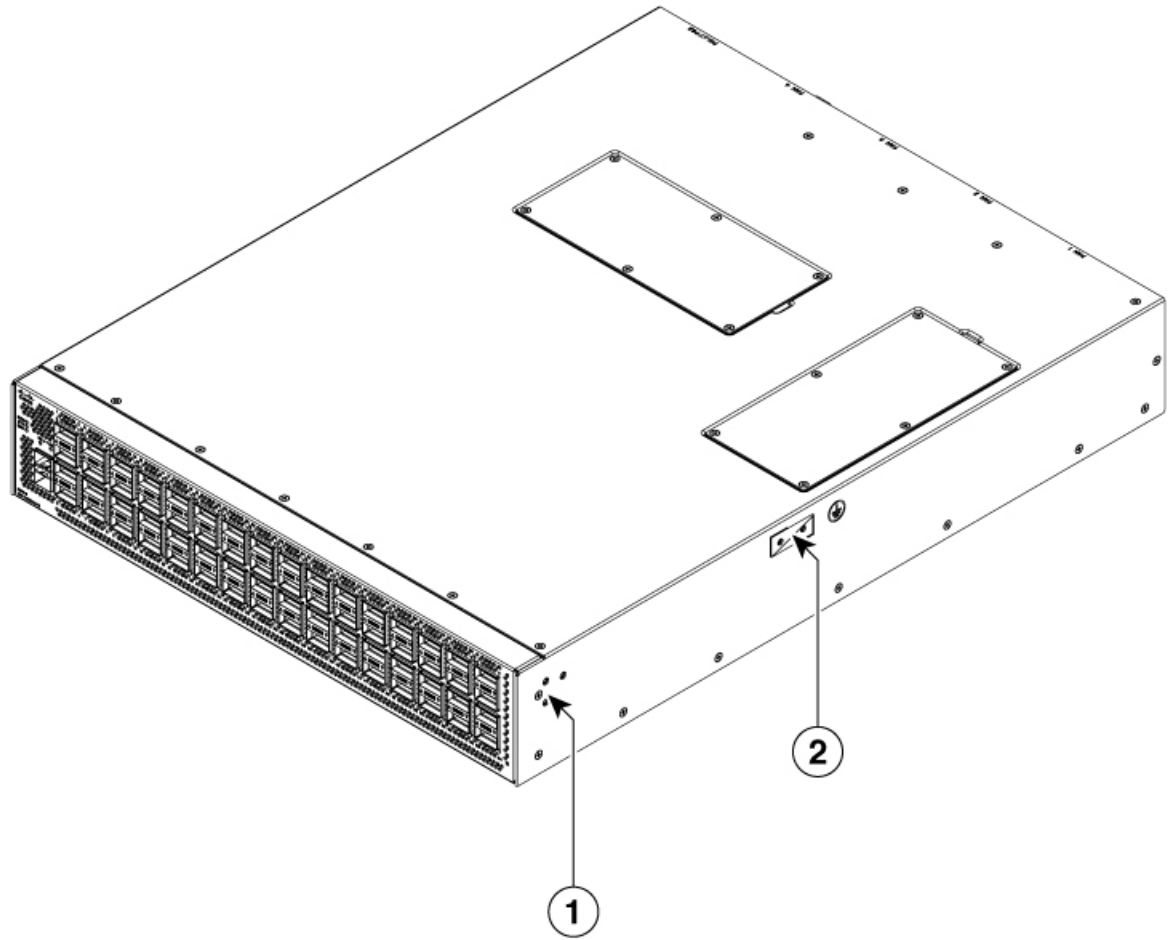
- Note**
- When more than one Fan module (two rotors) fails, major alarm is raised and a graceful shut down is performed within two minutes, unless the Fan module is restored.
 - The switch functions normally when only one fan tray fails. If more than one fan tray fails, the switch issues a warning and powers down within two minutes.

