H3C S5560X-EI Switch Series

Hardware Information and Specifications

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Preface

H3C S5560X-EI Switch Series Hardware Information and Specifications describes product models, technical specifications, ports,and LEDs of the S5560X-EI 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 S5560X-EI switch series includes the following models:

- S5560X-30C-EI
- S5560X-30C-PWR-EI
- S5560X-54C-EI
- S5560X-54C-PWR-EI
- S5560X-30F-EI
- S5560X-30F-EIF
- S5560X-54F-EI
- S5560X-34S-EI
- S5560X-54S-EI

Technical specifications

Non-PoE switch models

Table1-1 Technical specifications for non-PoE switch models (1)

Item	S5560X-30C-EI	S5560X-54C-EI	S5560X-30F-EI	S5560X-54F-EI
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	≤ 6.7 kg (14.77 lb)	≤ 7.0 kg (15.43 lb)	≤ 6.6 kg (14.55 lb)	≤ 6.7 kg (14.77 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
SFP+ port	4	4	4	4
SFP port	8 (Each and its corresponding 10/100/1000BASE-T port form a combo interface.)	N/A	24 (The rightmost eight SFP ports and their corresponding 10/100/1000BASE-T autosensing Ethernet ports form combo interfaces.)	48
10/100/1000 BASE-T	24	48	8 (Each and its corresponding SFP	N/A

Item	S5560X-30C-EI	S5560X-54C-EI	S5560X-30F-EI	S5560X-54F-EI
autosensing Ethernet port			port form a combo interface.)	
Expansion slot	1, on the rear panel	1, on the rear panel	1, on the rear panel	1, on the rear panel
Power module 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 PSR150-A1 or PSR150-A2 power module:
	  ○ Rated voltage range: 100 VAC to 240 VAC @ 50 Hz or 60 Hz
	  ○ Max voltage range: 90 VAC to 264 VAC @ 47 Hz to 63 Hz
	• DC input for the PSR150-D1 power module:
	You can use a –48 VDC power source in the equipment room or an RPS (RPS800-A or RPS1600-A).
	  ○ Rated voltage range: –48 VDC to –60 VDC
	  ○ Max voltage range: –36 VDC to –72 VDC\			

Minimum power consumption	• Single AC input: 24 W • Single DC input: 24 W • Dual AC inputs: 29 W • Dual DC inputs: 28 W	• Single AC input: 27 W • Single DC input: 24 W • Dual AC inputs: 31 W • Dual DC inputs: 29 W	• Single AC input: 24 W • Single DC input: 24 W • Dual AC inputs: 29 W • Dual DC inputs: 30 W	• Single AC input: 30 W • Single DC input: 30 W • Dual AC inputs: 37 W • Dual DC inputs: 36 W
Maximum power consumption	• Single AC input: 87 W • Single DC input: 88 W • Dual AC inputs: 91 W • Dual DC inputs: 95 W	• Single AC input: 88 W • Single DC input: 89 W • Dual AC inputs: 93 W • Dual DC inputs: 96 W	• Single AC input: 112 W • Single DC input: 113 W • Dual AC inputs: 116 W • Dual DC inputs: 122 W	• Single AC input: 130 W • Single DC input: 132 W • Dual AC inputs: 134 W • Dual DC inputs: 140 W
Chassis leakage current compliance	UL 62368-1/EN 62368-1/IEC 62368-1/UL 60950-1/EN 60950-1/IEC 60950-1/GB4943.1			
Melting current of power module fuse	• PSR150-A1/PSR150-A2 power module: 5 A, 250 V • PSR150-D1 power module: 8 A, 250 V			
Operating temperature	-5°C to 45°C (23°F to 113°F)			
Humidity	5% RH to 95% RH, noncondensing			
Fire resistance compliance	UL 62368-1/EN 62368-1/IEC 62368-1/UL 60950-1/EN 60950-1/IEC 60950-1/GB4943.1			

Table1-2 Technical specifications for non-PoE switch models (2)

