H3C S6520X-EI & S6520X-HI Switch Series

Hardware Information and Specifications

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Preface

H3C S6520X-EI & S6520X-HI Switch Series Hardware Information and Specifications describes product models, technical specifications, ports,and LEDs of the S6520X-EI & S6520X-HI switches.

This preface includes the following topics about the documentation:

- Audience.
- Conventions.
- Documentation feedback.

Audience

This documentation is intended for:

- Network planners.
- Field technical support and servicing engineers.
- Network administrators working with the switches.

Conventions

The following information describes the conventions used in the documentation.

Command conventions

Convention	Description
Boldface	**Bold** text represents commands and keywords that you enter literally as shown.
Italic	*Italic* text represents arguments that you replace with actual values.
[ ]	Square brackets enclose syntax choices (keywords or arguments) that are optional.
{ x | y | ... }	Braces enclose a set of required syntax choices separated by vertical bars, from which you select one.
[x | y | ...]	Square brackets enclose a set of optional syntax choices separated by vertical bars, from which you select one or none.
{ x | y | ... } *	Asterisk marked braces enclose a set of required syntax choices separated by vertical bars, from which you select a minimum of one.
[x | y | ...] *	Asterisk marked square brackets enclose optional syntax choices separated by vertical bars, from which you select one choice, multiple choices, or none.
&<1-n>	The argument or keyword and argument combination before the ampersand (&) sign can be entered 1 to n times.
#	A line that starts with a pound (#) sign is comments.

GUI conventions

Convention	Description
Boldface	Window names, button names, field names, and menu items are in Boldface. For example, the **New User** window opens; click **OK**.
>	Multi-level menus are separated by angle brackets. For example, **File** > **Create** > **Folder**.

Symbols

Convention	Description
WARNING!	An alert that calls attention to important information that if not understood or followed can result in personal injury.
CAUTION:	An alert that calls attention to important information that if not understood or followed can result in data loss, data corruption, or damage to hardware or software.
IMPORTANT:	An alert that calls attention to essential information.
NOTE:	An alert that contains additional or supplementary information.
TIP:	An alert that provides helpful information.

Network topology icons

Convention	Description
	Represents a generic network device, such as a router, switch, or firewall.
	Represents a routing-capable device, such as a router or Layer 3 switch.
	Represents a generic switch, such as a Layer 2 or Layer 3 switch, or a router that supports Layer 2 forwarding and other Layer 2 features.
	Represents an access controller, a unified wired-WLAN module, or the access controller engine on a unified wired-WLAN switch.
	Represents an access point.
	Represents a wireless terminator unit.
	Represents a wireless terminator.
	Represents a mesh access point.
	Represents omnidirectional signals.
	Represents directional signals.
	Represents a security product, such as a firewall, UTM, multiservice security gateway, or load balancing device.
	Represents a security module, such as a firewall, load balancing, NetStream, SSL VPN, IPS, or ACG module.

Examples provided in this document

Examples in this document might use devices that differ from your device in hardware model, configuration, or software version. It is normal that the port numbers, sample output, screenshots, and other information in the examples differ from what you have on your device.

Documentation feedback

You can e-mail your comments about product documentation to info@h3c.com.

We appreciate your comments.

1 Product models and technical specifications

Product models

H3C S6520X-EI switch series includes the following models:

- S6520X-30QC-EI
- S6520X-54QC-EI
- S6520X-30HC-EI
- S6520X-54HC-EI
- S6520X-30HF-EI
- S6520X-54HF-EI
- S6520X-54HC-UPWR-EI

H3C S6520X-HI switch series includes the following models:

- S6520X-30QC-HI
- S6520X-54QC-HI
- S6520X-30HC-HI
- S6520X-54HC-HI
- S6520X-30HF-HI
- S6520X-54HF-HI

Technical specifications

Table1-1 Technical specifications (1)

Item	S6520X-30QC-EI S6520X-30QC-HI	S6520X-54QC-EI S6520X-54QC-HI	S6520X-30HC-EI S6520X-30HC-HI	S6520X-54HC-EI S6520X-54HC-HI
Dimensions (H × W × D)	43.6 × 440 × 360 mm (1.72 × 17.32 × 14.17 in)	43.6 × 440 × 360 mm (1.72 × 17.32 × 14.17 in)	43.6 × 440 × 360 mm (1.72 × 17.32 × 14.17 in)	43.6 × 440 × 360 mm (1.72 × 17.32 × 14.17 in)
Weight	≤ 7.0 kg (15.43 lb)	≤ 7.2 kg (15.87 lb)	≤ 7.4 kg (16.31 lb)	≤ 7.6 kg (16.75 lb)
Console port	• 1 × micro USB console port • 1 × serial console port Only the micro USB console port is available when you connect both ports.			
USB port	1	1	1	1
Management Ethernet port	1	1	1	1
QSFP+ port	2	2	N/A	N/A
SFP+ port	24	48	24	48
QSFP28 port	N/A	N/A	2	2

Item	S6520X-30QC-EI S6520X-30QC-HI	S6520X-54QC-EI S6520X-54QC-HI	S6520X-30HC-EI S6520X-30HC-HI	S6520X-54HC-EI S6520X-54HC-HI
Expansion slot	2, on the rear panel	2, on the rear panel	2, on the rear panel	2, on the rear panel
Power supply slot	2, on the rear panel	2, on the rear panel	2, on the rear panel	2, on the rear panel
Fan tray slot	2, on the rear panel	2, on the rear panel	2, on the rear panel	2, on the rear panel

Input voltage	• AC input for the PSR250-12A/PSR250-12A1 power supply:
	  ○ Rated voltage range: 100 to 240 VAC @ 50/60 Hz
	  ○ Max voltage range: 90 to 264 VAC @ 47 to 63 Hz
	• High-voltage DC input for the PSR250-12A/PSR250-12A1 power supply:
	  ○ Rated voltage range: 240 VDC
	  ○ Max voltage range: 180 to 320 VDC
	• PSR450-12D power supply:
	  ○ Rated voltage range: –48 to –60 VDC
	  ○ Max voltage range: –36 to –72 VDC			

Minimum power consumption	• 38 W with one PSR250-12A/PSR250-12A1 • 43 W with two PSR250-12A/PSR250-12A1 • 40 W with one PSR450-12D • 45 W with two PSR450-12D	• 39 W with one PSR250-12A/PSR250-12A1 • 44 W with two PSR250-12A/PSR250-12A1 • 41 W with one PSR450-12D • 46 W with two PSR450-12D	• 38 W with one PSR250-12A/PSR250-12A1 • 43 W with two PSR250-12A/PSR250-12A1 • 40 W with one PSR450-12D • 45 W with two PSR450-12D	• 44 W with one PSR250-12A/PSR250-12A1 • 49 W with two PSR250-12A/PSR250-12A1 • 46 W with one PSR450-12D • 51 W with two PSR450-12D
Maximum power consumption	• 179 W with one PSR250-12A/PSR250-12A1 • 183 W with two PSR250-12A/PSR250-12A1 • 181 W with one PSR450-12D • 185 W with two PSR450-12D	• 231 W with one PSR250-12A/PSR250-12A1 • 234 W with two PSR250-12A/PSR250-12A1 • 233 W with one PSR450-12D • 236 W with two PSR450-12D	• 197 W with one PSR250-12A/PSR250-12A1 • 200 W with two PSR250-12A/PSR250-12A1 • 199 W with one PSR450-12D • 202 W with two PSR450-12D	• 249 W with one PSR250-12A/PSR250-12A1 • 251 W with two PSR250-12A/PSR250-12A1 • 251 W with one PSR450-12D • 253 W with two PSR450-12D

Melting current of power supply fuse	• PSR250-12A/PSR250-12A1:
	  ○ AC input: 6.3 A/250 VAC
	  ○ High-voltage DC input: 6.3 A/250 VDC
	• PSR450-12D: 20 A/125 V			

Operating temperature	–5°C to +45°C (23°F to 113°F) **Note:** The maximum acceptable temperature decreases by 0.33°C (32.59°F) for every 100 m (328.08 ft) increase in altitude from 0 m (0 ft).			
Humidity	5% RH to 95% RH, noncondensing			
Security compliance	UL 60950-1/IEC 60950-1/GB4943.1			

Table1-2 Technical specifications (2)

Item	S6520X-30HF-EI	S6520X-54HF-EI	S6520X-30HF-HI	S6520X-54HF-HI
Dimensions (H × W × D)	44 × 440 × 360 mm (1.73 × 17.32 × 14.17 in)	44 × 440 × 360 mm (1.73 × 17.32 × 14.17 in)	44 × 440 × 360 mm (1.73 × 17.32 × 14.17 in)	44 × 440 × 360 mm (1.73 × 17.32 × 14.17 in)
Weight	≤ 5.5 kg (12.13 lb)	≤ 6.0 kg (13.23 lb)	≤ 6.0 kg (13.23 lb)	≤ 6.5 kg (14.33 lb)
Console port	1 × serial console port			
Management Ethernet port	1	1	1	1
USB port	1	1	1	1
SFP+ port	24	48	24	48
QSFP28 port	6	6	6	6
Fan tray slot	3	3	3	3
Power supply slot	2	2	2	2
Input voltage	AC input for the PSR180-12A-F/PSR180-12A-B power supply: • Rated voltage range: 100 to 240 VAC @ 50/60 Hz • Max voltage range: 90 to 264 VAC @ 47 to 63 Hz			
Minimum power consumption	• 29 W with one PSR180-12A-F /PSR180-12A-B • 35 W with two PSR180-12A-F /PSR180-12A-B	• 29 W with one PSR180-12A-F /PSR180-12A-B • 36 W with two PSR180-12A-F /PSR180-12A-B	• 38 W with one PSR180-12A-F /PSR180-12A-B • 46 W with two PSR180-12A-F /PSR180-12A-B	• 36 W with one PSR180-12A-F /PSR180-12A-B • 44 W with two PSR180-12A-F /PSR180-12A-B
Maximum power consumption	• 131 W with one PSR180-12A-F /PSR180-12A-B • 134 W with two PSR180-12A-F /PSR180-12A-B	• 162 W with one PSR180-12A-F /PSR180-12A-B • 163 W with two PSR180-12A-F /PSR180-12A-B	• 143 W with one PSR180-12A-F /PSR180-12A-B • 145 W with two PSR180-12A-F /PSR180-12A-B	• 176 W with one PSR180-12A-F /PSR180-12A-B • 177 W with two PSR180-12A-F /PSR180-12A-B
Melting current of power supply fuse	6.3 A @ 250 VAC			
Operating temperature	–5°C to +45°C (23°F to 113°F) **Note:** The maximum acceptable temperature decreases by 0.33°C (32.59°F) for every 100 m (328.08 ft) increase in altitude from 0 m (0 ft).			
Humidity	5% RH to 95% RH, noncondensing			
Safety	UL 62368-1/EN 62368-1/IEC 62368-1/UL 60950-1/IEC 60950-1/GB4943.1			

Item	S6520X-30HF-EI	S6520X-54HF-EI	S6520X-30HF-HI	S6520X-54HF-HI
specification compliance				

Table1-3 Technical specifications (3)

Item	S6520X-54HC-UPWR-EI
Dimensions (H × W × D)	44 × 440 × 460 mm (1.73 × 17.32 × 18.11 in)
Weight	≤ 9.6 kg (21.16 lb)
Console port	1 × serial console port
USB port	1
Management Ethernet port	1
10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port	24
QSFP28 port	4
Expansion slot	2, one on the front panel and the other on the rear panel
Power supply slot	2, on the rear panel
Fan tray slot	2, on the rear panel
Input voltage	• Rated voltage range: 100 to 240 VAC @ 50/60 Hz • Max voltage range: 90 to 290 VAC @ 47 to 63 Hz
PoE power capacity	Depends on the power supply configuration, as shown in Table1-4.
Power consumption (static)	With an LSWM124SFPP interface module installed: • Single AC input: 69 W • Dual AC inputs: 82 W With an LSWM124MUPWR interface module installed: • Single AC input: 74 W • Dual AC inputs: 89 W
Power consumption (with typical configuration)	With an LSWM124SFPP interface module installed: • Single AC input: 169 W • Dual AC inputs: 183 W With an LSWM124MUPWR interface module installed: • Single AC input: 191 W • Dual AC inputs: 211 W
Power consumption (full load)	Depends on the power supply configuration, as shown in Table1-5.
Melting current of power supply fuse	• PSR600-54A-B: 10 A/250 V • PSR920-54A-B: 16 A/250 V • PSR1600-54A-B: 16 A/250 V
Operating temperature	–5°C to +45°C (23°F to 113°F) **Note:** The maximum acceptable temperature decreases by 0.33°C (32.59°F) for every 100 m (328.08 ft) increase in altitude from 0 m (0 ft).
Humidity	5% RH to 95% RH, noncondensing
Security compliance	UL62368-1/EN62368-1/IEC62368-1/UL60950-1/IEC60950-1/GB4943.1

Table1-4 PoE power capacity of the S6520X-54HC-UPWR-EI switch

Power supply configuration	S6520X-54HC-UPWR-EI	
	Total PoE power capacity	Max PoE power capacity per port
1 × PSR600-54A-B	300 W	100 W
1 × PSR920-54A-B	630 W	100 W
1 × PSR1600-54A-B (90 VAC to 176 VAC)	630 W	100 W
1 × PSR1600-54A-B (176 VAC to 290 VAC or 180 VDC to 320 VDC)	1290 W	100 W
2 × PSR600-54A-B	870 W	100 W
1 × PSR600-54A-B and 1 × PSR920-54A-B	870 W	100 W
2 × PSR920-54A-B	1440 W	100 W
1 × PSR920-54A-B and 1 × PSR1600-54A-B (90 VAC to 176 VAC)	1100 W	100 W
1 × PSR920-54A-B and 1 × PSR1600-54A-B (176 VAC to 290 VAC or 180 VDC to 320 VDC)	1440 W	100 W
2 × PSR1600-54A-B (90 VAC to 176 VAC)	1440 W	100 W
1 × PSR1600-54A-B (90 VAC to 176 VAC) and 1 × PSR1600-54A-B (176 VAC to 290 VAC or 180 VDC to 320 VDC)	1440 W	100 W
2 × PSR1600-54A-B (176 VAC to 290 VAC or 180 VDC to 320 VDC)	• 2400 W (with an LSWM124SFPP interface module installed) • 2700 W (with an LSWM124MUPWR interface module installed)	100 W **Note:** If the switch is installed with an LSWM124MUPWR interface module, the maximum PoE power capacity per port for the module is 60 W.

