



## Understanding the LEDs

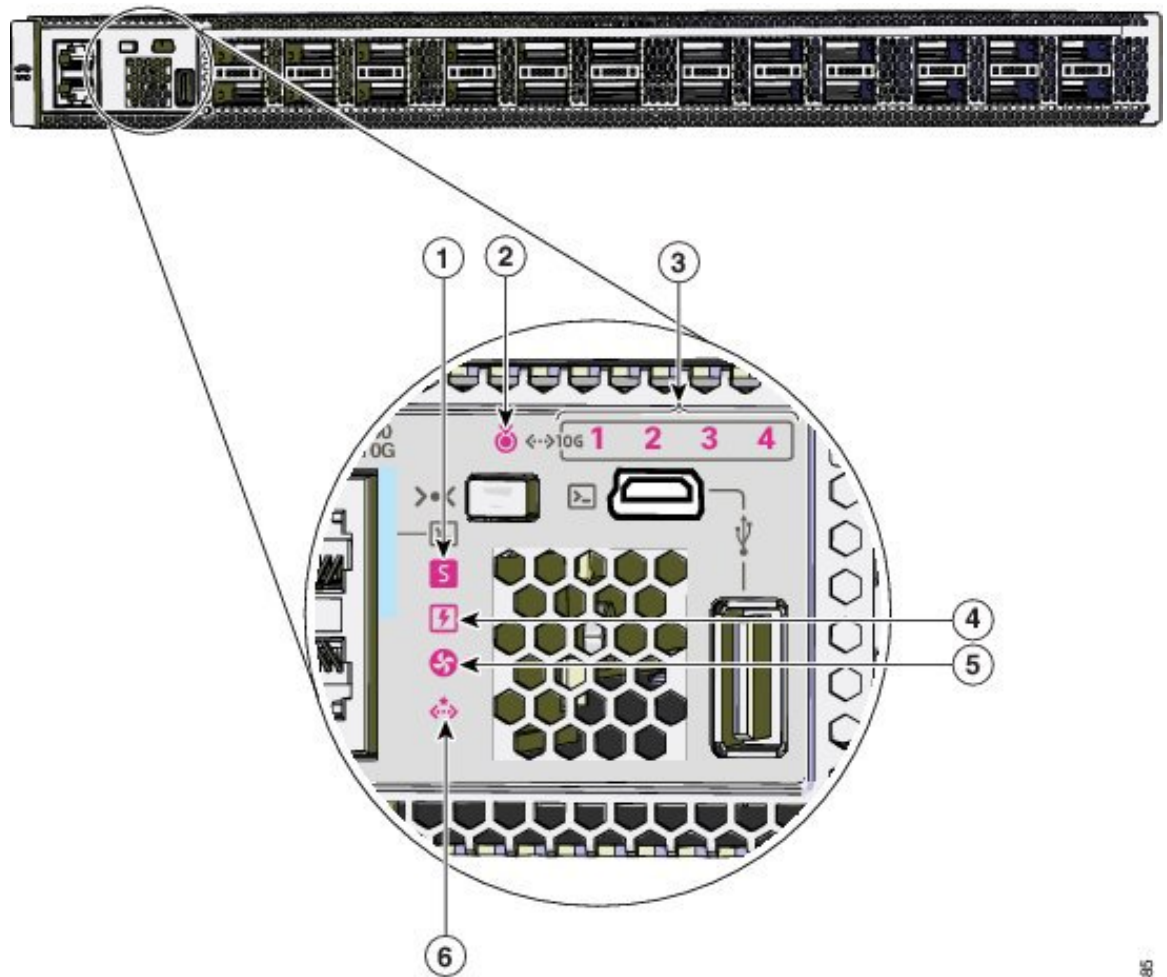
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The switch consists of multiple LEDs to monitor switch activity and performance. You can also monitor the status of the fan tray assembly and the power supplies.