- Power supply modules (two—one for operations and one for redundancy [1+1]) with the following choices:
 - 1400-W port-side exhaust AC power supply with blue coloring (NXA-PAC-1400W-PE)
 - 1400-W port-side intake AC power supply with burgundy coloring (NXA-PAC-1400W-PI)
 - 2000-W- HVAC/HVDC DC airflow power intake with burgundy coloring (NXA-PHV-2KW-PI)
 - 2000-W port-side exhaust DC power supply with blue coloring (NXA-PDC-2KW-PE)
 - 2000-W port-side intake DC power supply with burgundy coloring (NXA-PDC-2KW-PI)

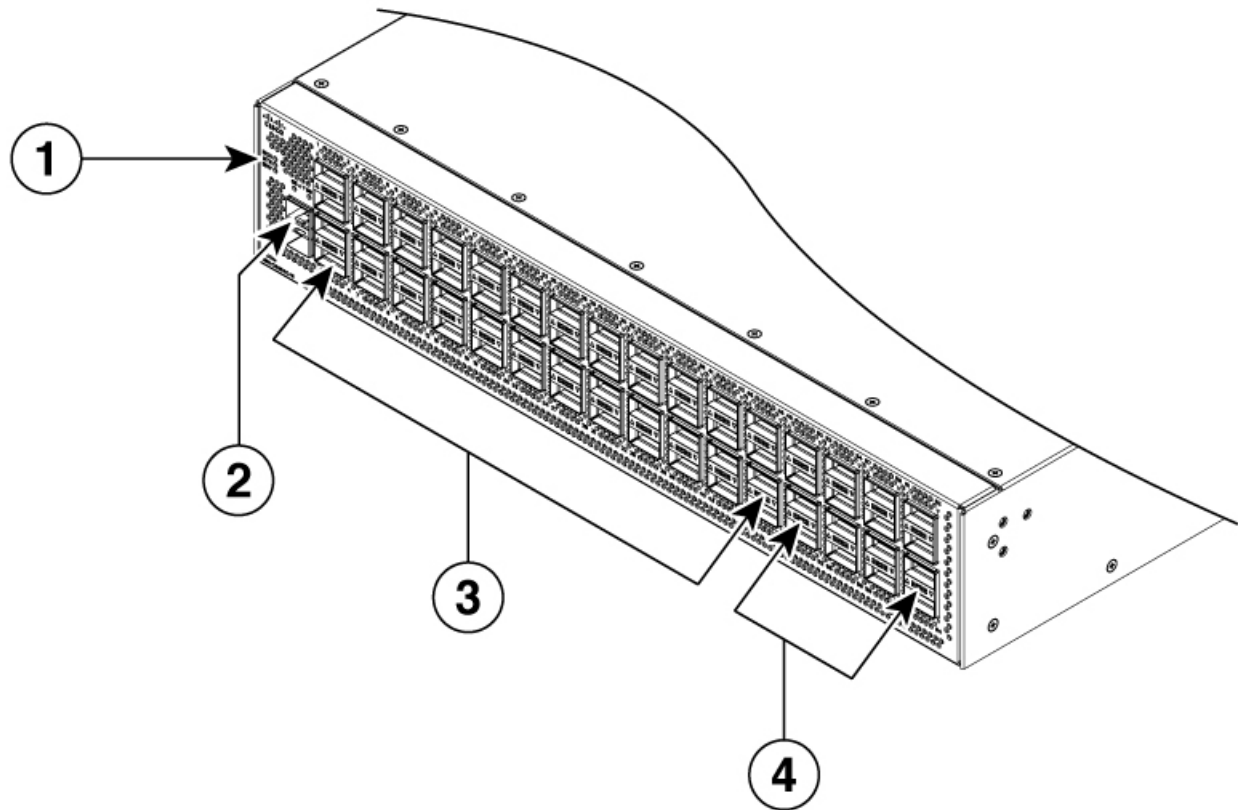


- Note**
- A mix of AC and DC power supplies in the same switch are supported for hot swapping purposes within a time limit of 15 minutes.
 - All the fan modules and power supplies must use the same airflow direction.

The following figure shows the switch features on the port side of the chassis.