Item	S5560X-30F-EIF	S5560X-34S-EI	S5560X-54S-EI
Dimensions (H × W × D)	43.6 × 440 × 220 mm (1.72 × 17.32 × 8.66 in)	43.6 × 440 × 260 mm (1.72 × 17.32 × 10.24 in)	43.6 × 440 × 260 mm (1.72 × 17.32 × 10.24 in)

Item	S5560X-30F-EIF	S5560X-34S-EI	S5560X-54S-EI
Weight	≤ 3.2 kg (7.05 lb)	≤ 3.6 kg (7.94 lb)	≤ 3.9 kg (8.60 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
Management Ethernet port	1	1	1
QSFP+ port	2	2	2
SFP+ port	4	4	4
SFP port	24	4 (Each and its corresponding 10/100/1000BASE-T port form a combo interface)	N/A
10/100/1000BASE-T autosensing Ethernet port	N/A	28	48

Input voltage	• AC input:
	  ○ Rated voltage range: 100 VAC to 240 VAC @ 50 Hz or 60 Hz
	  ○ Max voltage range: 90 VAC to 264 VAC @ 47 Hz to 63 Hz
	• DC input:
	You can use a –48 VDC power source in the equipment room or an RPS (RPS800-A or RPS1600-A).
	  ○ Rated voltage range: –48 VDC to –60 VDC
	  ○ Max voltage range: –36 VDC to –72 VDC		

Minimum power consumption	• AC: 20 W • DC: 23 W	• AC: 19 W • DC: 19 W	• AC: 22 W • DC: 22 W
Maximum power consumption	• AC: 71 W • DC: 72 W	• AC: 56 W • DC: 57 W	• AC: 66 W • DC: 68 W
Chassis leakage current compliance	UL 62368-1/EN 62368-1/IEC 62368-1/UL 60950-1/EN 60950-1/IEC 60950-1/GB4943.1		
Melting current of power module fuse	• AC: 3.15 A, 250 V • DC: 8 A, 250 V		
Operating temperature	-5°C to 45°C (23°F to 113°F)		
Humidity	5% RH to 95% RH, noncondensing		
Fire resistance compliance	UL 62368-1/EN 62368-1/IEC 62368-1/UL 60950-1/EN 60950-1/IEC 60950-1/GB4943.1		

PoE switch models

Table1-3 Technical specifications for PoE switch models

Item	S5560X-30C-PWR-EI	S5560X-54C-PWR-EI
Dimensions (H × W × D)	43.6 × 440 × 460 mm (1.72 × 17.32 × 18.11 in)	43.6 × 440 × 460 mm (1.72 × 17.32 × 18.11 in)

Item	S5560X-30C-PWR-EI	S5560X-54C-PWR-EI
Weight	≤ 9.2 kg (20.28 lb)	≤ 9.6 kg (21.16 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
Management Ethernet port	1	1
SFP+ port	4	4
10/100/1000BASE-T autosensing Ethernet port	24	48
Expansion slot	1, on the rear panel	1, on the rear panel
Power module slot	2, on the rear panel	2, on the rear panel
Fan tray slot	2, on the rear panel	2, on the rear panel

Input voltage	• AC input for the PSR360-56A/PSR720-56A power module:
	  ○ Rated voltage range: 100 VAC to 240 VAC @ 50 Hz or 60 Hz
	  ○ Max voltage range: 90 VAC to 264 VAC @ 47 Hz to 63 Hz
	• AC input for the PSR1110-56A power module:
	  ○ Rated voltage range: 115 VAC to 240 VAC @ 50 Hz or 60 Hz
	  ○ Max voltage range: 102.5 VAC to 264 VAC @ 47 Hz to 63 Hz
	• DC input for the PSR560-56D power module:
	You can use a –48 VDC power source in the equipment room or an RPS (RPS1600-A).
	  ○ Rated voltage range: –48 VDC to –60 VDC
	  ○ Max voltage range: –36 VDC to –72 VDC	