Table1-5 Power consumption of the S6520X-54HC-UPWR-EI switch (full load)

Power supply configuration	S6520X-54HC-UPWR-EI	
	With an LSWM124MUPWR interface module installed	With an LSWM124SFPP interface module installed
1 × PSR600-54A-B	510 W	540 W
1 × PSR920-54A-B	812 W	810 W
1 × PSR1600-54A-B (90 VAC to 176 VAC)	867 W	860 W

Power supply configuration	S6520X-54HC-UPWR-EI	
	With an LSWM124MUPWR interface module installed	With an LSWM124SFPP interface module installed
1 × PSR1600-54A-B (176 VAC to 290 VAC or 180 VDC to 320 VDC)	1595 W	1580 W
2 × PSR600-54A-B	1008 W	997 W
2 × PSR920-54A-B	1726 W	1637 W
2 × PSR1600-54A-B (90 VAC to 176 VAC)	1909 W	1701 W
2 × PSR1600-54A-B (176 VAC to 290 VAC or 180 VDC to 320 VDC)	3061 W	2487 W

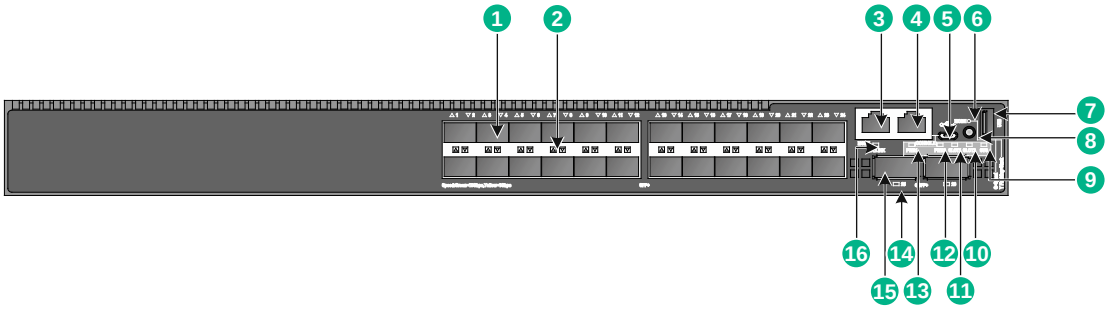
IMPORTANT:

Do not install a PSR600-54A-B and a PSR1600-54A-B on the same switch.

2 Chassis views

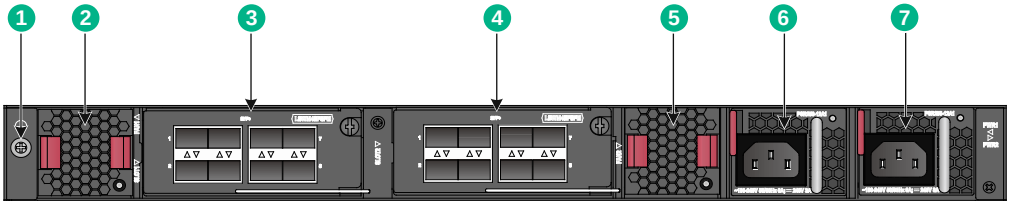
S6520X-30QC-EI & S6520X-30QC-HI

Figure2-1 Front panel



(1) SFP+ port	(2) SFP+ port LED
(3) Management Ethernet port	(4) Console port (CONSOLE)
(5) Micro USB console port	(6) Mode LED (MODE)
(7) USB port	(8) Mode button
(9) System status LED (SYS)	(10) Expansion card 2 status LED (SLOT2)
(11) Expansion card 1 status LED (SLOT1)	(12) Power supply 2 status LED (PWR2)
(13) Power supply 1 status LED (PWR1)	(14) QSFP+ port LED
(15) QSFP+ port	(16) Management Ethernet port LED (ACT/LINK)

Figure2-2 Rear panel



(1) Grounding screw	(2) Fan tray 1 (FAN1)
(3) Expansion card 1 (SLOT1)	(4) Expansion card 2 (SLOT2)
(5) Fan tray 2 (FAN2)	(6) Power supply 1 (PWR1)
(7) Power supply 2 (PWR2)	

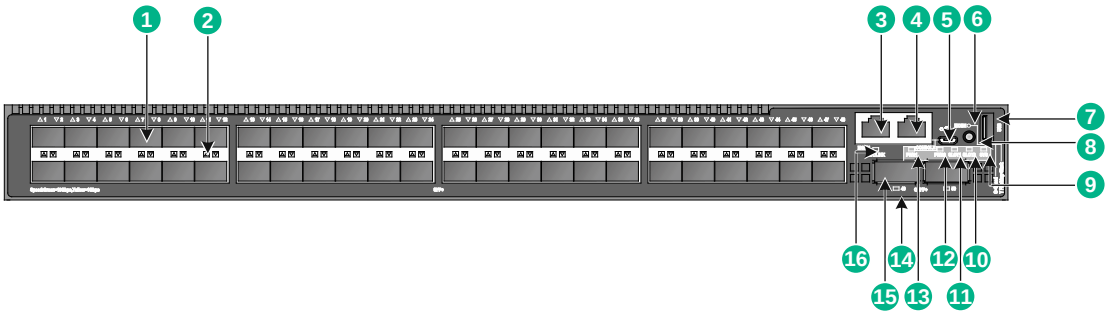
The S6520X-30QC-EI and S6520X-30QC-HI switches came with power supply slot PWR1 empty and power supply slot PWR2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure2-2, two PSR250-12A1 power supplies are installed in the power supply slots.

The S6520X-30QC-EI and S6520X-30QC-HI switches came with the two fan tray slots empty. You must install two fan trays of the same model for the switch. In Figure2-2, two LSWM1FANSCBE fan trays are installed in the fan tray slots.

The S6520X-30QC-EI and S6520X-30QC-HI switches came with a filler panel in each expansion slot. You can select expansion cards for the switch as required. In Figure2-2, two LSWM4SP8PM interface modules are installed in the expansion slots.

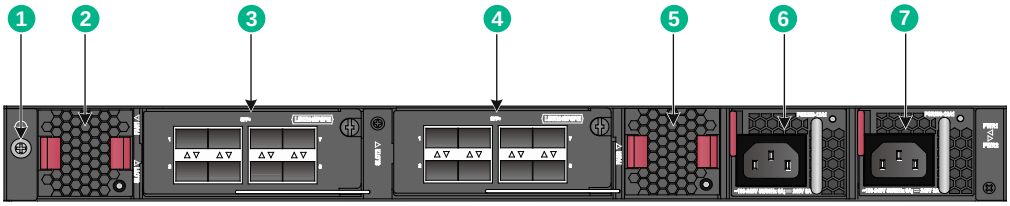
S6520X-54QC-EI & S6520X-54QC-HI

Figure2-3 Front panel



(1) SFP+ port	(2) SFP+ port LED
(3) Management Ethernet port	(4) Console port (CONSOLE)
(5) Micro USB console port	(6) Mode LED (MODE)
(7) USB port	(8) Mode button
(9) System status LED (SYS)	(10) Expansion card 2 status LED (SLOT2)
(11) Expansion card 1 status LED (SLOT1)	(12) Power supply 2 status LED (PWR2)
(13) Power supply 1 status LED (PWR1)	(14) QSFP+ port LED
(15) QSFP+ port	(16) Management Ethernet port LED (ACT/LINK)

Figure2-4 Rear panel



(1) Grounding screw	(2) Fan tray 1 (FAN1)
(3) Expansion card 1 (SLOT1)	(4) Expansion card 2 (SLOT2)
(5) Fan tray 2 (FAN2)	(6) Power supply 1 (PWR1)
(7) Power supply 2 (PWR2)	

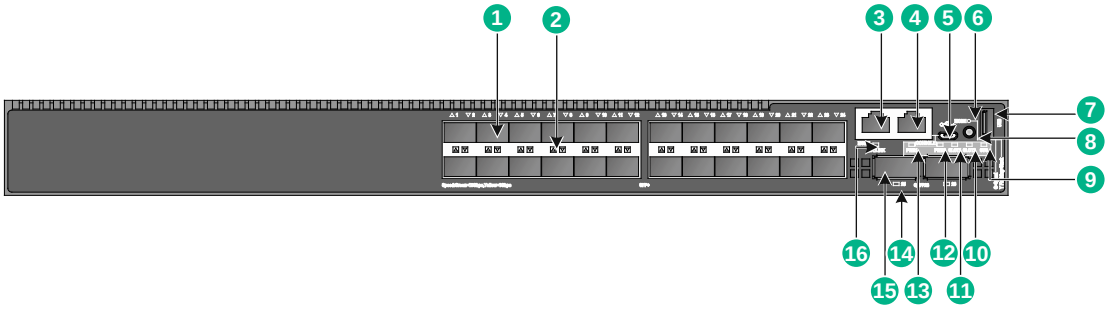
The S6520X-54QC-EI and S6520X-54QC-HI switches came with power supply slot PWR1 empty and power supply slot PWR2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure2-4, two PSR250-12A1 power supplies are installed in the power supply slots.

The S6520X-54QC-EI and S6520X-54QC-HI switches came with the two fan tray slots empty. You must install two fan trays of the same model for the switch. In Figure2-4, two LSWM1FANSCBE fan trays are installed in the fan tray slots.

The S6520X-54QC-EI and S6520X-54QC-HI switches came with a filler panel in each expansion slot. You can select expansion cards for the switch as required. In Figure2-4, two LSWM4SP8PM interface modules are installed in the expansion slots.

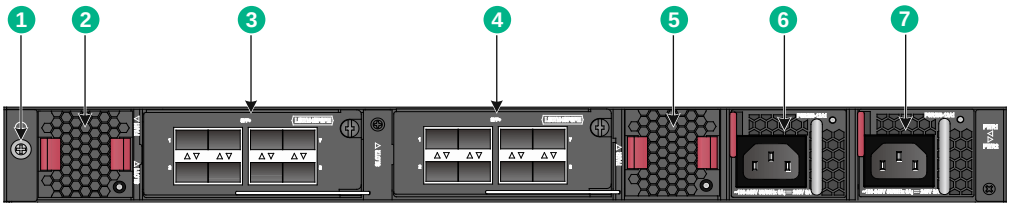
S6520X-30HC-EI & S6520X-30HC-HI

Figure2-5 Front panel



(1) SFP+ port	(2) SFP+ port LED
(3) Management Ethernet port	(4) Console port (CONSOLE)
(5) Micro USB console port	(6) Mode LED (MODE)
(7) USB port	(8) Mode button
(9) System status LED (SYS)	(10) Expansion card 2 status LED (SLOT2)
(11) Expansion card 1 status LED (SLOT1)	(12) Power supply 2 status LED (PWR2)
(13) Power supply 1 status LED (PWR1)	(14) QSFP28 port LED
(15) QSFP28 port	(16) Management Ethernet port LED (ACT/LINK)

Figure2-6 Rear panel



(1) Grounding screw	(2) Fan tray 1 (FAN1)
(3) Expansion card 1 (SLOT1)	(4) Expansion card 2 (SLOT2)
(5) Fan tray 2 (FAN2)	(6) Power supply 1 (PWR1)
(7) Power supply 2 (PWR2)	

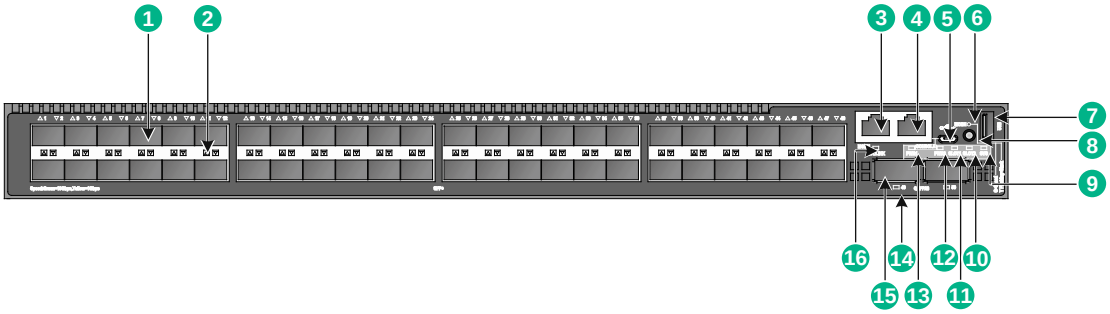
The S6520X-30HC-EI and S6520X-30HC-HI switches came with power supply slot PWR1 empty and power supply slot PWR2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure2-6, two PSR250-12A1 power supplies are installed in the power supply slots.

