



Overview

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The Cisco Nexus 9348D-GX2A switch (N9K-C9348D-GX2A) is a 2-rack unit (RU), fixed-port switch designed for spine-leaf-APIC deployment in data centers.

This switch includes the following ports:

- 400-Gigabit QSFP-DD ports (48)
- 10-Gigabit SFP+ ports (2)
- Management ports (one RJ-45 port and one SFP port)
- Console port
- USB port



Note Dust covers (NXA-ACC-QDD-DC) are suggested for unused ports, to protect the connectors and help divert airflow for thermal dispensation.

Default port-profile information for this switch:

- Default port profile (Leaf): 36 downlinks and 12 fabric links + 2x1/10G downlinks

Leaf/Spine role considerations:

- This switch's default role is as a leaf switch.
- The default fabric links (37-48) must be used for initial switch discovery via another switch.
- To change the switch from the default role, you must proceed as follows: the node appears as a discovered device in the fabric inventory view, you must set the role of the switch (spine or leaf) and the switch automatically goes for reboot to come up in the configured role.

- If you connect a default spine (i.e. a dual role switch that by default is a spine, such as Nexus 9316D-GX) directly to an APIC, the change of the role to leaf is performed automatically by APIC as well as the reboot. After that, the node appears in “Nodes pending registration” and you need to register the node.

This switch includes the following high power optics and MACsec:

- Up to 48 ports of MACsec with 24 ports of 20-W optics



Note For this switch, 24 ports of 20-W optics, and 48 ports of MACsec, can be supported either individually or together. And this 24 ports of 20-W optics can go in the following 24 ports only: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 26, 29, 32, 35, 38, 41, and 47.

This switch includes the following user-replaceable components:

- Fan modules (four) with the following airflow choices:
 - Port-side intake fan module with burgundy coloring (NXA-FAN-160CFM2-PI)



Note If a fan fails, the other fans are automatically increased to 100% capacity to compensate. If two fans fail, then multi fan failure policy kicks in, the switch will issue a warning, and power down in 2 minutes.

- Power supply modules (two—One for operations and one for redundancy [1+1]) with the following choices:
 - 3200-W port-side intake AC/HVDC power supply with burgundy coloring (NXA-PAC-3200W-PI)
 - 3200-W port-side intake DC/HVDC power supply with burgundy coloring (NXA-PDC-3200W-PI)

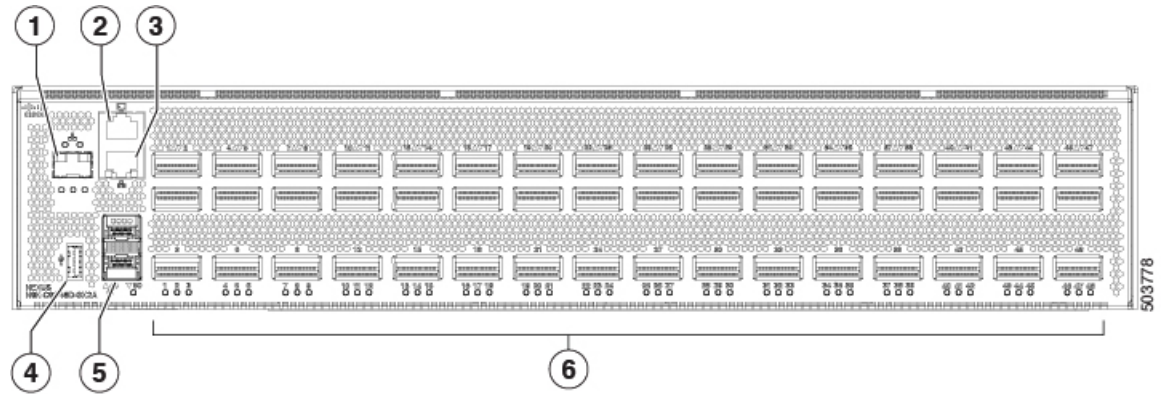


Note Both power supplies are the same type. Do not mix AC, and DC, power supplies.



Note All fan modules and power supplies must use the same airflow direction.