PoE power capacity	Depends on the power module configurations. For more information, see Table1-4.	
Minimum power consumption	• Single AC input: 31 W • Single DC input: 43 W • Dual AC inputs: 31 W • Dual DC inputs: 60 W	• Single AC input: 33 W • Single DC input: 48 W • Dual AC inputs: 40 W • Dual DC inputs: 66 W
Maximum power consumption (including PoE power consumption)	• Single AC input: 926 W • Single DC input: 486 W • Dual AC inputs: 928 W • Dual DC inputs: 876 W	• Single AC input: 1090 W • Single DC input: 502 W • Dual AC inputs: 1742 W • Dual DC inputs: 1003 W
Chassis leakage current compliance	UL 62368-1/EN 62368-1/IEC 62368-1/UL 60950-1/EN 60950-1/IEC 60950-1/GB4943.1	
Melting current of power module fuse	15 A, 250 V	
Operating temperature	-5°C to 45°C (23°F to 113°F)	
Humidity	5% RH to 95% RH, noncondensing	
Fire resistance compliance	UL 62368-1/EN 62368-1/IEC 62368-1/UL 60950-1/EN 60950-1/IEC 60950-1/GB4943.1	

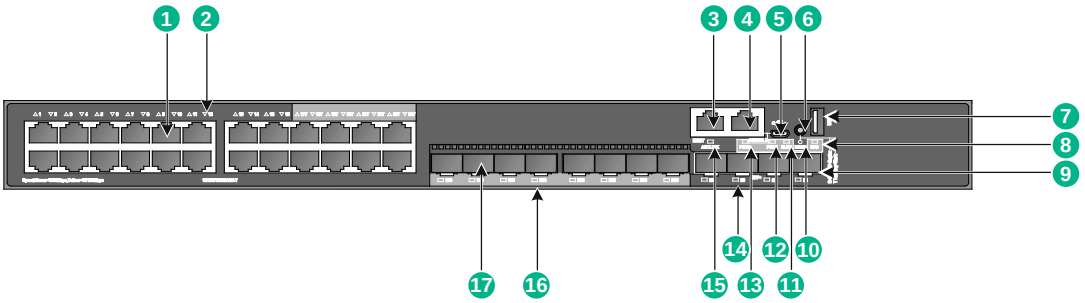
Table1-4 PoE power capacity of the S5560X-30C-PWR-EI and S5560X-54C-PWR-EI switches

Power module configuration	S5560X-30C-PWR-EI		S5560X-54C-PWR-EI	
	Total PoE power capacity	Max PoE power capacity per port	Total PoE power capacity	Max PoE power capacity per port
2 × PSR1110-56A	810 W	30 W	1680 W	30 W
1 × PSR1110-56A and 1 × PSR720-56A	810 W	30 W	1560 W	30 W
1 × PSR1110-56A and 1 × PSR560-56D	810 W	30 W	1440 W	30 W
1 × PSR1110-56A and 1 × PSR360-56A	810 W	30 W	1200 W	30 W
2 × PSR720-56A	810 W	30 W	1200 W	30 W
1× PSR720-56A and 1 × PSR560-56D	810 W	30 W	1200 W	30 W
1 × PSR1110-56A	810 W	30 W	810 W	30 W
2 × PSR560-56D	810 W	30 W	810 W	30 W
1 × PSR720-56A and 1 × PSR360-56A	810 W	30 W	810 W	30 W
1 × PSR560-56D and 1 × PSR360-56A	720 W	30 W	720 W	30 W
1 × PSR720-56A	450 W	30 W	450 W	30 W
2 × PSR360-56A	450 W	30 W	450 W	30 W
1 × PSR560-56D	360 W	30 W	360 W	30 W
1 × PSR360-56A	180 W	30 W	180 W	30 W

