



Overview

- [Overview, on page 1](#)

Overview

The Cisco Nexus 93128TX switch (N9K-C93128TX) is a 3-RU, fixed-port switch designed for spine-leaf-APIC deployment in data centers. This switch has 96 fixed 1/10GBASE-T (copper) ports that support 100-Megabit, 1-Gigabit, and 10-Gigabit Ethernet for APIC connections and 6 or 12 fixed 40-Gigabit ports provided through an uplink module (for this switch, the 12-port uplink module has only eight active ports) for connections to spine switches. The chassis for this switch includes the following user-replaceable components:

- Uplink modules (one of either of the following for uplink ports)
 - M6PQ uplink module (six-port, 40-Gigabit Ethernet)
 - M6PQ-E uplink module (six-port, 40-Gigabit Ethernet)
 - M12PQ uplink module (12-port (8 active ports), 40-Gigabit Ethernet)
- Fan modules (three—two for operations and one for redundancy [2+1]) with the following airflow choices:
 - Port-side-intake fan module with burgundy coloring (N9K-C9300-FAN2)
 - Port-side-exhaust fan module with blue coloring (N9K-C9300-FAN2-B)
- Power supply modules (two—one for operations and one for redundancy [1+1]) with the following choices:
 - 1200-W AC power supply with port-side intake airflow (burgundy coloring) (N9K-PAC-1200W)
 - 1200-W AC power supply with port-side exhaust airflow (blue coloring) (N9K-PAC-1200W-B)
 - 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)

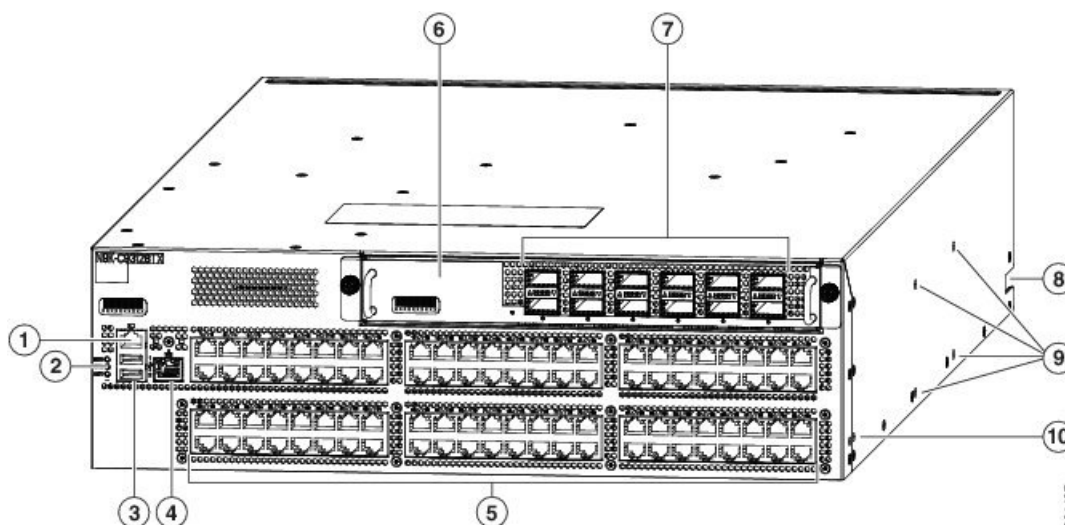


Note Both power supplies should be the same type. Do not mix AC and DC power supplies.



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

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

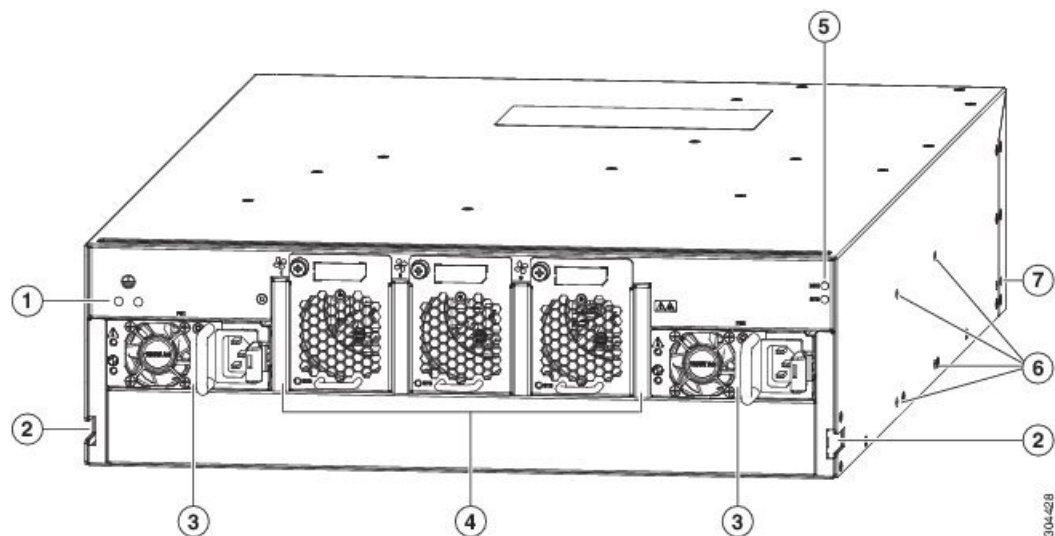


1	Console port (RS232 port)	6	M6PQ, M6PQ-E, or M12PQ uplink module (M12PQ uplink module shown).
2	Chassis LEDs <ul style="list-style-type: none"> • Beacon (BCN) • Status (STS) • Environment (ENV) 	7	6 or 12 40-Gigabit Ethernet Quad Small Form-Factor Pluggable (QSFP+) optical ports for uplink connections to spine switches (12-port uplink module shown) Note For this switch, the 12-port module has only 8 active ports (leftmost ports).
3	2 USB ports used for saving or copying functions 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). Devices, such as external hard drives, that instantaneously draw more than 0.5 A are not supported.	8	Notch in both sides of the chassis for locking the power supply end of the chassis to the bottom-support rails
4	Out-of-band management port (RJ-45 port)	9	Screw holes (4) for attaching a center-mount rack bracket for 2-post racks (one bracket for each of two sides)

5	96 10GBASE-T copper ports (supporting 100-Megabit, 1-Gigabit, and 10-Gigabit Ethernet) to Application Policy Infrastructure Controllers (APICs)	10	Screw holes (2) for attaching a front-mount bracket for 4-post racks (1 bracket on each of 2 sides)
---	-------------------------------------------------------------------------------------------------------------------------------------------------	----	-----------------------------------------------------------------------------------------------------

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 fan side of the chassis.



1	Screw holes (2) for attaching the grounding lug.	5	Chassis LEDs include the following: <ul style="list-style-type: none"> • Beacon (BCN) • Status (STS)
2	A notch in both sides of the chassis for locking the fan side of the chassis to the bottom-support rails.	6	Screw holes (4) for attaching a center-mount rack bracket for 2-post racks (1 bracket for each of 2 sides).
3	Two power supply modules (one used for operations and one used for redundancy) (AC power supplies shown) with slots numbered 1 (left side) and 2 (right side).	7	Screw holes (2) for attaching a front-mount bracket for 4-post racks (1 bracket on each of 2 sides).
4	Three fan modules (two used for operations and one used for redundancy) with slots numbered from 1 (left side) to 3 (right side)		

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 modules have burgundy coloring (DC power supply modules have green coloring). For port-side exhaust airflow, the fan modules have blue coloring (DC power supply modules have gray coloring).

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.