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# LED Indicators

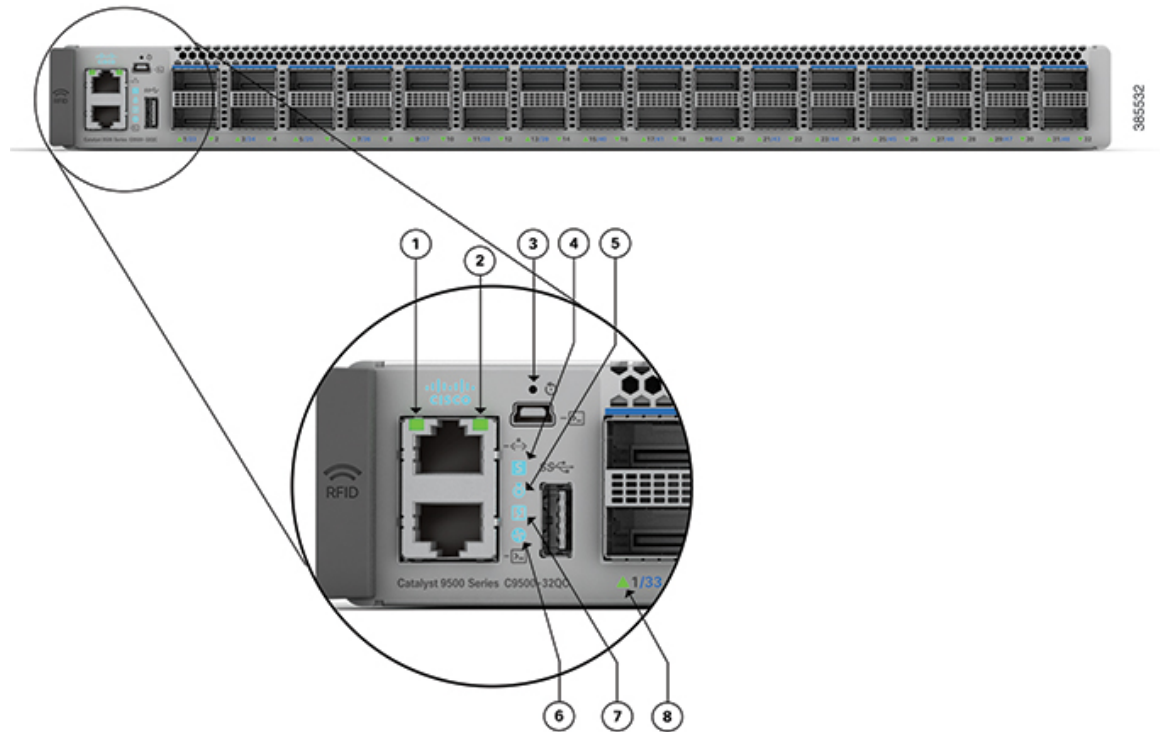
Figure 1: LEDs on Cisco Catalyst 9500 Series Switches



1	System LED	4	Power Supply Unit(PSU) LED
2	Blue beacon LED	5	Fan LED
3	10G Status LEDs <sup>1</sup>	6	Ethernet Management port LED

<sup>1</sup> Available only on switches with 10G ports.

Figure 2: LEDs on Cisco Catalyst 9500 Series High Performance Switches



1	Ethernet Management port link activity LED	5	Blue beacon LED
2	Ethernet Management port link status LED	6	Fan LED
3	Reset switch	7	Power Supply Unit (PSU) LED
4	System LED	8	Port LEDs

## System LED

The system LED indicates the status of the system.

Table 1: System LED Indicator

Color/State	Description
Off	System is not operational.
Green	System is operating normally without alarms.
Amber	System has triggered a minor environmental alarm.
Red	System has triggered a major environmental alarm.

# Power Supply LEDs

## Cisco Catalyst 9500 Series Switches

The following table describes the LED indicators when two power supplies modules are installed in the switch.

**Table 2: Power Supply LED Indicators for Two PSUs**

Color/State	Description
Green	Power supply is operating normally. Both PSUs are in the bay with active power.
Amber	One of the PSU has input loss.
Red	One of the PSU has output failure.

If only one power supply module is installed in the switch and it is operating normally, the power supply LED turns green. If the single power supply unit fails, the switch is powered off.

## Cisco Catalyst 9500 Series High Performance Switches

The following table describes the LED indicators when two power supplies modules are installed in the switch.

**Table 3: Power Supply LED Indicators for Two PSUs**

Color/State	Description
Green	Power supply is operating normally. Both PSUs are in the bay with active power.
Amber	One of the PSU has input loss.

If only one power supply module is installed in the switch and it is operating normally, the power supply LED turns amber. If the single power supply unit fails, the switch is powered off.

# Port LEDs and Modes

## Cisco Catalyst 9500 Series Switches

Each Ethernet port, 1-Gigabit Ethernet module slot, and 10-Gigabit Ethernet module slot has a port LED. These port LEDs, as a group or individually, display information about the switch and about the individual ports. The port mode determines the type of information shown by the port LEDs.