2 Chassis views

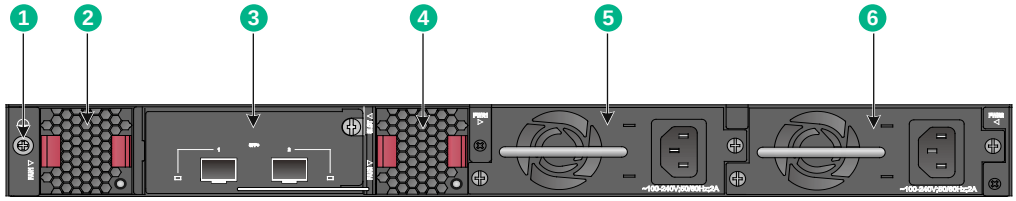
S5560X-30C-EI

Figure2-1 Front panel



(1) 10/100/1000BASE-T autosensing Ethernet port	
(2) 10/100/1000BASE-T autosensing Ethernet port LED	
(3) Management Ethernet port	(4) Console port (CONSOLE)
(5) Micro USB console port	(6) Mode button
(7) USB port	(8) System status LED (SYS)
(9) SFP+ port	(10) Mode LED (MODE)
(11) Expansion card status LED (SLOT)	(12) Power module 2 status LED (PWR2)
(13) Power module 1 status LED (PWR1)	(14) SFP+ port LED
(15) Management Ethernet port LED (ACT/LINK)	(16) SFP port LED
(17) SFP port	

Figure2-2 Rear panel



(1) Grounding screw	(2) Fan tray 1
(3) Expansion card	(4) Fan tray 2
(5) Power module 1	(6) Power module 2

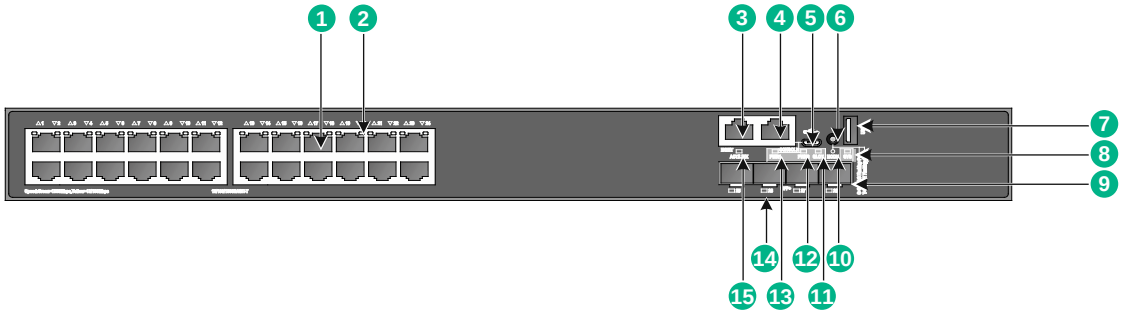
The S5560X-30C-EI switch comes with power module slot 1 empty and power module slot 2 installed with a filler panel. You can install one or two power modules for the switch as required. In this figure, two PSR150-A1 AC power modules are installed in the power module slots.

The S5560X-30C-EI switch comes with the two fan tray slots empty. You must install two fan trays of the same model for the switch. In this figure, two LSPM1FANSB fan trays are installed in the fan tray slots.

The S5560X-30C-EI switch comes with a filler panel in the expansion slot. You can select an expansion card for the switch as required. In this figure, an LSWM2SP2PM interface card is installed in the expansion slot.

