



Overview

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The Cisco Nexus 93108TC-FX switch (N9K-C93108TC-FX) is a 1-RU, fixed-port switch designed for spine-leaf-APIC deployment in data centers. This switch has 48 10GBASE-T Application Policy Infrastructure Controllers (APICs) facing ports that support 100-Megabits, 1- or 10-Gigabit Ethernet connections, and it has six fixed 40/100-Gigabit QSFP28 spine-facing ports.



Note Autonegotiation is supported on 100M/1G/10G ports.

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



Note You can order this switch in a 24-port configuration (N9K-C93108TC-FX-24)

- Fan modules (four) with the following airflow choices:
 - Port-side intake airflow with burgundy coloring (NXA-FAN-30CFM-B)
 - Port-side exhaust airflow with blue coloring (NXA-FAN-30CFM-F)



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%



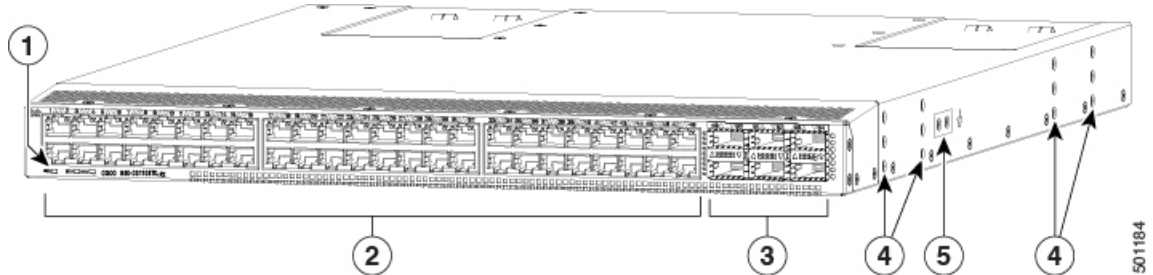
Note Each fan module has two rotors. The switch can function normally if one rotor inside the any one fan module fails. In case of more than one rotor failure, the switch will issue a warning and power down in 2 minute.

- Power supply modules (two—One for operations and one for redundancy [1+1]) with the following choices (do not mix AC and DC power sources and do not mix airflow directions):
 - 500-W AC power supply with port-side intake airflow (burgundy coloring) (NXA-PAC-500W-PI)
 - 500-W AC power supply with port-side exhaust airflow (blue coloring) (NXA-PAC-500W-PE)
 - 930-W DC power supply with port-side intake airflow (burgundy coloring) (NXA-PDC-930W-PI)
 - 930-W DC power supply with port-side exhaust airflow (blue coloring) (NXA-PDC-930W-PE)
 - 1200-W HVAC/HVDC power supply with dual-direction airflow (white coloring) (N9K-PUV-1200W)



Note If you are using the 1200-W HVAC/HVDC power supply, the power supply automatically uses the same airflow direction as the fan modules installed switch.

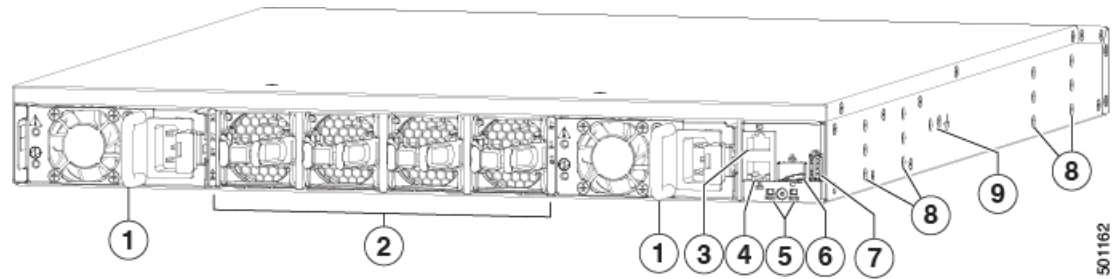
The following figure shows the hardware features seen from the port side of the chassis.



1	Beacon [BCN], Status [STS], and Environment [ENV] LEDs	4	Screw holes (6) for attaching rack mounting brackets
2	48 10/1-Gigabit RJ45 ports	5	Grounding pad
3	6 40/100-Gigabit QSFP28 ports		

To determine which transceivers, adapters, and cables this switch supports, 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	Two power supplies (one used for operations and one used for redundancy) (AC power supplies shown) with power supply slot 1 on the left and slot 2 on the right.	6	Management port (SFP+ port)
2	Four fan modules with fan slot 1 on the left and fan slot 4 on the right	7	USB port
3	Console port (RS232 port)	8	Screw holes (6) for attaching rack mounting brackets
4	Management port (RJ-45 port)	9	Grounding pad
5	Chassis LEDs (Beacon [BCN] and Status [STS])		



Note There is a limit 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 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	Burgundy	Blue

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



Note Fans 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.