To select or change a mode, press the Mode button until the desired mode is highlighted. When you change port modes, the meanings of the port LED colors also change.

When you press the Mode button on any switch in the switch stack, all the stack switches change to show the same selected mode. For example, if you press the Mode button on the active switch to show the SPEED LED, all the other switches in the stack also show the SPEED LED.

Table 4: Port Mode LEDs

Mode LED	Port Mode	Description
STAT	Port status	The port status. This is the default mode.
SPEED	Port speed	The port operating speed: 10, 100, or 1000 Mb/s.
DUPLX	Port duplex mode	The port duplex mode: full duplex or half duplex.
ACTV	Active	The active switch status.
STACK	Stack member status	Stack member status.
	StackWise port status	The StackWise port status.

Table 5: Meaning of Switch LED Colors in Different Modes

Port Mode	Port LED Color	Meaning
STAT (port status)	Off	No link, or port was administratively shut down.
	Green	Link present, no activity.
	Blinking green	Activity. Port is sending or receiving data.
	Alternating green-amber	Link fault. Error frames can affect connectivity, and errors such as excessive collisions, CRC errors, and alignment and jabber errors are monitored for a link-fault indication.
	Amber	Port is blocked by Spanning Tree Protocol (STP) and is not forwarding data.  After a port is reconfigured, the port LED can be amber for up to 30 seconds as STP checks the switch for possible loops.
SPEED	<b>10/100/1000/SFP ports</b>	
	Off	Port is operating at 10 Mb/s.
	Green	Port is operating at 100 Mb/s.
	Single green flash (on for 100 ms, off for 1900 ms)	Port is operating at 1000 Mb/s.
	Blinking twice	Port is operating at 2500, 5000 or 10000 Mb/s
	<b>Network module slots</b>	
	Off	Port is not operating.
	Blinking green	Port is operating at up to 10 Gb/s.
DUPLX (duplex)	Off	Port is operating in half duplex.
	Green	Port is operating in full duplex.

Port Mode	Port LED Color	Meaning
ACTV (data active switch)	Off	The switch is not the active switch. <b>Note</b> For a standalone switch, this LED is off.
	Green	The switch is the active switch.
	Amber	Error during active switch election.
	Blinking green	Switch is a standby member of a data stack and assumes active responsibilities if the current active switch fails.
STACK (stack member)	Off	No stack member corresponding to that member number.
	Blinking green	Stack member number.
	Green	Member numbers of other stack member switches.

### Cisco Catalyst 9500 Series High Performance Switches

The port LEDs on the Cisco Catalyst 9500 Series High Performance Switches display only the port status.

**Table 6: Meaning of Switch LED Colors for Port Status LED**

Port LED Color	Meaning
Off	Link is not up.
Green	Link present.
Alternating green-amber	Link fault. Error frames can affect connectivity, and errors such as excessive collisions, CRC errors, and alignment and jabber errors are monitored for a link-fault indication.
Amber	<ul style="list-style-type: none"> <li>Port is blocked by Spanning Tree Protocol (STP) and is not forwarding data. After a port is reconfigured, the port LED can be amber for up to 30 seconds as STP checks the switch for possible loops.</li> <li>Port link is disabled, that is, administratively down.</li> </ul>

## Beacon LED

The UID and the Beacon LED can be turned on by the administrator to indicate that the switch needs attention. It helps the administrator identify the switch. The beacon can be turned on by either pressing the UID button on the switch front panel, or by using the CLI. There is a blue beacon on the front and rear panel of the switch. The blue beacon on the front panel is a button labeled UID, and on the back panel it is a LED labeled BEACON.

Color/State	Description
Solid blue	The operator has indicated that the system needs attention.

## Fan LED

*Table 7: Fan LED Indicator*

Color/State	Description
Off	The fan is not receiving power; the fans have stopped.
Green	The fan is operating normally.
Amber	The fan has encountered a fault.
Red	One or more fans' tachometer faults have exceeded the maximum limit.

## Ethernet Management Port LED

The following table describes the colors and the descriptions of the LEDs for link activity and link status of the Ethernet management port.

*Table 8: Ethernet Management Port Link Activity LED*

Color	Description
Blinking green	Link is up.
Off	Link is down.

*Table 9: Ethernet Management Port Link Status LED*

Color	Description
Solid green	Link is up.
Off	Link is down.

