



Overview

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The Cisco Nexus 9336C-FX2 switch (N9K-C9336C-FX2) is a 1-RU, fixed-port switch designed for spine-leaf-APIC deployment in data centers. This switch has 36 40/100-Gigabit QSFP28 ports. Ports 31-36 are default fabric links (The last 2 ports 35-36 are reserved for fabric links). Downlink ports, 1-30 by default, support 4x10/4x25-Gigabit breakout. Up to 34 breakout ports are supported starting from ACI release 4.2(4) and 5.0(1). Prior to this, up to 20 breakout ports are supported. From ACI release 3.2(3i) onwards, ports 31-34 are convert-able to downlink ports. All ports support 10-Gigabit with a QSA adapter (CVR-QSF-SFP10G). Ports 7-32 support 1-Gigabit with QSA adapter.

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



Note When connecting an APIC to a 40-Gigabit interface, ensure that you use the correct adapter that automatically converts the interface to operate at 10-Gigabit. There is no support for 40-Gigabit to 10-Gigabit breakout cables in this manner as they require manual configuration. You can do this post fabric discovery.

This switch includes the following user-replaceable components:

- Fan modules (three) with the following airflow choices:
 - Port-side exhaust airflow with blue coloring (NXA-FAN-65CFM-PE)
 - Port-side exhaust airflow with blue coloring (NXA-SFAN-65CFM-PE)
 - Port-side intake airflow with burgundy coloring (NXA-FAN-65CFM-PI)
 - Port-side intake airflow with burgundy coloring (NXA-SFAN-65CFM-PI)



Note The NXA-SFAN-65CFM fans are supported beginning with Cisco NX-OS Release 9.3(7). To enable or disable the display of the fan's serial number, enter the **[no] hardware fan-sprom** command.

**Note****Table 1: Fan Speeds for This Switch**

	Port-Side Intake Fan Speed %	Port-Side Exhaust Fan Speed %
Typical/Minimum	50%	70%
Maximum	100%	100%

**Note**

Each fan module has two rotors. The switch can function normally if one rotor inside the any one fan module fails. In case of more than one rotor failure, the switch will issue a warning and power down in 2 minute.

- Power supply modules (two—One for operations and one for redundancy [1+1]) with the following choices:
 - 750-W AC power supply with port-side exhaust airflow (blue coloring) (NXA-PAC-750W-PE)
 - 750-W AC power supply with port-side intake airflow (burgundy coloring) (NXA-PAC-750W-PI)
 - 1100-W AC power supply with port-side exhaust airflow (blue coloring) (NXA-PAC-1100W-PE2)
 - 1100-W AC power supply with port-side intake airflow (burgundy coloring) (NXA-PAC-1100W-PI2)
 - 1100-W HVAC/HVDC power supply with port-side exhaust airflow (blue coloring) (NXA-PHV-1100W-PE)
 - 1100-W HVAC/HVDC power supply with port-side intake airflow (burgundy coloring) (NXA-PHV-1100W-PI)
 - 1100-W DC power supply with port-side exhaust airflow (blue coloring) (NXA-PDC-1100W-PE)
 - 1100-W DC power supply with port-side intake airflow (burgundy coloring) (NXA-PDC-1100W-PI)

**Note**

The 750-W AC PSU is compatible only with software versions ACI-N9KDK9-14.2 or NXOS-9.3.3 and onwards.

**Note**

Both power supplies use the same type of power source. Do not mix AC and DC power sources.



