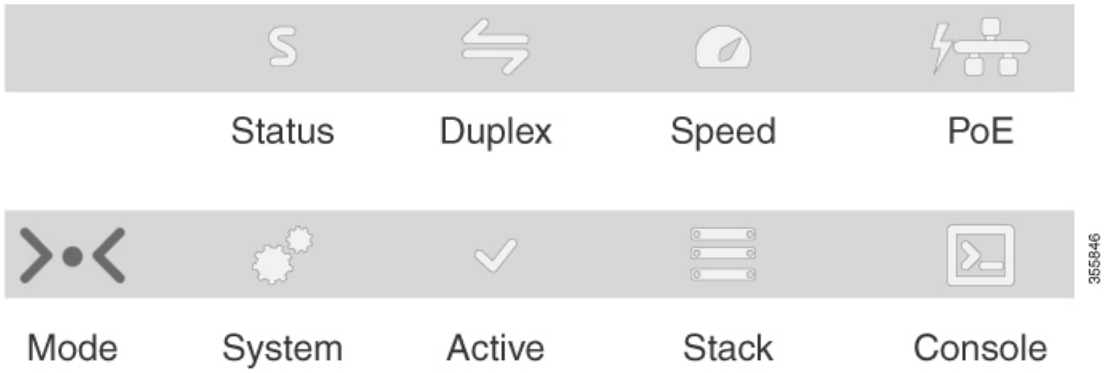
Switch LEDs

LEDs

Switch Front Panel LEDs

You can use the switch LEDs to monitor switch activity and its performance.



Console LED

The console LED indicates whether the USB console port or the bluetooth console is enabled.

Table 1: Console LED

LED	Color	Description
Console	Solid green	USB Mini-Type B console port is active.
	Off	USB cable not connected

System LED

Table 2: System LED

Color	System Status
Off	System is not powered on.
Green	System is operating normally.
Blinking green	System is loading the software.
Amber	System is receiving power but is not functioning properly.

ACTIVE LED

Table 3: ACTIVE LED

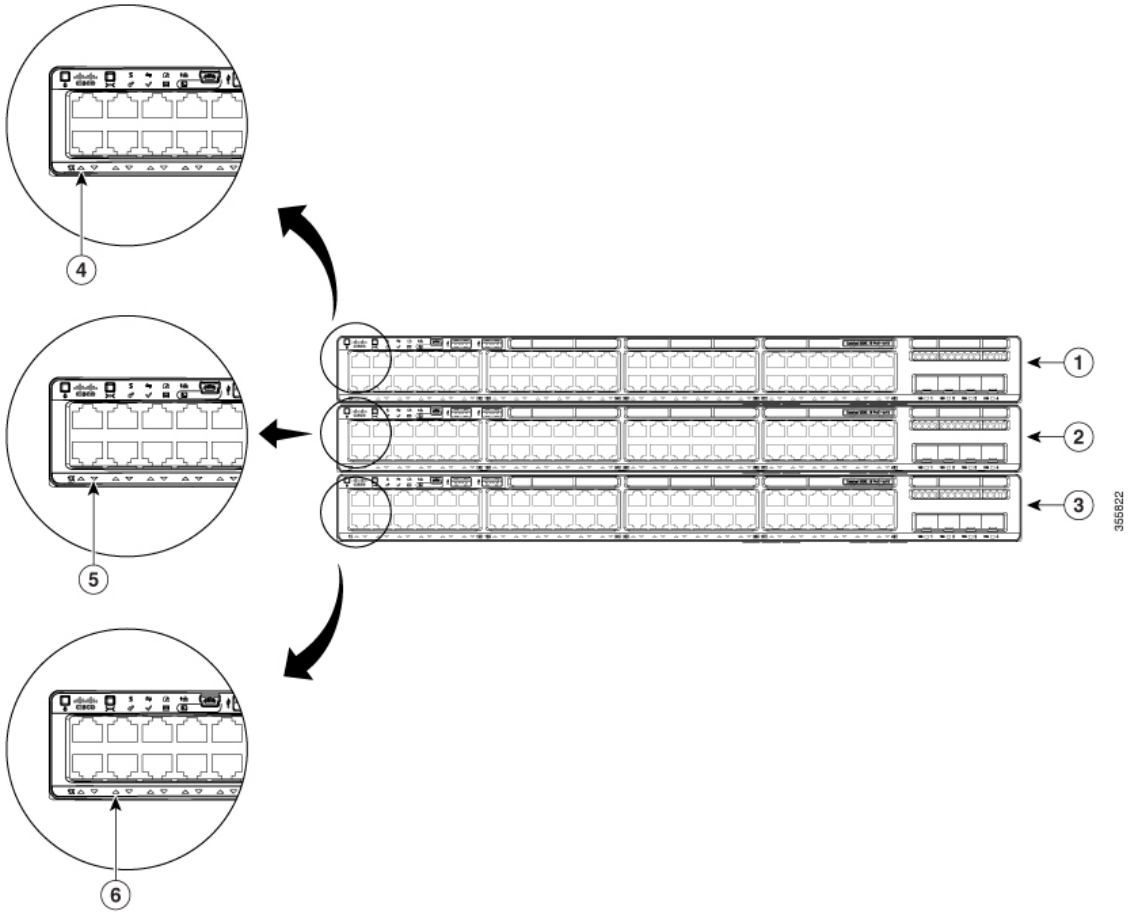
Color	Description
Off	Switch is not the active switch.
Green	Switch is the stack's active switch or a standalone switch.
Fast blinking green	Switch is in stack standby mode.