The S6520X-30HC-EI & S6520X-30HC-HI switches came with the two fan tray slots empty. You must install two fan trays of the same model for the switch. In Figure2-6, two LSWM1FANSCBE fan trays are installed in the fan tray slots.

The S6520X-30HC-EI & S6520X-30HC-HI switches came with a filler panel in each expansion slot. You can select expansion cards for the switch as required. In Figure2-6, two LSWM4SP8PM interface modules are installed in the expansion slots.

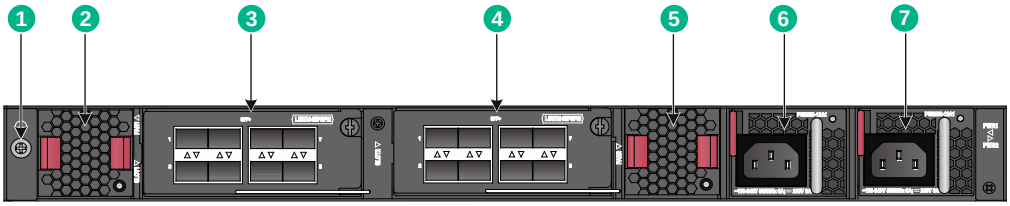
S6520X-54HC-EI & S6520X-54HC-HI

Figure2-7 Front panel



(1) SFP+ port	(2) SFP+ port LED
(3) Management Ethernet port	(4) Console port (CONSOLE)
(5) Micro USB console port	(6) Mode LED (MODE)
(7) USB port	(8) Mode button
(9) System status LED (SYS)	(10) Expansion card 2 status LED (SLOT2)
(11) Expansion card 1 status LED (SLOT1)	(12) Power supply 2 status LED (PWR2)
(13) Power supply 1 status LED (PWR1)	(14) QSFP28 port LED
(15) QSFP28 port	(16) Management Ethernet port LED (ACT/LINK)

Figure2-8 Rear panel



(1) Grounding screw	(2) Fan tray 1 (FAN1)
(3) Expansion card 1 (SLOT1)	(4) Expansion card 2 (SLOT2)
(5) Fan tray 2 (FAN2)	(6) Power supply 1 (PWR1)
(7) Power supply 2 (PWR2)	

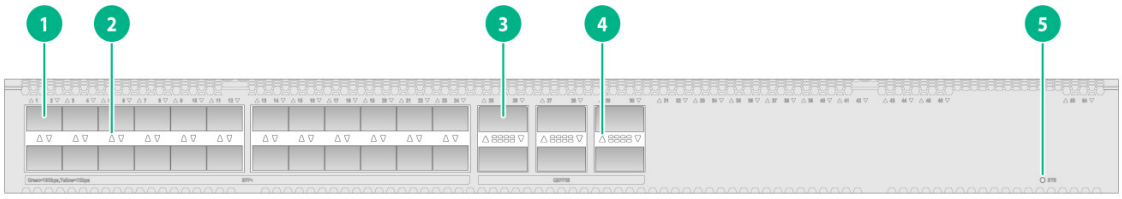
The S6520X-54HC-EI and S6520X-54HC-HI switches came with power supply slot PWR1 empty and power supply slot PWR2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure2-8, two PSR250-12A1 power supplies are installed in the power supply slots.

The S6520X-54HC-EI and S6520X-54HC-HI switches came with the two fan tray slots empty. You must install two fan trays of the same model for the switch. In Figure2-4, two LSWM1FANSCBE fan trays are installed in the fan tray slots.

The S6520X-54HC-EI and S6520X-54HC-HI switches came with a filler panel in each expansion slot. You can select expansion cards for the switch as required. In Figure2-4, two LSWM4SP8PM interface modules are installed in the expansion slots.

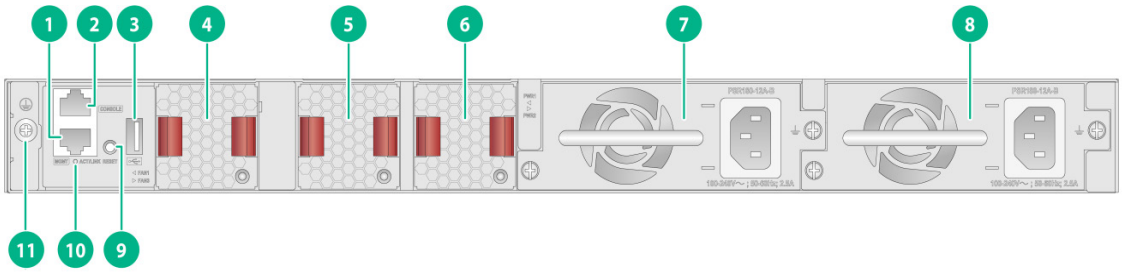
S6520X-30HF-EI & S6520X-30HF-HI

Figure2-9 Front panel



(1) SFP+ port	(2) SFP+ port LED
(3) QSFP28 port	(4) QSFP28 port LED
(5) System status LED (SYS)	

Figure2-10 Rear panel



(1) Management Ethernet port	(2) Console port (CONSOLE)
(3) USB port	(4) Fan tray 1 (FAN1)
(5) Fan tray 2 (FAN2)	(6) Fan tray 3 (FAN3)
(7) Power supply 1 (PWR1)	(8) Power supply 2 (PWR2)
(9) Reset button (RESET)	(10) Management Ethernet port LED (ACT/LINK)
(11) Grounding screw	

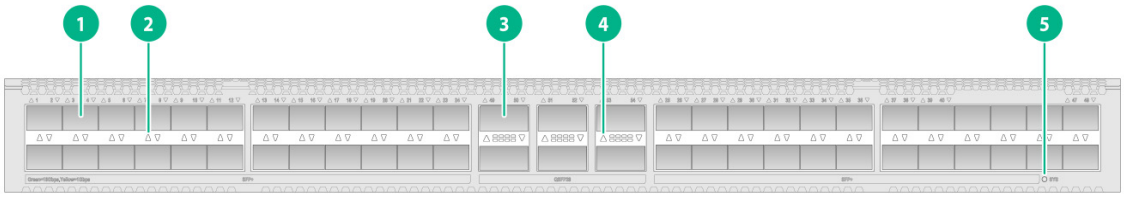
The S6520X-30HF-EI and S6520X-30HF-HI switches came with power supply slot PWR1 empty and power supply slot PWR2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure2-10, two PSR180-12A-B power supplies are installed in the power supply slots.

The S6520X-30HF-EI and S6520X-30HF-HI switches came with the three fan tray slots empty. You must install three fan trays of the same model for the switch. In Figure2-10, three LSPM1FANSB-SN fan trays are installed in the fan tray slots.

The S6520X-30HF-EI and S6520X-30HF-HI switches came with a reset button RESET. You can press the button to reboot the device.

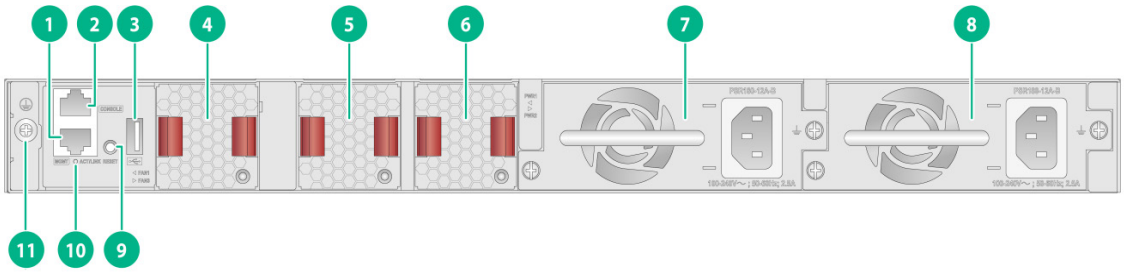
S6520X-54HF-EI & S6520X-54HF-HI

Figure2-11 Front panel



(1) SFP+ port	(2) SFP+ port LED
(3) QSFP28 port	(4) QSFP28 port LED
(5) System status LED (SYS)	

Figure2-12 Rear panel



(1) Management Ethernet port	(2) Console port (CONSOLE)
(3) USB port	(4) Fan tray 1 (FAN1)
(5) Fan tray 2 (FAN2)	(6) Fan tray 3 (FAN3)
(7) Power supply 1 (PWR1)	(8) Power supply 2 (PWR2)
(9) Reset button (RESET)	(10) Management Ethernet port LED (ACT/LINK)
(11) Grounding screw	

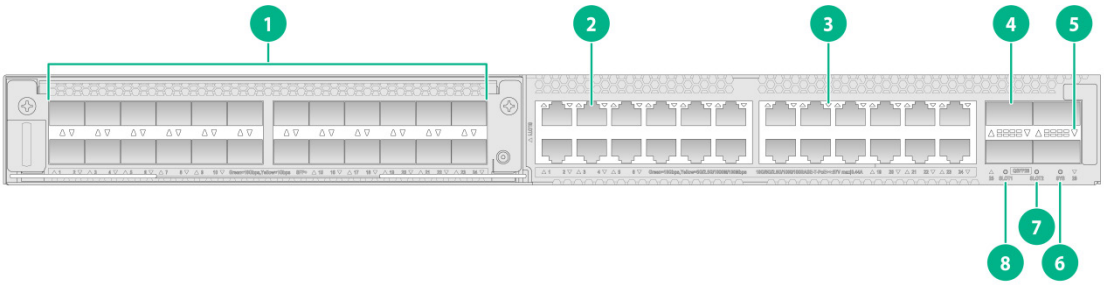
The S6520X-54HF-EI and S6520X-54HF-HI switches came with power supply slot PWR1 empty and power supply slot PWR2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure2-12, two PSR180-12A-B power supplies are installed in the power supply slots.

The S6520X-54HF-EI and S6520X-54HF-HI switches came with the three fan tray slots empty. You must install three fan trays of the same model for the switch. In Figure2-12, three LSPM1FANSB-SN fan trays are installed in the fan tray slots.

The S6520X-54HF-EI and S6520X-54HF-HI switches came with a reset button (RESET). You can press the button to reboot the device.

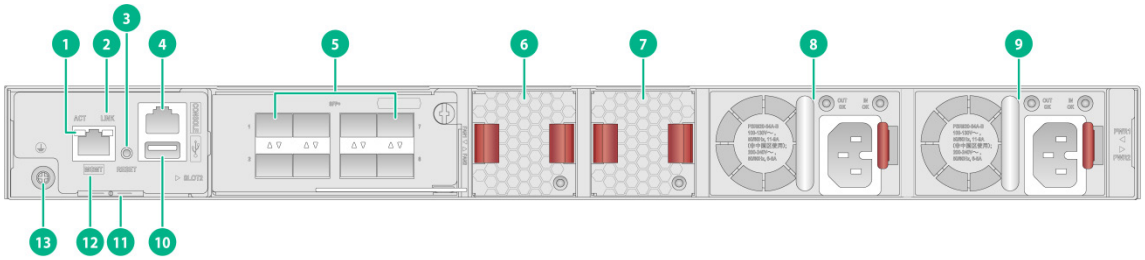
S6520X-54HC-UPWR-EI

Figure2-13 Front panel



(1) Expansion card 1 (SLOT1)	(2) 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port
(3) 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port LED	(4) QSFP28 port
(5) QSFP28 port LED	(6) System status LED (SYS)
(7) Expansion card status LED (SLOT2)	(8) Expansion card status LED (SLOT1)

Figure2-14 Rear panel



(1) Management Ethernet port LED (ACT)	(2) Management Ethernet port LED (LINK)
(3) Reset button (RESET)	(4) Console port (CONSOLE)
(5) Expansion card 2 (SLOT2)	(6) Fan tray 1 (FAN1)
(7) Fan tray 2 (FAN2)	(8) Power supply 1 (PWR1)
(9) Power supply 2 (PWR2)	(10) USB port
(11) Serial label pull tab	(12) Management Ethernet port
(13) Grounding screw	

The SN serial number and MAC address of the S6520X-54HC-UPWR-EI switch can be found on the serial label pull tab.