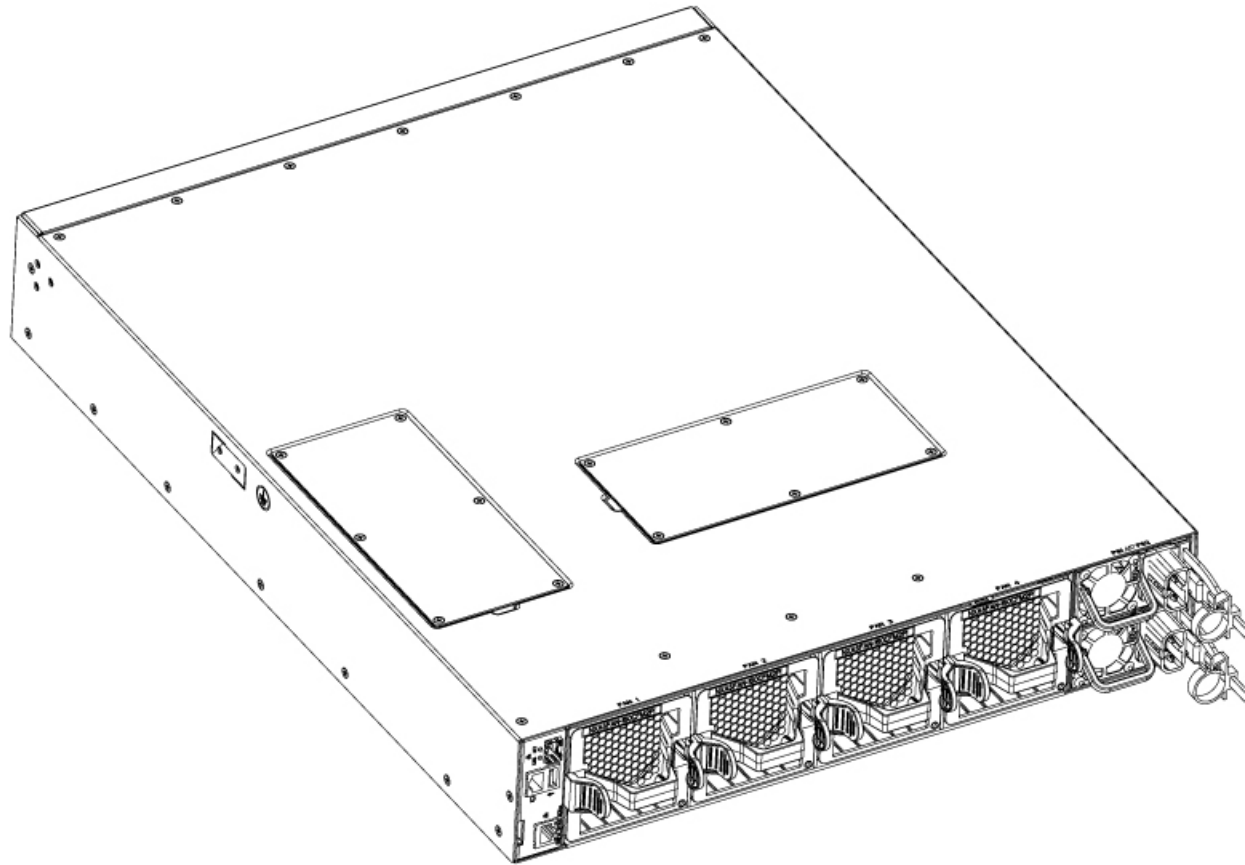
1	Screw holes for front mounting brackets (both left & right sides)	2	Grounding pad
---	---	---	---------------