STACK LED

The STACK LED shows the sequence of member switches in a stack. Up to eight switches can be members of a stack. The first eight port LEDs show the member number of a switch in a stack.

Figure 1: STACK LED

This figure shows the LEDs on for each switch. When you press the Mode button to select the STACK LED, the corresponding port LEDs will blink green for each switch. For example, for switch 1, port 1 will blink green and the rest of the LEDs will be off. On switch 2, port 2 will blink green and the rest of the LEDs will be off. The same behavior will be seen with the remaining switches in the stack.



1	Stack member 1	4	LED blinks green to show that this is switch 1 in the stack.
2	Stack member 2	5	LED blinks green to show that this is switch 2 in the stack.
3	Stack member 3	6	LED blinks green to show that this is switch 3 in the stack.

PoE LED

The PoE LED indicates the status of the PoE mode: either PoE or PoE+.

Table 4: PoE LED

Color	Description
Off	PoE mode is not selected. None of the 10/100/1000 ports have been denied power or are in a fault condition.
Green	PoE mode is selected, and the port LEDs show the PoE mode status.

Port LEDs and Modes

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 5: 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 StackWise port status	Stack member status. The StackWise port status. See STACK LED, on page 2.
PoE[1]	The PoE+ port status.	The PoE+ port status.

[1] Only switches with PoE+ ports.

Table 6: 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	Off	Port is operating at 10 Mb/s.
	Green	Port is operating at 100 Mb/s.
	Blinking green (on for 100 ms, off for 1900 ms)	Port is operating at 1000 Mb/s.
	Blinking green (on for 200 ms, off for 1800 ms)	Port is operating at 2500 Mb/s.
	Blinking green (on for 400 ms, off for 1600 ms)	Port is operating at 5000 Mb/s.
	Blinking green (on for 800 ms, off for 1200 ms)	Port is operating at 10 G.
	Blinking green (on for 1200 ms, off for 800 ms)	Port is operating at 25 G.
	Blinking green (two intervals) (First Interval: on for 200 ms, off for 200 ms) (Second Interval: on for 200 ms, off for 1400 ms)	Port is operating at 40 G.
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. **Note** 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.
PoE+[2]	Off	PoE+ is off. If the powered device is receiving power from an AC power source, the port LED is off even if the device is connected to the switch port.
	Green	PoE+ is on. The port LED is green when the switch port is providing power.
	Alternating green-amber	PoE+ is denied because providing power to the powered device will exceed the switch power capacity.
	Blinking amber	PoE+ is off due to a fault or because it has exceeded a limit set in the switch software. **Caution** PoE+ faults occur when noncompliant cabling or powered devices are connected to a PoE+ port. Use only standard-compliant cabling to connect Cisco prestandard IP Phones and wireless access points or IEEE 802.3af-compliant devices to PoE+ ports. You must remove from the network any cable or device that causes a PoE+ fault.
	Amber	PoE+ for the port has been disabled. **Note** PoE+ is enabled by default

[2] Only switches with PoE or PoE+ ports.

Beacon LED

The beacon LED on the front panel of the switch 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 button on the switch front panel, or by using the CLI.

RJ-45 Console Port LED

Table 7: RJ-45 Console Port LED

Color	RJ-45 Console Port Status
Off	RJ-45 console is disabled. USB console is active.
Green	RJ-45 console is enabled. USB console is disabled.

Fan LED

Table 8: Fan LED Indicator

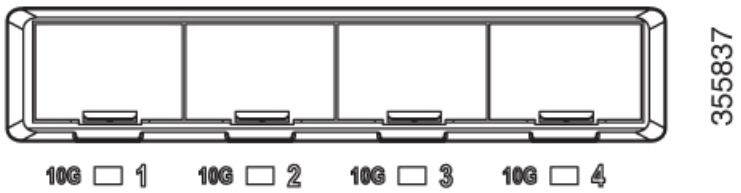
Color/State	Description
Off	The fan is not receiving power; the fans have stopped.
Green	The fan is operating normally.
Amber	The fan has encountered a fault.

Uplink Port LEDs

The uplink ports have various status LEDs. Each port LED is labeled according to its module status.

- For SFP ports, a G labeling nomenclature is used, where G = 1 Gigabit. The The G label appears to the left of the uplink port LED.
- For SFP+ ports, a 10G labeling nomenclature is used, where 10G = 10 Gigabit. The 10G label appears to the left of the uplink port LED. SFP+ module ports support both SFP+ and SFP modules
- For SFP28 ports, a 25G labeling nomenclature is used, where 25G = 25 Gigabit. The The G label appears to the left of the uplink port LED.
- For QSFP+ ports, a 40G labeling nomenclature is used, where 40G = 40 Gigabit. The The G label appears to the left of the uplink port LED.

Figure 2: SFP+ Port LEDs



Color	Network Module Link Status
Off	Link is off.
Green	Link is on; no activity.
Blinking green	Activity on a link; no faults. **Note** The LED will blink green even when there is very little control traffic.
Blinking amber	Link is off due to a fault or because it has exceeded a limit set in the switch software. **Caution** Link faults occur when non-compliant cabling is connected to an SFP/SFP+ port. Use only standard-compliant cabling to connect to Cisco SFP/SFP+ ports. You must remove from the network any cable or device that causes a link fault.
Amber	Link for the SFP/SFP+/SFP28/QSFP+ has been disabled.