The S6520X-54HC-UPWR-EI switch came with power supply slot PWR1 empty and power supply slot PWR2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure2-14, two PSR920-54A-B power supplies are installed in the power supply slots.

The S6520X-54HC-UPWR-EI switch came with the two fan tray slots empty. You must install two fan trays of the same model for the switch. In Figure2-14, two FAN-40B-1-A fan trays are installed in the fan tray slots.

The S6520X-54HC-UPWR-EI switch came with the two expansion slots each installed with a filler panel. You can select expansion cards for the switch as required. In Figure2-13 and Figure2-14, an LSWM124SFPP and an LSWM4SP8PM are installed in the expansion slots on the front and rear panels, respectively.

You can install an LSWM124SFPP or LSWM124MUPWR interface module only in SLOT1 and an interface module of any other model only in SLOT2.

The S6520X-54HC-UPWR-EI switch came with a reset button (RESET). You can press the button to reboot the device.

3 Removable components and compatibility matrixes

CAUTION:

- Do not install or remove an expansion card on a starting switch.
- All expansion cards except the LSWM124MUPWR interface module support hot swapping.

Table3-1 Compatibility matrix between switches and removable components

FRU model	S6520X-30QC-EI S6520X-30QC-HI S6520X-54QC-EI S6520X-54QC-HI	S6520X-30HC-EI S6520X-30HC-HI S6520X-54HC-EI S6520X-54HC-HI	S6520X-30HF-EI S6520X-54HF-EI S6520X-30HF-HI S6520X-54HF-HI	S6520X-54HC-UPWR-EI
Removable power supplies				
PSR250-12A	Supported	Supported	Not supported	Not supported
PSR250-12A1	Supported	Supported	Not supported	Not supported
PSR450-12D	Supported	Supported	Not supported	Not supported
PSR180-12A-F	Not supported	Not supported	Supported	Not supported
PSR180-12A-B	Not supported	Not supported	Supported	Not supported
PSR600-54A-B	Not supported	Not supported	Not supported	Supported
PSR920-54A-B	Not supported	Not supported	Not supported	Supported
PSR1600-54A-B	Not supported	Not supported	Not supported	Supported
Removable fan trays				
LSWM1FANSCE	Supported	Supported	Not supported	Not supported
LSWM1FANSCBE	Supported	Supported	Not supported	Not supported
LSPM1FANSA-SN	Not supported	Not supported	Supported	Not supported
LSPM1FANSB-SN	Not supported	Not supported	Supported	Not supported
FAN-40B-1-A	Not supported	Not supported	Not supported	Supported
Expansion cards				
LSWM2QP2P	Supported	Supported	Not supported	Supported
LSWM2SP8P	Supported	Supported	Not supported	Supported

FRU model	S6520X-30QC-EI S6520X-30QC-HI S6520X-54QC-EI S6520X-54QC-HI	S6520X-30HC-EI S6520X-30HC-HI S6520X-54HC-EI S6520X-54HC-HI	S6520X-30HF-EI S6520X-54HF-EI S6520X-30HF-HI S6520X-54HF-HI	S6520X-54HC-UPWR-EI
LSWM4SP8PM	Supported	Supported	Not supported	Supported
LSWM2ZQP2P	Not supported	Supported	Not supported	Supported
LSWM2ZSP8P	Not supported	Supported	Not supported	Supported
LSPM6FWD	Supported	Supported	Not supported	Supported
LSPM6FWD8	Supported	Supported	Not supported	Supported
LSWM2XMGT8P	Supported	Supported	Not supported	Supported
LSWM2MGT8P	Supported	Supported	Not supported	Supported
LSWM2SP2PB	Supported	Supported	Not supported	Supported
LSWM2SP4PB	Supported	Supported	Not supported	Supported
LSWM2FPGAB	Not supported	Not supported	Not supported	Supported
LSWM2FPGA	Not supported	Not supported	Not supported	Supported
LSWM2-iMC	Not supported	Not supported	Not supported	Supported
LSWM2EC	Not supported	Not supported	Not supported	Supported
LSWM2XMGT2PM	Not supported	Not supported	Not supported	Supported
LSWM124SFPP	Not supported	Not supported	Not supported	Supported
LSWM124MUPWR	Not supported	Not supported	Not supported	Supported

Removable power supplies

The switch uses removable power supplies. You can install one power supply, or two power supplies in 1+1 redundancy for the switch.

Table3-2 Power supplies available for the switch

Power supply model	AC or DC input	Specifications	Reference
PSR250-12A PSR250-12A1	AC input	• Rated input voltage range: 100 to 240 VAC @ 50/60 Hz • Max input voltage range: 90 to 264 VAC @ 47 to 63 Hz • Max output power: 250 W	*H3C PSR250-12A & PSR250-12A1 Power Modules User Manual*

Power supply model	AC or DC input	Specifications	Reference
	High-voltage DC input	• Rated input voltage: 240 VDC • Max input voltage range: 180 to 320 VDC • Max output power: 250 W	
PSR450-12D	DC input	• Rated input voltage range: –48 to –60 VDC • Max input voltage range: –36 to –72 VDC • Max output power: 450 W	*H3C PSR450 Power Supply Series User Guide*
PSR180-12A-F	AC input	• Rated input voltage range: 100 to 240 VAC @ 56/60 Hz • Max input voltage range: 90 to 264 VAC @ 47 to 63 Hz • Max output power: 180 W • Melting current of power supply fuse: 6.3 A/250 V	*H3C PSR180-12A & PSR180-12D Power Supply Series User Manual*
PSR180-12A-B	AC input	• Rated input voltage range: 100 to 240 VAC @ 56/60 Hz • Max input voltage range: 90 to 264 VAC @ 47 to 63 Hz • Max output power: 180 W • Melting current of power supply fuse: 6.3 A/250 V	*H3C PSR180-12A & PSR180-12D Power Supply Series User Manual*
PSR600-54A-B	AC input	• Rated input voltage range: 100 to 240 VAC @ 50/60 Hz • Max input voltage range: 90 to 290 VAC @ 47 to 63 Hz • Max output power: 600 W	*H3C PSR600-54A-B Power Module User Manual*
	High-voltage DC input	• Rated input voltage: 240 VDC • Max input voltage range: 180 to 320 VDC • Max output power: 600 W	

PSR920-54A-B	AC input	• Rated input voltage range:
		  ○ 100 to 130 VAC @ 50/60 Hz
		  ○ 200 to 240 VAC @ 50/60 Hz
		• Max input voltage range: 90 to 290 VAC @ 47 to 63 Hz
		• Max output power: 920 W
			H3C PSR920-54A-B Power Module User Manual

	High-voltage DC input	• Rated input voltage: 240 VDC • Max input voltage range: 180 to 320 VDC • Max output power: 920 W	

PSR1600-54A-B	AC input	• Rated input voltage range: 100 to 240 VAC @ 50/60 Hz
		• Max input voltage range: 90 to 264 VAC @ 47 to 63 Hz
		• Max output power:
		  ○ 1600 W (176 VAC to 290 VAC or 180 VDC to 320 VDC)
		  ○ 950 W (90 VAC to 176 VAC)
			H3C PSR1600-54A-B Power Module User Manual

Power supply model	AC or DC input	Specifications	Reference
	High-voltage DC input	• Rated input voltage: 240 VDC • Max input voltage range: 180 to 320 VDC • Max output power: 160 W	

Removable fan trays

CAUTION:
You can power on the switch only when the switch has all fan trays of the same model installed.

The switch uses removable fan trays.

Table3-3 LSWM1FANSCE and LSWM1FANSCBE fan tray specifications

Item	Specifications
Dimensions (H × W × D)	40.6 × 40 × 116.7 mm (1.60 × 1.57 × 4.59 in)
Fan speed	21000 R.P.M
Max airflow	26 CFM (0.74 m^3/min)
Input voltage	12 V
Maximum power consumption	27.72 W
Airflow direction	• **LSWM1FANSCE**—From the power supply side to the port side • **LSWM1FANSCBE**—From the port side to the power supply side
Reference	*H3C LSWM1FANSCE & LSWM1FANSCBE Fan Trays User Guide*

Table3-4 LSPM1FANSA-SN and LSPM1FANSB-SN fan tray specifications

Item	Specifications
Dimensions (H × W × D)	40.6 × 40 × 88.7 mm (1.60 × 1.57 × 3.49 in)
Fan speed	20000 R.P.M
Max airflow	20 CFM (0.57 m^3/min)
Input voltage	12 V
Maximum power consumption	9.8 W
Airflow direction	• **LSPM1FANSA-SN**—From the power supply side to the port side • **LSPM1FANSB-SN**—From the port side to the power supply side
Reference	*H3C LSPM1FANSA-SN & LSPM1FANSB-SN Fan Trays User Guide*

Table3-5 FAN-40B-1-A fan tray specifications

Item	Specifications
Dimensions (H × W × D)	40.6 × 40 × 116.7 mm (1.60 × 1.57 × 4.59 in)
Fan speed	21000 R.P.M
Max airflow	26 CFM (0.74 m^3/min)

Item	Specifications
Input voltage	12 V
Maximum power consumption	27.72 W
Airflow direction	From the port side to the power supply side
Reference	*H3C FAN-40F-1-A & FAN-40B-1-A Fan Trays User Guide*

Expansion cards

Table3-6 Expansion card specifications

Item	Specifications
LSWM2QP2P	
Description	2-port 40GE QSFP+ interface module
Port type and quantity	Two 40 Gbps QSFP+ fiber ports
Available transceiver modules and cables	QSFP+ transceiver modules and cables described in Table4-14, Table4-15, and Table4-16.
Reference	*H3C LSWM2QP2P Interface Card User Manual*
LSWM2SP8P	
Description	8-port 10GE SFP+ interface module
Port type and quantity	Eight 1/10 Gbps SFP+ fiber ports
Available transceiver modules and cables	See GE SFP transceiver modules and cables described in Table4-3 and 10-GE SFP+ transceiver modules and cables described in Table4-5 and Table4-6.
Reference	*H3C LSWM2SP8PM & LSWM2SP8P Interface Cards User Manual*
LSWM4SP8PM	
Description	8-port 10GE SFP+ interface module
Port type and quantity	Eight 1/10 Gbps SFP+ fiber ports
Available transceiver modules and cables	See GE SFP transceiver modules and cables described in Table4-3 and 10-GE SFP+ transceiver modules and cables described in Table4-5 and Table4-6.
Reference	*H3C LSWM4SP8PM Interface Card User Manual*
LSWM2ZQP2P	
Description	2-port 100GE QSFP28 interface module
Port type and quantity	Two 40/100 Gbps QSFP28 fiber ports
Available transceiver modules and cables	See QSFP+ transceiver modules and cables described in Table4-14, Table4-15, and Table4-16 and QSFP28 transceiver modules and cables described in Table4-18, Table4-19, and Table4-20.
Reference	*H3C LSWM2ZQP2P Interface Card User Manual*
LSWM2ZSP8P	
Description	8-port 25GE SFP28 interface module

Item	Specifications
Port type and quantity	Eight 25 Gbps SFP28 fiber ports
Available transceiver modules and cables	See SFP28 transceiver modules and cables described in Table4-12 and Table4-13.
Reference	*H3C LSWM2ZSP8P Interface Card User Manual*
LSPM6FWD	
Description	The card is a fourth-generation high performance firewall module. It provides features including firewall, VPN, content filtering, content identification, URL filtering, and NAT. By using this card on a switch, you can enhance the switch security capabilities without changing the network topology.
Reference	*H3C LSPM6FWD Card Manual*
LSPM6FWD8	
Description	The card is a fourth-generation high performance firewall module. It provides features including firewall, VPN, content filtering, content identification, URL filtering, and NAT. By using this card on a switch, you can enhance the switch security capabilities without changing the network topology.
Reference	*H3C LSPM6FWD8 Card Manual*
LSWM2XMGT8P	
Description	8-port 1/2.5/5/10GBASE-T interface module
Port type and quantity	Eight 10G/5G/2.5G/1000BASE-T autosensing Ethernet ports
Port specifications	See Table4-21 for the port specifications.
Reference	*H3C LSWM2MGT8P & LSWM2XMGT8P Interface Cards User Manual*
LSWM2MGT8P	
Description	8-port 1/2.5/5GBASE-T interface module
Port type and quantity	Eight 5G/2.5G/1000BASE-T autosensing Ethernet ports
Port specifications	See Table4-24 for the port specifications.
Reference	*H3C LSWM2MGT8P & LSWM2XMGT8P Interface Cards User Manual*
LSWM2SP2PB	
Description	2-port 10G SFP+ Ethernet optical interface module
Port type and quantity	Two 1G/10G SFP+ fiber ports
Available transceiver modules and cables	• See the GE SFP transceiver modules and SFP cables described in Table4-3. • See the 10-GE SFP+ transceiver modules and SFP+ cables described in Table4-5, Table4-6, and Table4-7.
Reference	*H3C LSWM2SP2PB & LSWM2SP4PB Interface Cards User Manual*
LSWM2SP4PB	
Description	4-port 10G SFP+ Ethernet optical interface module
Port type and quantity	Four 1G/10G SFP+ fiber ports
Available transceiver modules and cables	• See the GE SFP transceiver modules and SFP cables described in Table4-3.

