Overview

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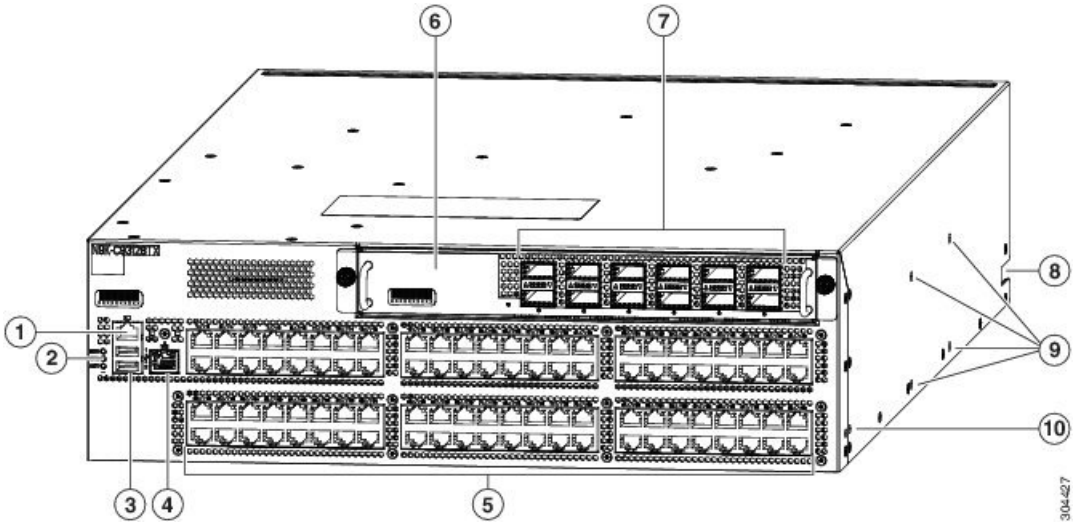
The Cisco Nexus 93128TX switch (N9K-C93128TX) is a 3-RU, fixed-port switch designed for Top-of-Rack (TOR), Middle-of-Rack (MoR), and End-of-Rack (EoR) deployment in data centers. This switch has 96 fixed 1/10GBASE-T (copper) downlink ports that support 100-Megabit, 1-Gigabit, and 10-Gigabit Ethernet and 6 or 12 fixed 40-Gigabit or 4 100-Gigabit (optical) uplink ports provided through an uplink module (for this switch, the 12-port uplink module has only eight active ports and the four-port module has only two active ports). The chassis for this switch includes the following user-replaceable components:

- Uplink modules (one of either of the following for uplink ports)
  - M4PC-CFP2 uplink module (four-port [two active ports—ports 3 and 4], 100-Gigabit Ethernet)
  - 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 HVAC/HVDC dual-direction airflow power supply with white coloring (N9K-PUV-1200W)
  - 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 DC and HVAC/HVDC power supplies.

Note All fan modules and power supplies must use the same airflow direction during operations. If you are using the 1200-W HVAC/HVDC power supply, the power supply automatically uses the same airflow direction as used by the other modules in the switch.

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

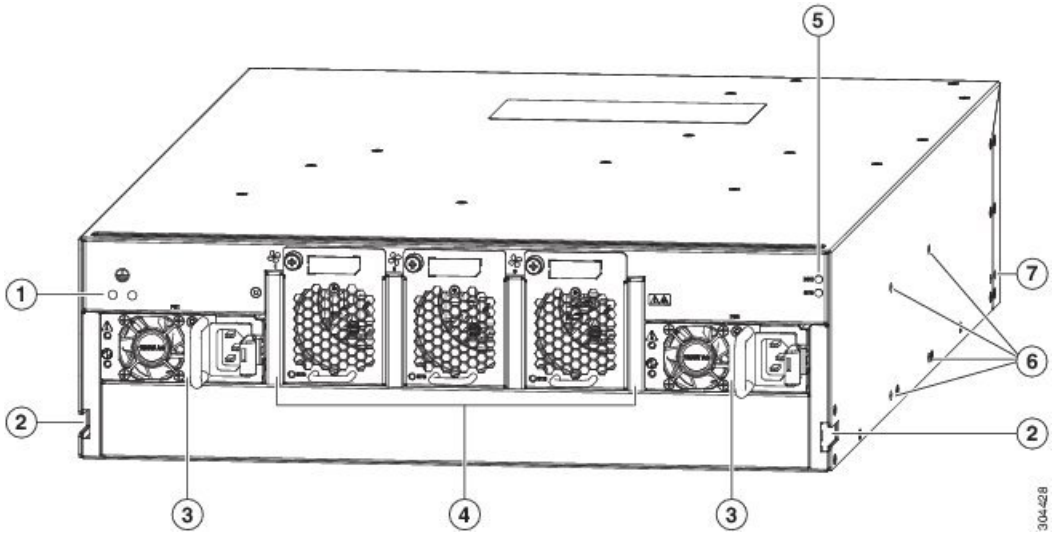


1	Console port (RS232 port)	6	M4PC, M6PQ, M6PQ-E, or M12PQ uplink module (M12PQ uplink module shown).
2	Chassis LEDs • Beacon (BCN) • Status (STS) • Environment (ENV)	7	4, 6, or 12 40-Gigabit Ethernet Quad Small Form-Factor Plugable (QSFP+) optical ports for uplink connections to aggregation switches (12-port uplink module shown) **Note** For this switch, the 12-port module has only 8 active ports (leftmost ports) and the 4-port module has only 2 active ports (ports 3 and 4).

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 other devices	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: • 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). You can also order the 1200-W HVAC/HVDC power supply which has dual-direction airflow with white coloring. Dual-direction airflow modules automatically use the airflow direction of the other modules installed in the switch.

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. 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.