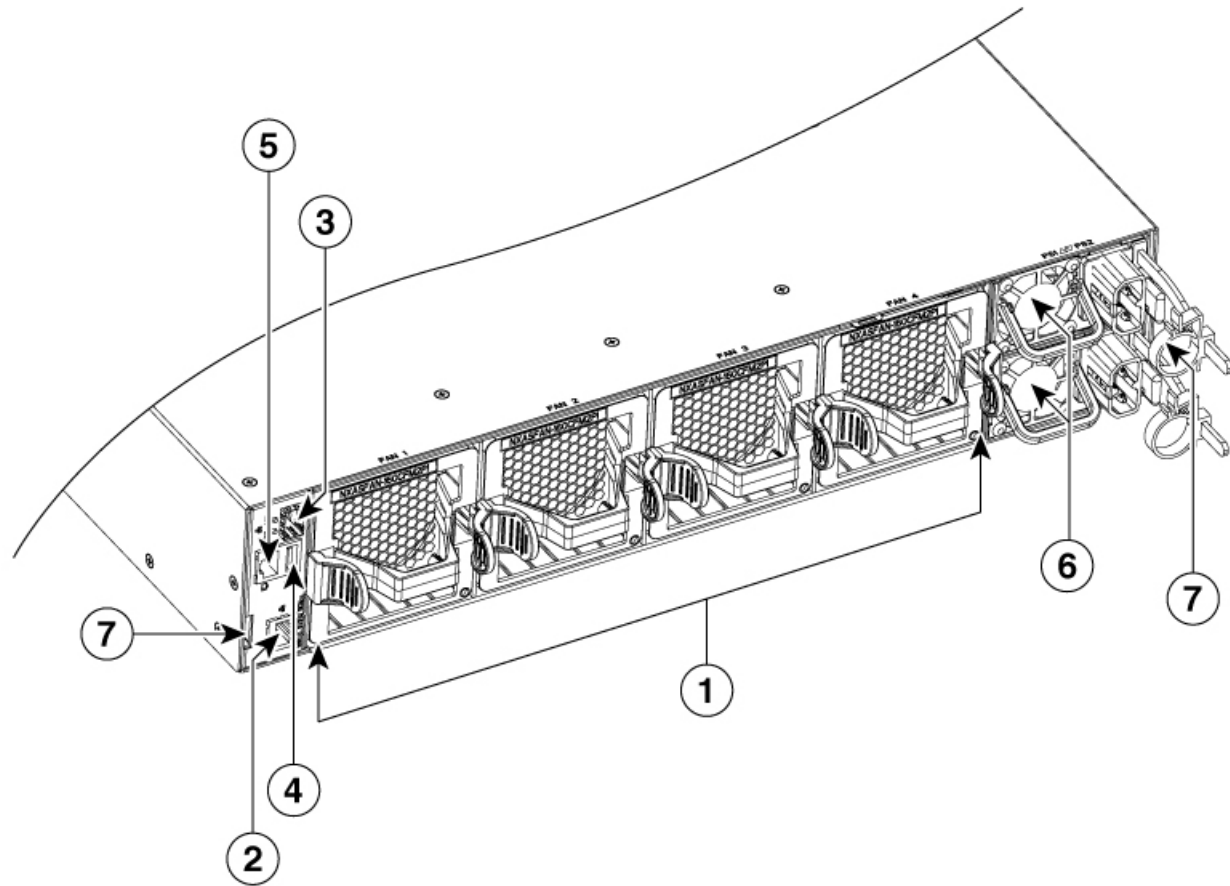


1	Beacon (BCN), Status (STS), and Environment (ENV) LEDs	3	40-/100-Gigabit QSFP28 ports (ports 1 to 48 in 4 rows of 12 ports)
2	1-/10-Gigabit SFP+ ports (2)	4	Green colored 100-Gigabit QSFP28 ports supporting MACsec (when software support is available) (ports 49 to 64 in 4 rows of 4 ports)

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 switch features on the power supply side of the chassis.





1	Fan modules (4) with slots numbered from 1 (left) to 4 (right)	5	Console port (1)
2	Management port (1—RJ-45 copper port)	6	Power supply modules (1 or 2) (AC power supplies shown) with slots numbered 1 (top) and 2 (bottom)
3	Management port (1—SFP optical port)	7	Notch on both sides of the chassis at the end for rack mount supporting.
4	USB port (1)		

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. For port-side intake airflow, the fan and AC power supply modules have burgundy coloring. For port-side exhaust airflow, the fan and AC power supplies have blue coloring. You can also order the 2000-W HVAC/HVDC power supply having red coloring port-side intake.

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.



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.