Item	Specifications
	• See the 10-GE SFP+ transceiver modules and SFP+ cables described in Table4-5, Table4-6, and Table4-7.
Reference	*H3C LSWM2SP2PB & LSWM2SP4PB Interface Cards User Manual*
LSWM2XMGT2PM	
Description	2-port 10G/5G/2.5G/1000/100BASE-T interface module
Port type and quantity	Two 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet ports
Port specifications	See Table4-22 for the port specifications.
Reference	*H3C LSWM2XMGT2PM Interface Card User Manual*
LSWM2FPGA	
Description	The LSWM2FPGA NetStream interface module offers unidirectional NetStream and session-based bidirectional NetStream.
Reference	*H3C LSWM2FPGA NetStream Interface Module User Manual*
LSWM2FPGAB	
Description	The LSWM2FPGAB NetStream interface module offers unidirectional NetStream and session-based bidirectional NetStream.
Reference	*H3C LSWM2FPGAB NetStream Interface Module User Manual*
LSWM2EC	
Description	The LSWM2EC is an EPS scanner module that can provide functions of an ESP scanner. By using an LSWM2EC EPS scanner module on a switch, you can save hardware resources, increase the number of endpoints that can be scanned, and enable incremental scanning.
Reference	*H3C LSWM2EC EPS Scanner Module User Manual*
LSWM2-iMC	
Description	The LSWM2-iMC intelligent network management module provides endpoint admission control for small and medium-sized campus networks. The module aims to provide network management solutions that integrate the endpoint users, resources, and network services for network administrators.
Reference	*H3C LSWM2-iMC Intelligent Network Management Module User Manual*.
LSWM124SFPP	
Description	24-port 10GE SFP+ interface module
Port type and quantity	Twenty-four 1G/10Gbps SFP+ fiber ports
Available transceiver modules and cables	• See the GE SFP transceiver modules and SFP cables described in Table4-4. • See the 10-GE SFP+ transceiver modules and SFP+ cables described in Table4-8, Table4-9, Table4-10, and Table4-11.
Reference	*H3C LSWM124SFPP Interface Module User Manual*
LSWM124MUPWR	
Description	24-port 10G/5G/2.5G/1000/100BASE-T interface module
Port type and quantity	Twenty-four 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet ports

Item	Specifications
Port specifications	See Table4-22 for the port specifications.
Reference	*H3C LSWM124MUPWR Interface Module User Manual*

To connect cables to the ports on interface modules, follow these guidelines:

- Do not bundle cables in their first 20 m (65.62 ft).
- Separate power cords and twisted pair cables at and around the distribution frame.
- For ports adjacent to one another on the device, the peer ports on the distribution frame is preferably not adjacent, for example:
- If the device connects to one distribution frame, connect port 1 on the device to port 1 on the distribution frame and port 2 on the device to port 3 on the distribution frame.
- If the device connects to two distribution frames, connect port 1 on the device to port 1 on distribution frame 1 and port 2 on the device to port 1 on distribution frame 2.
- Keep the device and cables away from the interference source, such as a two-way radio and a high-power variable-frequency drive.

4 Ports and LEDs

Ports

Console port

Table4-1 Console port specifications

Item	Serial console port	Micro USB console port
Connector type	RJ-45	Micro USB Type B
Compliant standard	EIA/TIA-232	USB 2.0
Transmission baud rate	9600 bps (default) to 115200 bps	
Services	• Provides connection to an ASCII terminal. • Provides connection to the serial port of a local PC running terminal emulation program.	Provides connection to the USB port of a local PC running terminal emulation program.
Compatible devices	All device models.	• S6520X-30QC-EI • S6520X-54QC-EI • S6520X-30HC-EI • S6520X-54HC-EI • S6520X-30QC-HI • S6520X-54QC-HI • S6520X-30HC-HI • S6520X-54HC-HI
You cannot use both console ports at the same time. Only the Micro USB console port works when you connect both ports.		

Management Ethernet port

You can connect the management Ethernet port to a PC or management station for loading and debugging software or remote management.

Table4-2 Management Ethernet port specifications

Item	Specification
Connector type	RJ-45
Port transmission rate	• 10/100 Mbps, half/full duplex, MDI/MDI-X autosensing • 1000 Mbps, full duplex, MDI/MDI-X autosensing
Transmission medium and max transmission distance	100 m (328.08 ft) over category-5 twisted pair cable
Functions and services	Switch software and Boot ROM upgrade, network management
Compatible devices	All device models

USB port

The switch has one OHC-compliant USB2.0 port that can upload and download data at a rate up to 480 Mbps. You can use this USB port to access the file system on the flash of the switch, for example, to upload or download application and configuration files.

NOTE:

USB devices from different vendors vary in compatibilities and drivers. H3C does not guarantee the correct operation of USB devices from all vendors on the switch. If a USB device fails to operate on the switch, replace it with one from another vendor.

SFP+ port

The switch (excluding the S6520X-54HC-UPWR-EI) provides fixed SFP+ ports on the front panel. The LSWM2SP2PB, LSWM2SP4PB, LSWM4SP8PM, LSWM2SP8P, and LSWM124SFPP interface modules also provide SFP+ ports.

The SFP+ ports on the switch (excluding the S6520X-54HC-UPWR-EI) or an LSWM2SP2PB, LSWM2SP4PB, LSWM4SP8PM, or LSWM2SP8P interface module support the following transceiver modules and cables:

- GE SFP transceiver modules and cables in Table4-3.
- 10-GE SFP+ transceiver modules in Table4-5.
- 10-GE SFP+ copper cables in Table4-6.
- 10-GE SFP+ fiber cables in Table4-7.

The SFP+ ports on an LSWM124SFPP interface module support the following transceiver modules and cables:

- GE SFP transceiver modules and cables in Table4-4.
- 10-GE SFP+ fiber transceiver modules in Table4-8.
- 10-GE SFP+ copper cables in Table4-9.
- 10-GE SFP+ fiber cables in Table4-10.
- 10-GE SFP+ copper transceiver modules in Table4-11.

Table4-3 GE SFP transceiver modules and cables available for the SFP+ ports (1)

GE SFP transceiver module and cable	Central wavelength (nm)	Connector	Cable/Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
GE SFP transceiver modules					
SFP-GE-T	N/A	RJ-45	Twisted pair cable	N/A	100 m (328.08 ft)
SFP-GE-T-D	N/A	RJ-45	Twisted pair cable	N/A	100 m (328.08 ft)
SFP-GE-SX-MM850-A	850	LC	Multi-mode, 50/125	500	550 m (1804.46 ft)
				400	500 m (1640.42 ft)
			Multi-mode, 62.5/125	200	275 m (902.23 ft)
				160	220 m (721.78 ft)

GE SFP transceiver module and cable	Central wavelength (nm)	Connector	Cable/Fiber type and diameter (µm)	Modal bandwidth (MHz × km)	Max transmission distance
SFP-GE-SX-MM850-D	850	LC	Multi-mode, 50/125	500	550 m (1804.46 ft)
				400	500 m (1640.42 ft)
			Multi-mode, 62.5/125	200	275 m (902.23 ft)
				160	220 m (721.78 ft)
SFP-GE-SX-MM850-S	850	LC	Multi-mode, 50/125	500	550 m (1804.46 ft)
				400	500 m (1640.42 ft)
			Multi-mode, 62.5/125	200	275 m (902.23 ft)
				160	220 m (721.78 ft)
SFP-GE-LX-SM1310-A	1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
			Multi-mode, 50/125	500 or 400	550 m (1804.46 ft)
			Multi-mode, 62.5/125	500	550 m (1804.46 ft)
SFP-GE-LX-SM1310-D	1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-GE-LX-SM1310-S	1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-GE-LH20-SM1310-I	1310	LC	Single-mode, 9/125	N/A	20 km (12.43 miles)
SFP-GE-LH40-SM1310	1310	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-GE-LH40-SM1310-D	1310	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-GE-LH40-SM1550	1550	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-GE-LH40-SM1310-I	1310	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-GE-LH80-SM1550	1550	LC	Single-mode, 9/125	N/A	80 km (49.71 miles)
SFP-GE-LH80-SM1550-D	1550	LC	Single-mode, 9/125	N/A	80 km (49.71 miles)
SFP-GE-LH100-SM1550	1550	LC	Single-mode, 9/125	N/A	100 km (62.14 miles)
SFP-GE-LX-SM1310-BIDI	TX: 1310 RX: 1490	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-GE-LX-SM1490-BIDI	TX: 1490 RX: 1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-GE-LH40-SM1310-BIDI	TX: 1310 RX: 1550	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)

GE SFP transceiver module and cable	Central wavelength (nm)	Connector	Cable/Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
SFP-GE-LH40-SM1550-BIDI	TX: 1550 RX: 1310	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-GE-LH70-SM1490-BIDI	TX: 1490 RX: 1550	LC	Single-mode, 9/125	N/A	70 km (43.50 miles)
SFP-GE-LH70-SM1550-BIDI	TX: 1550 RX: 1490	LC	Single-mode, 9/125	N/A	70 km (43.50 miles)
GE SFP cable					
SFP-STACK-Kit	N/A	N/A	N/A	N/A	1.5 m (4.92 ft)

IMPORTANT:

The SFP-GE-LX-SM1310-BIDI and SFP-GE-LX-SM1490-BIDI transceiver modules, the SFP-GE-LH40-SM1310-BIDI and SFP-GE-LH40-SM1550-BIDI transceiver modules, and the SFP-GE-LH70-SM1490-BIDI and SFP-GE-LH70-SM1550-BIDI transceiver modules must be used in pairs. For example, if one end uses the SFP-GE-LX-SM1310-BIDI transceiver module, the other end must use the SFP-GE-LX-SM1490-BIDI transceiver module.

Table4-4 GE SFP transceiver modules and cables available for the SFP+ ports (2)

GE SFP transceiver module and cable	Central wavelength (nm)	Connector	Cable/Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
GE SFP transceiver modules					
SFP-GE-T	N/A	RJ-45	Twisted pair cable	N/A	100 m (328.08 ft)
SFP-GE-SX-MM850-A	850	LC	Multi-mode, 50/125	500	550 m (1804.46 ft)
				400	500 m (1640.42 ft)
			Multi-mode, 62.5/125	200	275 m (902.23 ft)
				160	220 m (721.78 ft)
SFP-GE-LX-SM1310-A	1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
			Multi-mode, 50/125	500 or 400	550 m (1804.46 ft)
			Multi-mode, 62.5/125	500	550 m (1804.46 ft)
SFP-GE-LH40-SM1310	1310	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-GE-LH40-SM1550	1550	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-GE-LH80-SM1550	1550	LC	Single-mode, 9/125	N/A	80 km (49.71 miles)
SFP-GE-LH100	1550	LC	Single-mode,	N/A	100 km (62.14

GE SFP transceiver module and cable	Central wavelength (nm)	Connector	Cable/Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
-SM1550			9/125		miles)
SFP-GE-LX-SM1310-BIDI	TX: 1310 RX: 1490	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-GE-LX-SM1490-BIDI	TX: 1490 RX: 1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-GE-LH40-SM1310-BIDI	TX: 1310 RX: 1550	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-GE-LH40-SM1550-BIDI	TX: 1550 RX: 1310	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-GE-LH70-SM1490-BIDI	TX: 1490 RX: 1550	LC	Single-mode, 9/125	N/A	70 km (43.50 miles)
SFP-GE-LH70-SM1550-BIDI	TX: 1550 RX: 1490	LC	Single-mode, 9/125	N/A	70 km (43.50 miles)
GE SFP cable					
SFP-STACK-Kit	N/A	N/A	N/A	N/A	1.5 m (4.92 ft)

IMPORTANT:

The SFP-GE-LX-SM1310-BIDI and SFP-GE-LX-SM1490-BIDI transceiver modules, the SFP-GE-LH40-SM1310-BIDI and SFP-GE-LH40-SM1550-BIDI transceiver modules, and the SFP-GE-LH70-SM1490-BIDI and SFP-GE-LH70-SM1550-BIDI transceiver modules must be used in pairs. For example, if one end uses the SFP-GE-LX-SM1310-BIDI transceiver module, the other end must use the SFP-GE-LX-SM1490-BIDI transceiver module.