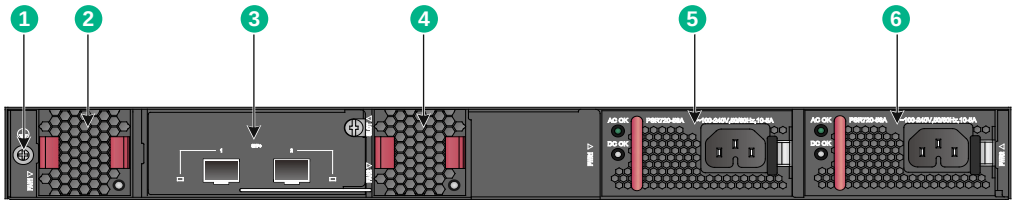
S5560X-30C-PWR-EI

Figure2-3 Front panel



(1) 10/100/1000BASE-T autosensing Ethernet port	
(2) 10/100/1000BASE-T autosensing Ethernet port LED	
(3) Management Ethernet port	(4) Console port (CONSOLE)
(5) Micro USB console port	(6) Mode button
(7) USB port	(8) System status LED (SYS)
(9) SFP+ port	(10) Mode LED (MODE)
(11) Expansion card status LED (SLOT)	(12) Power module 2 status LED (PWR2)
(13) Power module 1 status LED (PWR1)	(14) SFP+ port LED
(15) Management Ethernet port LED (ACT/LINK)	

Figure2-4 Rear panel



(1) Grounding screw	(2) Fan tray 1
(3) Expansion card	(4) Fan tray 2
(5) Power module 1	(6) Power module 2

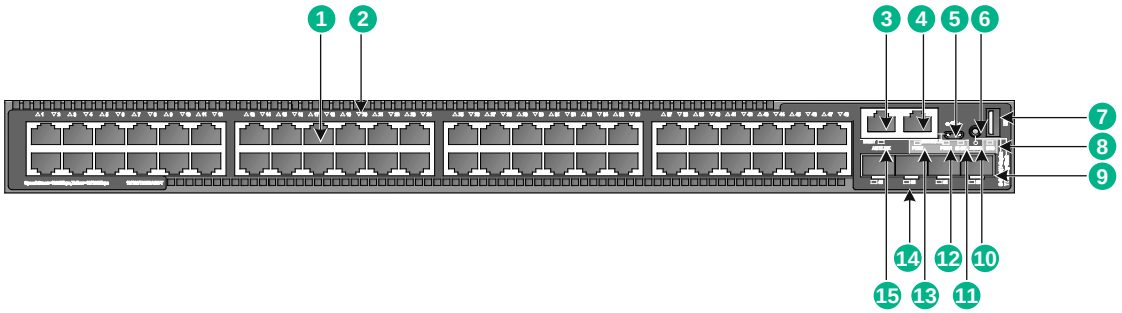
The S5560X-30C-PWR-EI switch comes with power module slot 1 empty and power module slot 2 installed with a filler panel. You can install one or two power modules for the switch as required. In this figure, two PSR720-56A AC power modules are installed in the power module slots.

The S5560X-30C-PWR-EI switch comes with the two fan tray slots empty. You must install two fan trays of the same model for the switch. In this figure, two LSPM1FANSB fan trays are installed in the fan tray slots.

The S5560X-30C-PWR-EI switch comes with a filler panel in the expansion slot. You can select an expansion card for the switch as required. In this figure, an LSWM2SP2PM interface card is installed in the expansion slot.

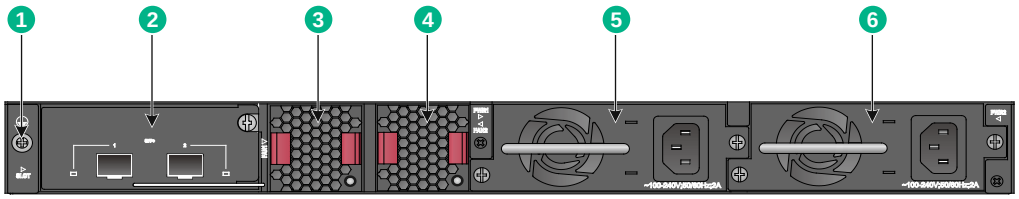
S5560X-54C-EI

Figure2-5 Front panel



(1) 10/100/1000BASE-T autosensing Ethernet port	
(2) 10/100/1000BASE-T autosensing Ethernet port LED	
(3) Management Ethernet port	(4) Console port (CONSOLE)
(5) Micro USB console port	(6) Mode button
(7) USB port	(8) System status LED (SYS)
(9) SFP+ port	(10) Mode LED (MODE)
(11) Expansion card status LED (SLOT)	(12) Power module 2 status LED (PWR2)
(13) Power module 1 status LED (PWR1)	(14) SFP+ port LED
(15) Management Ethernet port LED (ACT/LINK)	