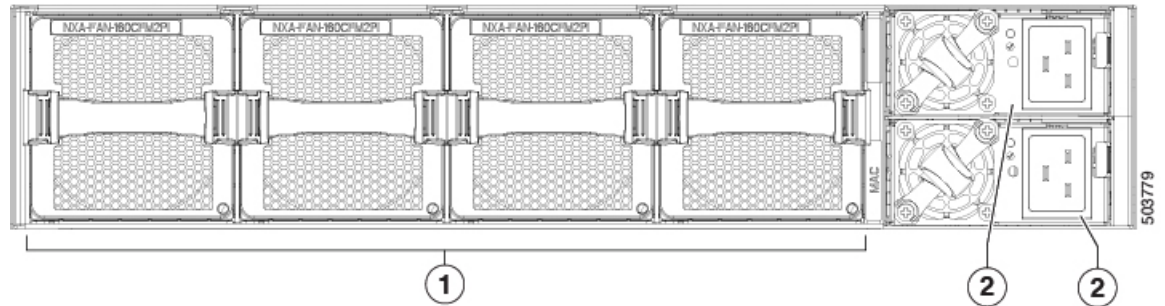
The following figure shows the switch features on the port side of the chassis.



1	SFP optical management port (1)	4	USB port (1)
2	Console port (1)	5	10-Gigabit SFP+ ports (2)
3	RJ-45 copper management port (1)	6	400-Gigabit QSFP-DD ports (48)

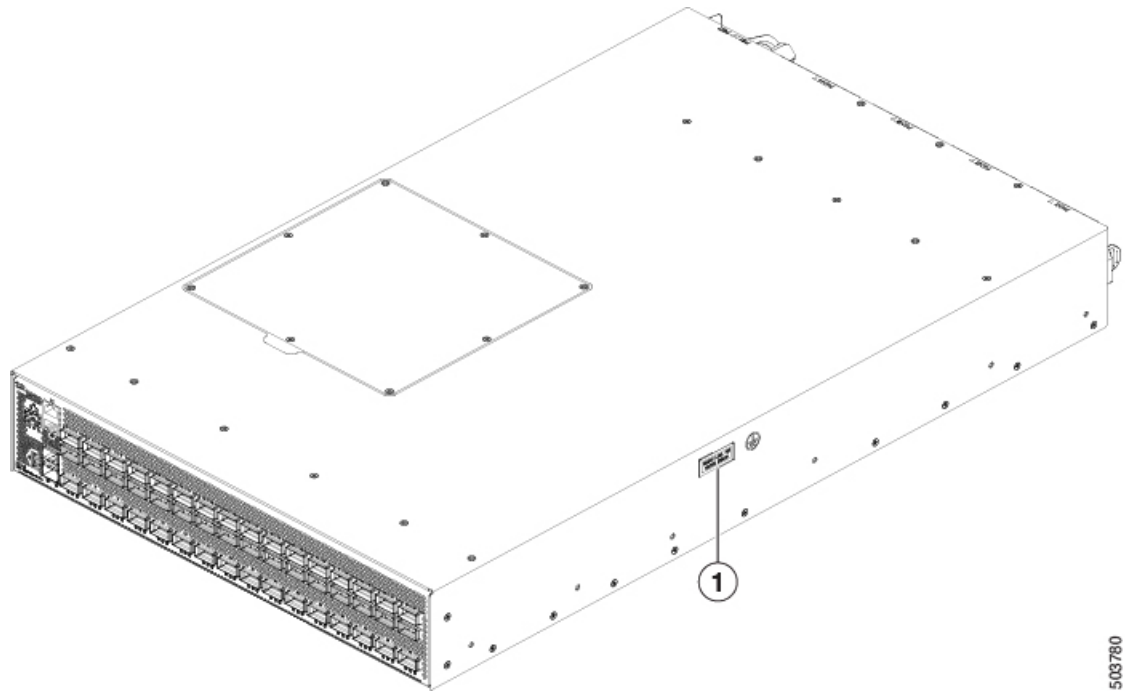
To determine which transceivers, adapters, and cables are support this switch, see the [Cisco Transceiver Modules Compatibility Information](#) document.

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)	2	Power supply modules (1 or 2) (AC power supplies shown) with slots numbered 1 (top) and 2 (bottom)
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The following figure shows the side of the chassis.



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1	Grounding pad	
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The fan and power supply modules are field replaceable. 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 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 automatically uses 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.