Table4-5 10-GE SFP+ transceiver modules available for the SFP+ ports (1)

10-GE SFP+ transceiver module	Central wavelength (nm)	Connector	Fiber diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
SFP-XG-SX-MM850-A	850	LC	Multi-mode, 50/125	2000	300 m (984.25 ft)
				500	82 m (269.03 ft)
				400	66 m (216.54 ft)
			Multi-mode, 62.5/125	200	33 m (108.27 ft)
				160	26 m (85.30 ft)
SFP-XG-SX-MM850-D	850	LC	Multi-mode, 50/125	2000	300 m (984.25 ft)
				500	82 m (269.03 ft)
				400	66 m (216.54 ft)
			Multi-mode, 62.5/125	200	33 m (108.27 ft)
				160	26 m (85.30 ft)
SFP-XG-SX-M	850	LC	Multi-mode,	2000	300 m (984.25 ft)

10-GE SFP+ transceiver module	Central wavelength (nm)	Connector	Fiber diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
				500	82 m (269.03 ft)
				400	66 m (216.54 ft)
			Multi-mode, 62.5/125	200	33 m (108.27 ft)
				160	26 m (85.30 ft)
SFP-XG-SX-MM850-S	850	LC	Multi-mode, 50/125	2000	300 m (984.25 ft)
				500	82 m (269.03 ft)
				400	66 m (216.54 ft)
			Multi-mode, 62.5/125	200	33 m (108.27 ft)
				160	26 m (85.30 ft)
SFP-XG-LX-SM1310-D	1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-XG-LX-SM1310-E	1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-XG-LX-SM1310-S	1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-XG-LH40-SM1550	1550	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-XG-LH40-SM1550-D	1550	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-XG-LH80-SM1550	1550	LC	Single-mode, 9/125	N/A	80 km (49.71 miles)
SFP-XG-LH80-SM1550-D	1550	LC	Single-mode, 9/125	N/A	80 km (49.71 miles)
SFP-XG-LX-SM1270-BIDI	TX: 1270 RX: 1330	LC	Single-mode, 9/125	N/A	10 m (32.81 ft)
SFP-XG-LX-SM1330-BIDI	TX: 1330 RX: 1270	LC	Single-mode, 9/125	N/A	10 m (32.81 ft)
SFP-XG-LH40-SM1270-BIDI	TX: 1270 RX: 1330	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-XG-LH40-SM1330-BIDI	TX: 1330 RX: 1270	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-XG-LH80-SM1490-BIDI	TX: 1490 RX: 1550	LC	Single-mode, 9/125	N/A	80 km (49.71 miles)
SFP-XG-LH80-SM1550-BIDI	TX: 1550 RX: 1490	LC	Single-mode, 9/125	N/A	80 km (49.71 miles)

IMPORTANT:

- The SFP-XG-LX-SM1270-BIDI and SFP-XG-LX-SM1330-BIDI transceiver modules must be used in pairs. For example, if one end uses an SFP-XG-LX-SM1270-BIDI transceiver module, the other end must use an SFP-XG-LX-SM1330-BIDI transceiver module.
- The SFP-XG-LH40-SM1270-BIDI and SFP-XG-LH40-SM1330-BIDI transceiver modules must

be used in pairs. For example, if one end uses an SFP-XG-LH40-SM1270-BIDI transceiver module, the other end must use an SFP-XG-LH40-SM1330-BIDI transceiver module.

- The SFP-XG-LH80-SM1490-BIDI and SFP-XG-LH80-SM1550-BIDI transceiver modules must be used in pairs. For example, if one end uses an SFP-XG-LH80-SM1490-BIDI transceiver module, the other end must use an SFP-XG-LH80-SM1550-BIDI transceiver module.

Table4-6 SFP+ copper cables available for the SFP+ ports (1)

SFP+ copper cable	Cable length
LSWM1STK	0.65 m (2.13 ft)
LSWM2STK	1.2 m (3.94 ft)
LSWM3STK	3 m (9.84 ft)
LSTM1STK	5 m (16.40 ft)

Table4-7 SFP+ fiber cables available for the SFP+ ports (1)

SFP+ fiber cable	Cable length
SFP-XG-D-AOC-7M	7 m (22.97 ft)
SFP-XG-D-AOC-10M	10 m (32.81 ft)
SFP-XG-D-AOC-20M	20 m (65.62 ft)

Table4-8 10-GE SFP+ fiber transceiver modules available for the SFP+ ports (2)

10-GE SFP+ fiber transceiver module	Central wavelength (nm)	Connector	Fiber diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
SFP-XG-SX-MM850-D	850	LC	Multi-mode, 50/125	2000	300 m (984.25 ft)
				500	82 m (269.03 ft)
				400	66 m (216.54 ft)
			Multi-mode, 62.5/125	200	33 m (108.27 ft)
				160	26 m (85.30 ft)
SFP-XG-LX-SM1310-D	1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-XG-LH40-SM1550	1550	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-XG-LH80-SM1550	1550	LC	Single-mode, 9/125	N/A	80 km (49.71 miles)
SFP-XG-LX-SM1270-BIDI	TX: 1270 RX: 1330	LC	Single-mode, 9/125	N/A	10 m (32.81 ft)
SFP-XG-LX-SM1330-BIDI	TX: 1330 RX: 1270	LC	Single-mode, 9/125	N/A	10 m (32.81 ft)
SFP-XG-LH40-SM1270-BIDI	TX: 1270 RX: 1330	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-XG-LH40	TX: 1330	LC	Single-mode,	N/A	40 km (24.86 miles)

10-GE SFP+ fiber transceiver module	Central wavelength (nm)	Connector	Fiber diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
-SM1330-BIDI	RX: 1270		9/125		
SFP-XG-LH80-SM1490-BIDI	TX: 1490 RX: 1550	LC	Single-mode, 9/125	N/A	80 km (49.71 miles)
SFP-XG-LH80-SM1550-BIDI	TX: 1550 RX: 1490	LC	Single-mode, 9/125	N/A	80 km (49.71 miles)

IMPORTANT:

- The SFP-XG-LX-SM1270-BIDI and SFP-XG-LX-SM1330-BIDI transceiver modules must be used in pairs. For example, if one end uses an SFP-XG-LX-SM1270-BIDI transceiver module, the other end must use an SFP-XG-LX-SM1330-BIDI transceiver module.
- The SFP-XG-LH40-SM1270-BIDI and SFP-XG-LH40-SM1330-BIDI transceiver modules must be used in pairs. For example, if one end uses an SFP-XG-LH40-SM1270-BIDI transceiver module, the other end must use an SFP-XG-LH40-SM1330-BIDI transceiver module.
- The SFP-XG-LH80-SM1490-BIDI and SFP-XG-LH80-SM1550-BIDI transceiver modules must be used in pairs. For example, if one end uses an SFP-XG-LH80-SM1490-BIDI transceiver module, the other end must use an SFP-XG-LH80-SM1550-BIDI transceiver module.

Table4-9 SFP+ copper cables available for the SFP+ ports (2)

SFP+ copper cable	Cable length
LSWM1STK	0.65 m (2.13 ft)
LSWM2STK	1.2 m (3.94 ft)
LSWM3STK	3 m (9.84 ft)
LSTM1STK	5 m (16.40 ft)

Table4-10 SFP+ fiber cables available for the SFP+ ports (2)

SFP+ fiber cable	Cable length
SFP-XG-D-AOC-7M	7 m (22.97 ft)
SFP-XG-D-AOC-10M	10 m (32.81 ft)
SFP-XG-D-AOC-20M	20 m (65.62 ft)

Table4-11 SFP+ copper transceiver modules available for the SFP+ ports

SFP+ copper transceiver module	Cable length
SFP-10GE-T	30 m (98.43 ft)

Figure4-1 SFP+ cable

(1) SFP+ module	(2) Pull latch

IMPORTANT:

- Ports 1 to 8 on the S6520X-54HC-EI and S6520X-54HC-HI switches do not support GE SFP transceiver modules or cables.
- The SFP+ ports on the S6520X-54QC-EI and S6520X-54QC-HI switches do not support the LSTM1STK cable.

NOTE:

- As a best practice, use H3C transceiver modules and network cables for the switch.
- The H3C transceiver modules and network cables are subject to change over time. For the most recent list of H3C transceiver modules and cables, contact H3C Support or marketing staff.
- For the specifications of H3C transceiver modules and network cables, see *H3C Transceiver Modules User Guide*.

SFP28 port

The LSWM2ZSP8P interface module provides SFP28 ports. You can install SFP28 transceiver modules in Table4-12 and SFP28 cables in Table4-13 in the SFP28 ports.

Table4-12 SFP28 transceiver modules available for the SFP28 ports

SFP28 transceiver module	Central wavelength (nm)	Connector	Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
SFP-25G-LR-SM1310	1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-25G-SR-MM850	850	LC	Multi-mode, 50/125	2000	70 m (229.66 ft)
				4700	100 m (328.08 ft)

Table4-13 SFP28 cables available for the SFP28 ports

SFP28 cable	Max transmission distance
SFP-25G-D-CAB-1M	1 m (3.28 ft)

SFP28 cable	Max transmission distance
SFP-25G-D-CAB-3M	3 m (9.84 ft)
SFP-25G-D-CAB-5M	5 m (16.40 ft)
SFP-25G-D-AOC-3M	3 m (9.84 ft)
SFP-25G-D-AOC-5M	5 m (16.40 ft)
SFP-25G-D-AOC-7M	7 m (22.97 ft)
SFP-25G-D-AOC-10M	10 m (32.81 ft)
SFP-25G-D-AOC-20M	20 m (65.62 ft)

Figure4-2 SFP28 cable

(1) SFP28 module (2) Pull latch

NOTE:

- As a best practice, use H3C transceiver modules and network cables for the switch.
- The H3C transceiver modules and network cables are subject to change over time. For the most recent list of H3C transceiver modules and cables, contact H3C Support or marketing staff.
- For the specifications of H3C transceiver modules and network cables, see *H3C Transceiver Modules User Guide*.

QSFP+ port

The S6520X-30QC-EI, S6520X-54QC-EI, S6520X-30QC-HI, and S6520X-54QC-HI switches and the LSWM2QP2P interface module provide QSFP+ ports. You can install QSFP+ transceiver modules in Table4-14, QSFP+ cables in Table4-15, and QSFP+ to SFP+ cables in Table4-16 in the QSFP+ ports.

Table4-14 QSFP+ transceiver modules available for the QSFP+ ports

QSFP+ transceiver module	Central wavelength (nm)	Connector	Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
QSFP-40G-SR4-MM850	850	MPO	Multi-mode, 50/125	2000	100 m (328.08 ft)
				4700	150 m (492.12 ft)

QSFP+ transceiver module	Central wavelength (nm)	Connector	Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
QSFP-40G-CSR4-MM850	850	MPO	Multi-mode, 50/125	2000	300 m (984.25 ft)
				4700	400 m (1312.33 ft)
QSFP-40G-LR4-PSM1310	1310	MPO	Single-mode, 9/125	N/A	10 km (6.21 miles)
QSFP-40G-LR4-WDM1300	Four lanes: • 1271 • 1291 • 1311 • 1331	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
QSFP-40G-LR4L-WDM1300	Four lanes: • 1271 • 1291 • 1311 • 1331	LC	Single-mode, 9/125	N/A	2 km (1.24 miles)
QSFP-40G-BIDI-SR-MM850	Two lanes: • 850. • 900.	LC	Multi-mode, 50/125	2000	100 m (328.08 ft)
				4700	150 m (492.12 ft)
QSFP-40G-BIDI-WDM850	Four lanes: • 850 • 880 • 910 • 940	LC	Multi-mode, 50/125	2000	240 m (787.40 ft)
				4700	350 m (1148.29 ft)
QSFP-40G-ER4-WDM1300	Four lanes: • 1271 • 1291 • 1311 • 1331	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)

Table4-15 QSFP+ cables available for the QSFP+ ports

QSFP+ cable	Max transmission distance
LSWM1QSTK0	1 m (3.28 ft)
LSWM1QSTK1	3 m (9.84 ft)
LSWM1QSTK2	5 m (16.40 ft)

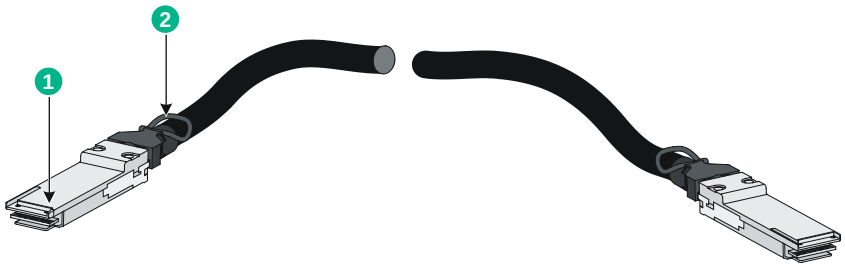
Table4-16 QSFP+ to SFP+ cables available for the QSFP+ ports

QSFP+ to SFP+ cable	Max transmission distance
LSWM1QSTK3	1 m (3.28 ft)
LSWM1QSTK4	3 m (9.84 ft)
LSWM1QSTK5	5 m (16.40 ft)