Figure2-6 Rear panel



(1) Grounding screw	(2) Expansion card
(3) Fan tray 1	(4) Fan tray 2
(5) Power module 1	(6) Power module 2

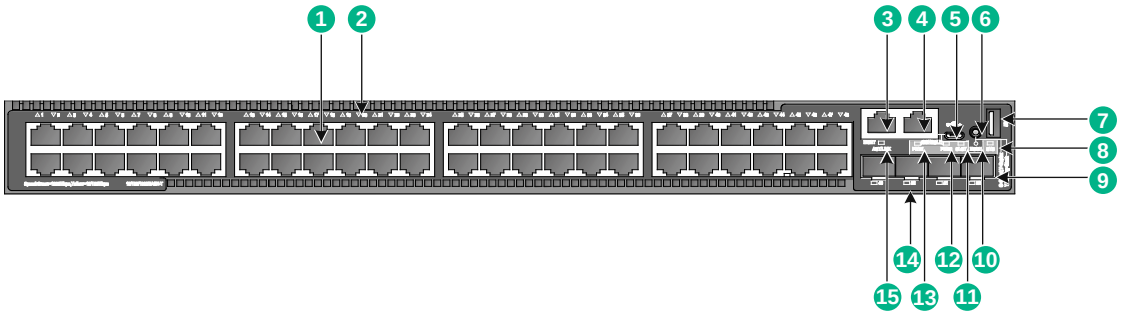
The S5560X-54C-EI switch comes with power module slot 1 empty and power module slot 2 installed with a filler panel. You can install one or two power modules for the switch as required. In this figure, two PSR150-A1 AC power modules are installed in the power module slots.

The S5560X-54C-EI switch comes with the two fan tray slots empty. You must install two fan trays of the same model for the switch. In this figure, two LSPM1FANSB fan trays are installed in the fan tray slots.

The S5560X-54C-EI switch comes with a filler panel in the expansion slot. You can select an expansion card for the switch as required. In this figure, an LSWM2SP2PM interface card is installed in the expansion slot.

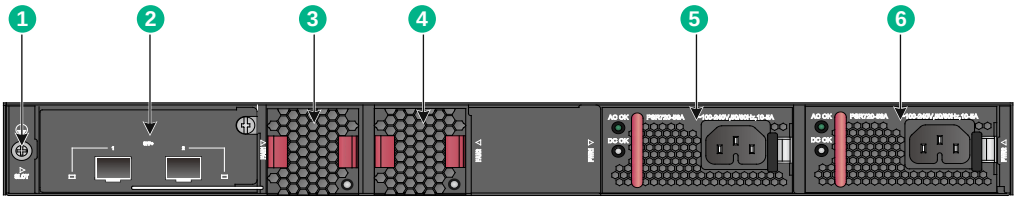
S5560X-54C-PWR-EI

Figure2-7 S5560X-54C-PWR-EI front panel



(1) 10/100/1000BASE-T autosensing Ethernet port	
(2) 10/100/1000BASE-T autosensing Ethernet port LED	
(3) Management Ethernet port	(4) Console port (CONSOLE)
(5) Micro USB console port	(6) Mode button
(7) USB port	(8) System status LED (SYS)
(9) SFP+ port	(10) Mode LED (MODE)
(11) Expansion card status LED (SLOT)	(12) Power module 2 status LED (PWR2)
(13) Power module 1 status LED (PWR1)	(14) SFP+ port LED
(15) Management Ethernet port LED (ACT/LINK)	

Figure2-8 Rear panel



(1) Grounding screw	(2) Expansion card
(3) Fan tray 1	(4) Fan tray 2
(5) Power module 1	(6) Power module 2