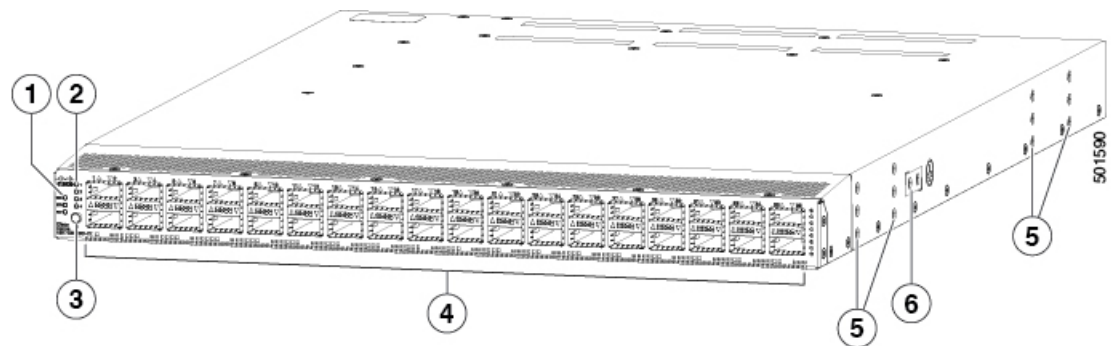
Note All fan modules and power supplies must use the same airflow direction during operations.



Note In the event that only one power supply is operating in an active system and a second power supply is inserted, the system fan will slow down to **50% of Max speed** for 12 seconds. It can take up to 10 seconds for the second power supply to become active. Please do not remove the first power supply during this time-frame, in order to avoid system shutdown.

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

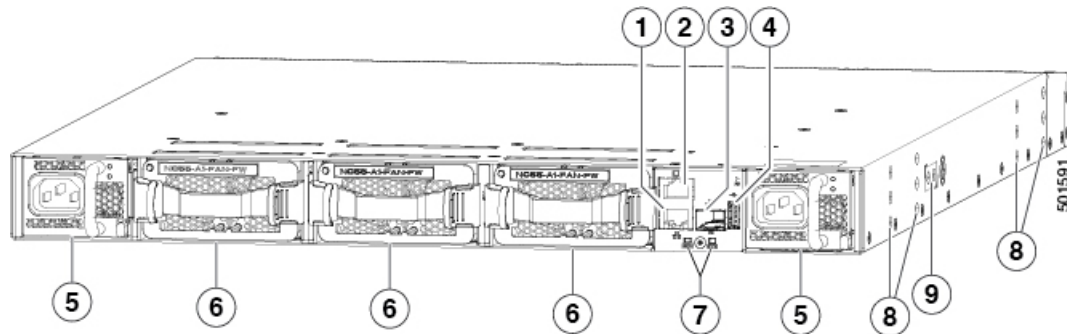
Figure 1: Port Side View of the Cisco Nexus 9336C-FX2 Switch



1	Chassis LEDs (Beacon [BCN], Status [STS], and Environment [ENV])	4	36 ports that are configurable differently for APIC and spine switch connections.
2	Lane selector LEDs	5	Screw holes (6) for attaching rack mounting brackets.
3	Lane selection button	6	Screw holes (2) for attaching grounding lug.

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

Figure 2: Power Supply Side View of the Cisco Nexus 9336C-FX2 Switch



1	Out-of-band management port (RJ-45 port)	6	Three fan modules with fan slot 1 on the left and fan slot 3 on the right
2	Console port (RS232 port)	7	Chassis LEDs (Beacon [BCN] and Status [STS])
3	Out-of-band management port (SFP port)	8	Screw holes (6) for attaching rack mounting brackets
4	USB port that is used for saving or copying functions.	9	Screw holes (2) for attaching grounding lug.
5	Two power supplies (one for operations and one for redundancy) (AC power supplies shown). Power supply slot 1 is on the left and slot 2 is on the right.		



Note USB support is limited to USB 2.0 devices that use less than 2.5 W (less than 0.5 A inclusive of surge current). There is no support for devices, such as external hard drives, that instantaneously draw more than 0.5 A.

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 (burgundy colored) or port-side exhaust (blue colored) airflow. All the power supply and fan modules must have the same coloring.

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 operating. If you have only one power supply that operational, you can install the replacement power supply in the open slot before removing the original power supply.



Note All 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.