Table4-17 QSFP+ fiber cables available for the QSFP+ ports

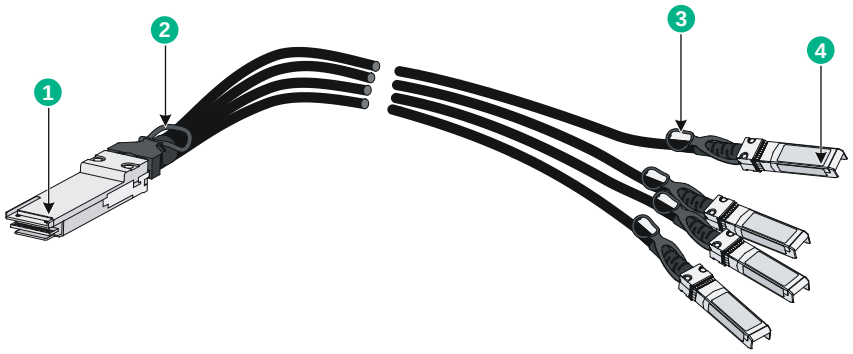
QSFP+ to SFP+ cable	Max transmission distance
QSFP-40G-D-AOC-3M	3 m (9.84 ft)
QSFP-40G-D-AOC-7M	7 m (22.97 ft)
QSFP-40G-D-AOC-10M	10 m (32.81 ft)
QSFP-40G-D-AOC-20M	20 m (65.62 ft)

Figure4-3 40G QSFP+ cable



(1) QSFP+ module	(2) Pull latch

Figure4-4 40G QSFP+ to SFP+ cable



(1) QSFP+ module	(2) QSFP+ module side pull latch
(3) SFP+ module side pull latch	(4) SFP+ module

IMPORTANT:

- You can install a QSFP-40G-LR4-PSM1310 transceiver module on an S6520X-30QC-EI, S6520X-54QC-EI, S6520X-30QC-HI, or S6520X-54QC-HI switch, or on a QSFP+ port on an LSWM2QP2P interface module. You cannot use a QSFP-40G-LR4-PSM1310 transceiver module to connect a QSFP+ port to four SFP+ ports.
- You can use a QSFP-40G-SR4-MM850 or QSFP-40G-CSR4-MM850 transceiver module to connect a QSFP+ port to four SFP+ ports. The QSFP+ transceiver module and SFP+ transceiver modules to be connected must be the same in specifications, including central wavelength and fiber type.
- Only the S6520X-30HF-EI, S6520X-54HF-EI, S6520X-30HF-HI, and S6520X-54HF-HI switches support the QSFP-40G-ER4-WDM1300 transceiver modules.

NOTE:

- As a best practice, use H3C transceiver modules and network cables for the switch.
- The H3C transceiver modules and network cables are subject to change over time. For the most recent list of H3C transceiver modules and cables, contact H3C Support or marketing staff.
- For the specifications of H3C transceiver modules and network cables, see *H3C Transceiver Modules User Guide*.

QSFP28 port

The S6520X-30HC-EI, S6520X-54HC-EI, S6520X-30HC-HI, S6520X-54HC-HI, S6520X-30HF-EI, S6520X-54HF-EI, S6520X-30HF-HI, S6520X-54HF-HI, and S6520X-54HC-UPWR-EI switches and the LSWM2ZQP2P interface module provide QSFP28 ports. You can install QSFP+ modules and cables in Table4-14, Table4-15, and Table4-16, and QSFP28 modules and cables in Table4-18 and Table4-19 in the QSFP28 ports as needed.

Table4-18 QSFP28 transceiver modules available for the QSFP28 ports

Model	Central wavelength (nm)	Connector	Cable/Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
QSFP-100G-SR4-MM850	840 to 860	MPO	Multi-mode, 50/125	2000	70 m (229.66 ft)
				4700	100 m (328.08 ft)
QSFP-100G-ER4L-WDM1300	Four lanes: • 1295 • 1300 • 1304 • 1309	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
QSFP-100G-LR4-WDM1300-A	Four lanes: • 1295 • 1300 • 1304 • 1309	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
QSFP-100G-LR4-WDM1300	Four lanes: • 1295.56 • 1300.05 • 1304.58 • 1309.14	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
QSFP-100G-LR4L-WDM1300	Four lanes: • 1271 • 1291 • 1311 • 1331	LC	Single-mode, 9/125	N/A	2 km (1.24 miles)
QSFP-100G-PSM4-SM1310	1310	MPO	Single-mode, 9/125	N/A	0.5 km (0.31 miles)

Table4-19 QSFP28 cables available for the QSFP28 ports

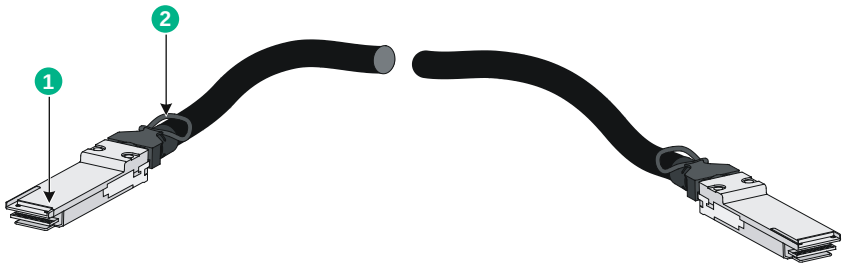
Model	Max transmission distance
QSFP-100G-D-CAB-1M	1 m (3.28 ft)

Model	Max transmission distance
QSFP-100G-D-CAB-3M	3 m (9.84 ft)
QSFP-100G-D-CAB-5M	5 m (16.40 ft)
QSFP-100G-D-AOC-7M	7 m (22.97 ft)
QSFP-100G-D-AOC-10M	10 m (32.81 ft)
QSFP-100G-D-AOC-20M	20 m (65.62 ft)

Table4-20 QSFP28 to SFP28 cables available for the QSFP28 ports

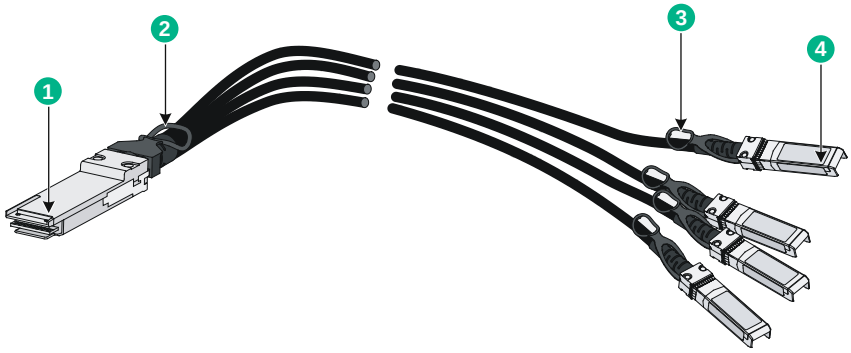
QSFP28 fiber cable	Max transmission distance
QSFP-100G-4SFP-25G-CAB-1M	1 m (3.28 ft)
QSFP-100G-4SFP-25G-CAB-3M	3 m (9.84 ft)
QSFP-100G-4SFP-25G-CAB-5M	5 m (16.40 ft)

Figure4-5 100G QSFP28 cable



(1) QSFP28 module	(2) Pull latch

Figure4-6 100G QSFP28 to 4 × 25G SFP28 cable



(1) QSFP28 module	(2) QSFP28 module side pull latch
(3) SFP28 module	(4) SFP28 module side pull latch

IMPORTANT:

- A QSFP-100G-SR4-MM850 transceiver module supports one-to-four splitting. You can use it to connect a 100G QSFP28 port to four 25G SFP28 ports. The QSFP28 transceiver module and SFP28 transceiver modules to be connected must be the same in specifications, including central wavelength and fiber type.
- QSFP28 ports do not support QSFP+ to SFP+ cables and cannot be split to 10GE ports by using QSFP+ transceiver modules.
- The S6520X-30HF-EI, S6520X-54HF-EI, S6520X-30HF-HI, and S6520X-54HF-HI switches do not support the QSFP-100G-D-CAB-5M transceiver modules.

NOTE:

- As a best practice, use H3C transceiver modules and network cables for the switch.
- The H3C transceiver modules and network cables are subject to change over time. For the most recent list of H3C transceiver modules and cables, contact H3C Support or marketing staff.
- For the specifications of H3C transceiver modules and network cables, see *H3C Transceiver Modules User Guide*.

10G/5G/2.5G/1000BASE-T autosensing Ethernet ports

The LSWM2XMGT8P interface module provides 10G/5G/2.5G/1000BASE-T autosensing Ethernet ports. Table4-21 describes the 10G/5G/2.5G/1000BASE-T autosensing Ethernet port specifications.

Table4-21 10G/5G/2.5G/1000BASE-T autosensing Ethernet port specifications

Item	Specification
Connector type	RJ-45
Rate, duplex mode, and auto-MDI/MDI-X	1/2.5/5/10 Gbps, full-duplex, auto MDI/MDI-X

Transmission medium and max transmission distance	• 10G mode
	  ◦ Category 6 or above shielded twisted pair cable: 100 m (328.08 ft)
	  ◦ Category 5e twisted pair cable or Category 6 unshielded twisted pair cable: 55 m (180.45 ft)
	• 5G mode: 100 m (328.08 ft) over a Category 5e or above twisted pair cable
	• 2.5G mode: 200 m (656.17 ft) over a Category 5e or above twisted pair cable
	• 1G mode: 140 m (459.32 ft) over a Category 5e or above twisted pair cable

Standard	IEEE 802.3ab, IEEE 802.3an, 802.3bz

10G/5G/2.5G/1000/100BASE-T autosensing Ethernet ports

The LSWM2XMGT2PM and LSWM124MUPWR interface modules and the S6520X-54HC-UPWR-EI switch provide 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet ports. Table4-22 describes the 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port specifications for the LSWM2XMGT2PM and LSWM124MUPWR interface modules. Table4-23 describes the 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port specifications for the S6520X-54HC-UPWR-EI switch.

Table4-22 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port specifications for the LSWM2XMGT2PM and LSWM124MUPWR interface modules

Item	Specification
Connector type	RJ-45
Rate, duplex mode, and auto-MDI/MDI-X	• 1/2.5/5/10 Gbps, full-duplex, auto MDI/MDI-X • 100 Mbps, half/full-duplex, auto MDI/MDI-X

Transmission medium and max transmission distance	• 10G mode
	  ◦ Category 6 or above shielded twisted pair cable: 100 m (328.08 ft)
	  ◦ Category 5e twisted pair cable or Category 6 unshielded twisted pair cable: 55 m (180.45 ft)
	• 5G mode: 100 m (328.08 ft) over a Category 5e or above twisted pair cable
	• 2.5G mode: 200 m (656.17 ft) over a Category 5e or above twisted pair cable
	• 1G mode: 140 m (459.32 ft) over a Category 5e or above twisted pair cable
	• 100M mode: 140 m (459.32 ft) over a Category 5e or above twisted pair cable

Standard	IEEE 802.3ab, IEEE 802.3an

Table4-23 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port specifications for the S6520X-54HC-UPWR-EI switch

Item	Specification
Connector type	RJ-45
Rate, duplex mode, and auto-MDI/MDI-X	• 1/2.5/5/10 Gbps, full-duplex, auto MDI/MDI-X • 100 Mbps, half/full-duplex, auto MDI/MDI-X

Transmission medium and max transmission distance	• 10G mode
	  ◦ Category 6 or above shielded twisted pair cable: 100 m (328.08 ft)
	  ◦ Category 5e twisted pair cable or Category 6 unshielded twisted pair cable: 55 m (180.45 ft)
	• 5G mode: 100 m (328.08 ft) over a Category 5e or above twisted pair cable
	• 2.5G mode: 200 m (656.17 ft) over a Category 5e or above twisted pair cable
	• 1G mode: 140 m (459.32 ft) over a Category 5e or above twisted pair cable
	• 100M mode: 200 m (656.17 ft) over a Category 5e or above twisted pair cable

Standard	IEEE 802.3ab, IEEE 802.3an, IEEE 802.3bz

5G/2.5G/1000BASE-T autosensing Ethernet ports

The LSWM2MGT8P interface module provides 5G/2.5G/1000BASE-T autosensing Ethernet ports. Table4-21 describes the 5G/2.5G/1000BASE-T autosensing Ethernet port specifications.

Table4-24 5G/2.5G/1000BASE-T autosensing Ethernet port specifications

Item	Specification
Connector type	RJ-45
Rate, duplex mode, and auto-MDI/MDI-X	1/2.5/5 Gbps, full-duplex, auto MDI/MDI-X
Transmission medium	• 5G mode: 100 m (328.08 ft) over a Category 5e or above twisted pair cable

Item	Specification
and max transmission distance	• 2.5G mode: 200 m (656.17 ft) over a Category 5e or above twisted pair cable • 1G mode: 140 m (459.32 ft) over a Category 5e or above twisted pair cable
Standard	IEEE 802.3ab, IEEE 802.3an, 802.3bz

LEDs

System status LED

The system status LED shows the operating state of the switch.