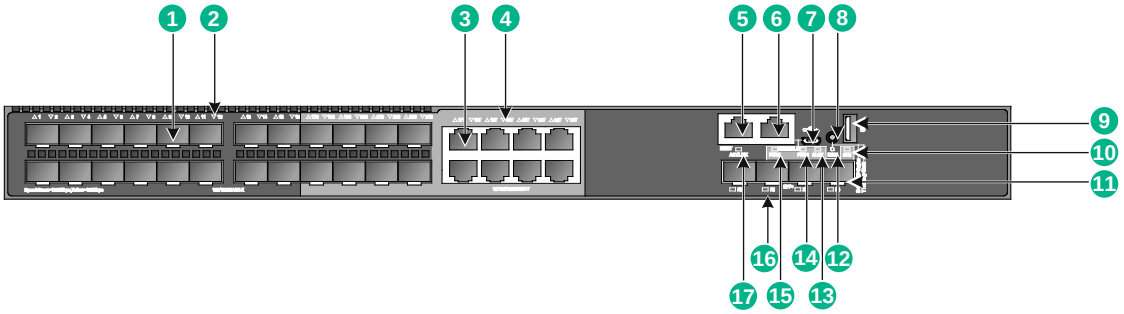
The S5560X-54C-PWR-EI switch comes with power module slot 1 empty and power module slot 2 installed with a filler panel. You can install one or two power modules for the switch as required. In this figure, two PSR720-56A AC power modules are installed in the power module slots.

The S5560X-54C-PWR-EI switch comes with the two fan tray slots empty. You must install two fan trays of the same model for the switch. In this figure, two LSPM1FANSB fan trays are installed in the fan tray slots.

The S5560X-54C-PWR-EI switch comes with a filler panel in the expansion slot. You can select an expansion card for the switch as required. In this figure, an LSWM2SP2PM interface card is installed in the expansion slot.

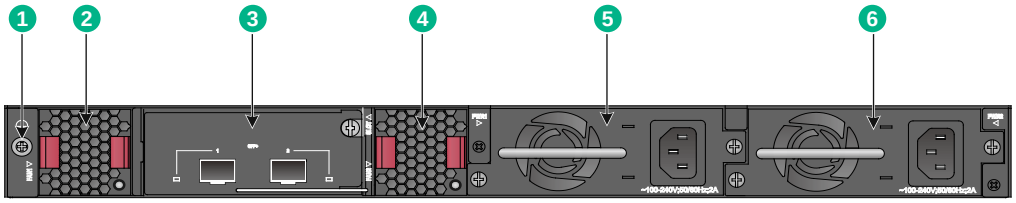
S5560X-30F-EI

Figure2-9 Front panel



(1) SFP port	(2) SFP port LED
(3) 10/100/1000BASE-T autosensing Ethernet port	
(4) 10/100/1000BASE-T autosensing Ethernet port LED	
(5) Management Ethernet port	(6) Console port (CONSOLE)
(7) Micro USB console port	(8) Mode button
(9) USB port	(10) System status LED (SYS)
(11) SFP+ port	(12) Mode LED (MODE)
(13) Expansion card status LED (SLOT)	(14) Power module 2 status LED (PWR2)
(15) Power module 1 status LED (PWR1)	(16) SFP+ port LED
(17) Management Ethernet port LED (ACT/LINK)	

Figure2-10 Rear panel



(1) Grounding screw	(2) Fan tray 1
(3) Expansion card	(4) Fan tray 2
(5) Power module 1	(6) Power module 2

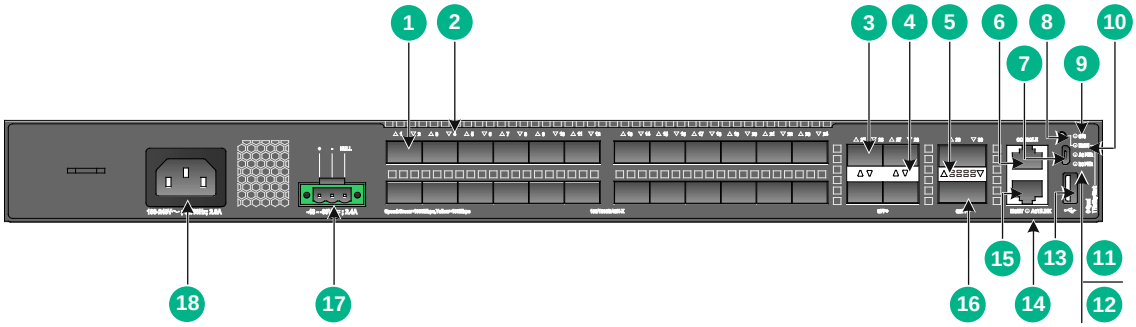
The S5560X-30F-EI switch comes with power module slot 1 empty and power module slot 2 installed with a filler panel. You can install one or two power modules for the switch as required. In this figure, two PSR150-A1 AC power modules are installed in the power module slots.