Table4-25 System status LED description

LED mark	Status	Description
SYS	Steady green	The switch is operating correctly.
	Flashing green (1 Hz)	The switch is performing power-on self test (POST).
	Steady red	The switch has failed the POST or is faulty.
	Off	The switch is powered off.

Power supply status LED

The switch provides two power supply slots on the rear panel. The S6520X-30QC-EI, S6520X-54QC-EI, S6520X-30HC-EI, S6520X-54HC-EI, S6520X-30QC-HI, S6520X-54QC-HI, S6520X-30HC-HI, and S6520X-54HC-HI switches each provide two power status LEDs PWR1 and PWR2 on the front panel. The power status LEDs show the operating status of power supply 1 (PWR1) and power supply 2 (PWR2), respectively.

Table4-26 Power supply status LED description

LED mark	Status	Description
PWR1/PWR2	Steady green	A power supply is installed in the power supply slot, and the power supply is outputting power correctly.
	Steady yellow	A power supply is installed in the power supply slot, but the power supply has failed or no power is input to the power supply.
	Off	No power supply is installed in the power supply slot.

MODE LED

To show more information about the switch through the port LEDs, the S6520X-30QC-EI, S6520X-54QC-EI, S6520X-30HC-EI, S6520X-54HC-EI, S6520X-30QC-HI, S6520X-54QC-HI, S6520X-30HC-HI, and S6520X-54HC-HI switches each provide a MODE LED (MODE) to indicate the type of information that the port status LEDs are showing.

You can use the mode button to change the indication of the MODE LED.

Table4-27 Description for the mode LED

LED mark	Status	Description
MODE	Steady green	The port status LEDs indicate port rates.
	Flashing yellow	The port status LEDs indicates the IRF member ID of the switch. For example, if the LEDs for ports 1 to 5 are steady green and the other LEDs are off, the IRF member ID of the switch is 5.

IMPORTANT:

- In versions earlier than Release 6326 (not inclusive) or Release 65xx versions earlier than Release 6525 (not inclusive), the MODE LED changes in color and indication after you press the mode button and keeps that state until you press the mode button again.
- In other versions, after you press the mode button, the MODE LED changes in color and indication and keeps that state for only 60 seconds and then turns steady green automatically.

Management Ethernet port LED

Table4-28 Management Ethernet port LED description for the switch excluding the S6520X-54HC-UPWR-EI

Management Ethernet port LED (ACT/LINK) status	Description
Steady green	A link is present on the port.
Flashing yellow	The port is sending or receiving data.
Off	No link is present on the port.

Table4-29 Management Ethernet port LED description for the S6520X-54HC-UPWR-EI

LED mark	Status	Description
LINK	Off	No link is present on the port.
	Steady green	The port is sending or receiving data at 10/100/1000 Mbps.
ACT	Off	The port is not sending or receiving data.
	Flashing yellow	The port is sending or receiving data.

10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port LED

The S6520X-54HC-UPWR-EI switch provides 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port LEDs on the front panel.

Table4-30 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port LED description

Status	Description
Steady green	A 10 Gbps link is present on the port.
Flashing green	The port is sending or receiving data at 10 Gbps.
Steady yellow	A 100 Mbps or 1/2.5/5 Gbps link is present on the port.

Status	Description
Flashing yellow	The port is sending or receiving data at 100 Mbps or 1/2.5/5 Gbps.
Off	No link is present on the port.

SFP+ port LED

Table4-31 describes the SFP+ port LEDs on the S6520X-30QC-EI, S6520X-54QC-EI, S6520X-30HC-EI, S6520X-54HC-EI, S6520X-30QC-HI, S6520X-54QC-HI, S6520X-30HC-HI, and S6520X-54HC-HI switches.

Table4-31 SFP+ port LED description

MODE LED status	SFP+ port LED status	Description
Steady green (rate mode)	Steady green	A link is present on the port and the port is operating at 10 Gbps.
	Flashing green	The port is sending or receiving data at 10 Gbps.
	Steady yellow	A link is present on the port and the port is operating at 1 Gbps.
	Flashing yellow	The port is sending or receiving data at 1 Gbps.
	Off	• No link is present on the port. • The mode LED operates in IRF mode.
Flashing yellow (IRF mode)	Steady green	The port status LEDs on the switch work in conjunction to indicate the IRF member ID of the switch. For example, if the LEDs for ports 1 to 5 are steady green and the other port LEDs are off, the IRF member ID of the switch is 5.

Table4-32 describes the SFP+ port LEDs on the S6520X-30HF-EI, S6520X-54HF-EI, S6520X-30HF-HI, and S6520X-54HF-HI switches.

Table4-32 SFP+ port LED description

SFP+ port LED status	Description
Steady green	A link is present on the port and the port is operating at 10 Gbps.
Flashing green	The port is sending or receiving data at 10 Gbps.
Steady yellow	A link is present on the port and the port is operating at 1 Gbps.
Flashing yellow	The port is sending or receiving data at 1 Gbps.
Off	No transceiver module or cable has been installed or no link is present on the port.

QSFP+ port LED

The S6520X-30QC-EI, S6520X-54QC-EI, S6520X-30QC-HI, and S6520X-54QC-HI switches each provide two QSFP+ ports. A LED is provided for each QSFP+ port to indicate its operating status.

Table4-33 QSFP+ port LED description

LED status	Description
Steady green	A link is present on the port and the port is operating at 40 Gbps.
Flashing green	The port is sending or receiving data at 40 Gbps.
Steady yellow	A link is present on the port and the port is operating at 10 Gbps.
Flashing yellow	The port is sending or receiving data at 10 Gbps.
Off	• No transceiver module or cable has been installed or no link is present on the port. • The mode LED operates in IRF mode.

QSFP28 port LED

The S6520X-30HC-EI, S6520X-54HC-EI, S6520X-30HC-HI, S6520X-54HC-HI, S6520X-30HF-EI, S6520X-54HF-EI, S6520X-30HF-HI, S6520X-54HF-HI, and S6520X-54HC-UPWR-EI switches each provide QSFP28 ports. A LED is provided for each QSFP28 port to indicate its operating status.

Table4-34 QSFP28 port LED description

LED status	Description
Steady green	A link is present on the port and the port is operating at 100 Gbps.
Flashing green	The port is sending or receiving data at 100 Gbps.
Steady yellow	A link is present on the port and the port is operating at 40 Gbps.
Flashing yellow	The port is sending or receiving data at 40 Gbps.
Off	• No transceiver module or cable has been installed in the port or no link is present on the port. • The mode LED is in IRF mode. (Only supported on the S6520X-30QC-EI, S6520X-54QC-EI, S6520X-30HC-EI, S6520X-54HC-EI, S6520X-30QC-HI, S6520X-54QC-HI, S6520X-30HC-HI, and S6520X-54HC-HI switches.)

Expansion card status LED

The expansion card status LEDs SLOT1 and SLOT2 on the front panel indicate the operating state of the expansion cards in slot 1 and slot 2, respectively.

Table4-35 Expansion card status LED description

LED mark	Status	Description
SLOT1/SLOT2	Steady green	The expansion card is present and is operating correctly.
	Flashing yellow	The switch does not support the card, or the card has failed.
	Off	The expansion slot is empty.

Port status LED on an expansion card

An expansion card provides a port status LED for each port. For more information about the LEDs, see the manual for the expansion card.

Input/output status LED on a power supply

The PSR250-12A, PSR250-12A1, PSR1600B-12A-B, PSR600-54A-B, and PSR920-54A-B power supplies each have a LED on the front panel to indicate the power input and output status. For more information about the LED, see the manual for the power supply.

Fan tray status LED on a fan tray

The LSWM1FANSCE, LSWM1FANSCBE, LSPM1FANSA-SN, LSPM1FANSB-SN, and FAN-40B-1-A fan trays each have a LED to indicate the fan tray operating status.

Table4-36 LSWM1FANSCE and LSWM1FANSCBE fan tray status LED description

Status	Description
Steady yellow	The fan tray is operating correctly.
Flashing yellow	The fan tray is faulty.
Off	The fan tray fails to be installed correctly or the switch is powered off.

Table4-37 LSPM1FANSA-SN and LSPM1FANSB-SN fan tray status LED description

Status	Description
On	The fan tray is faulty.
Off	The fan tray is operating correctly or the switch is powered off.

Table4-38 FAN-40B-1-A fan tray status LED description

Status	Description
Steady yellow	The fan tray is faulty.
Off	The fan tray is operating correctly.

5 Cooling system

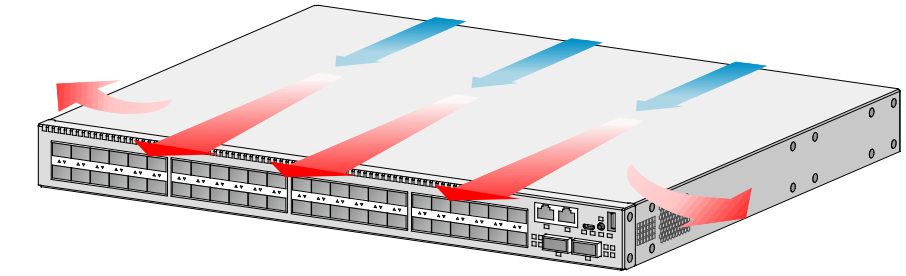
To dissipate heat timely and enhance system stability, the switch uses a high-performance cooling system. Consider the site ventilation design when you plan the installation site for the switch.

The switch uses removable fan trays. They provide airflow from the port side to the power supply side or from power supply side to the port side by using different types of fan trays. You must install all fan trays of the same model for the switch. Table5-1 describes fan trays available for the switch.

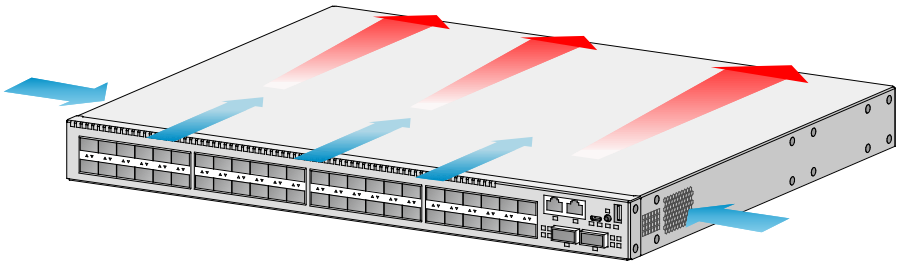
Table5-1 Fan trays available for the switches

Device model	Fan tray	Airflow direction
S6520X-30QC-EI S6520X-54QC-EI	LSWM1FANSCE	From the power supply side to the port side and chassis sides
S6520X-30HC-EI S6520X-54HC-EI S6520X-30QC-HI S6520X-54QC-HI S6520X-30HC-HI S6520X-54HC-HI	LSWM1FANSCBE	From the port side and chassis sides to the power supply side
S6520X-30HF-EI S6520X-54HF-EI	LSPM1FANSA-SN	From the power supply side to the port side
S6520X-30HF-HI S6520X-54HF-HI	LSPM1FANSB-SN	From the port side to the power supply side
S6520X-54HC-UPWR-EI	FAN-40B-1-A	From the port side to the power supply side

Figure5-1 Airflow direction (S6520X-54QC-EI)



LSW M1FANSCE



LSW M1FANSCBE

Figure5-2 Airflow direction (LSPM1FANSA-SN on S6520X-30HF-EI)

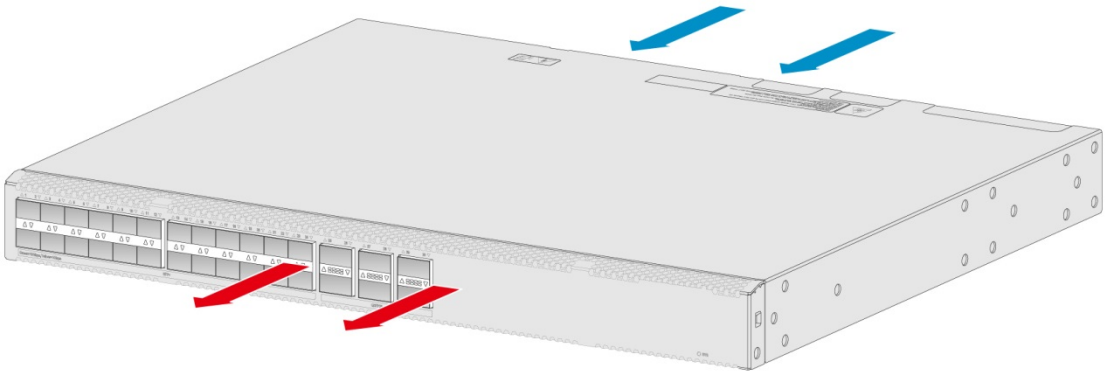


Figure5-3 Airflow direction (LSPM1FANSB-SN on S6520X-30HF-EI)