The S5560X-30F-EI switch comes with the two fan tray slots empty. You must install two fan trays of the same model for the switch. In this figure, two LSPM1FANSB fan trays are installed in the fan tray slots.

The S5560X-30F-EI switch comes with a filler panel in the expansion slot. You can select an expansion card for the switch as required. In this figure, an LSWM2SP2PM interface card is installed in the expansion slot.

S5560X-30F-EIF

Figure2-11 Front panel



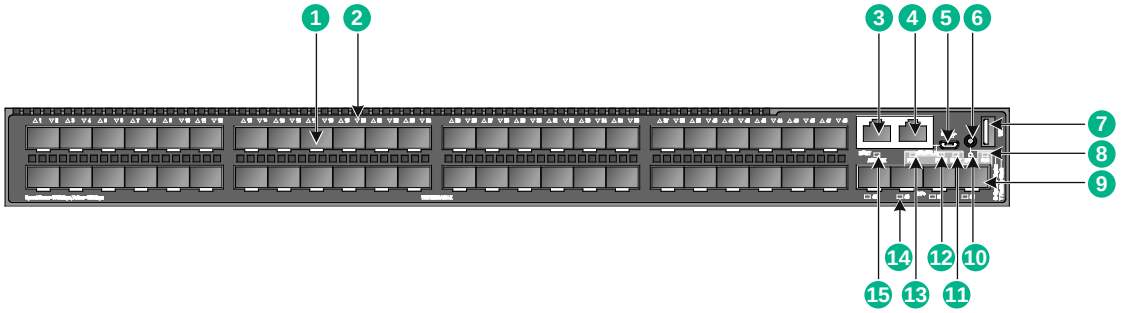
(1) SFP port	(2) SFP port LED
(3) SFP+ port	(4) SFP+ port LED
(5) QSFP+ port LED	(6) Console port (CONSOLE)
(7) Micro USB console port	(8) Mode button
(9) System status LED (SYS)	(10) Mode LED (MODE)
(11) AC power input status LED (AC PWR)	(12) DC power input status LED (DC PWR)
(13) USB port	(14) Management Ethernet port LED (ACT/LINK)
(15) Management Ethernet port	(16) QSFP+ port
(17) DC-input power receptacle	(18) AC-input power receptacle

Figure2-12 Rear panel

(1) Grounding screw

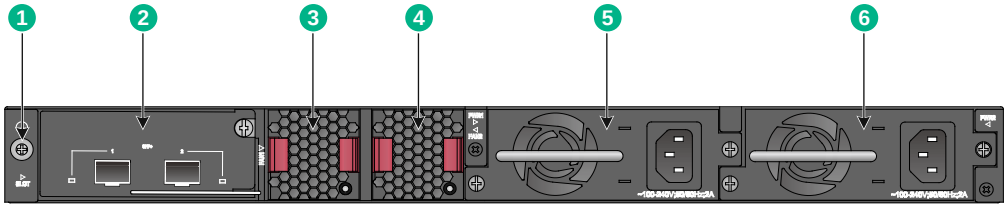
S5560X-54F-EI

Figure2-13 Front panel



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

Figure2-14 Rear panel



(1) Grounding screw	(2) Expansion card
(3) Fan tray 1	(4) Fan tray 2
(5) Power module 1	(6) Power module 2

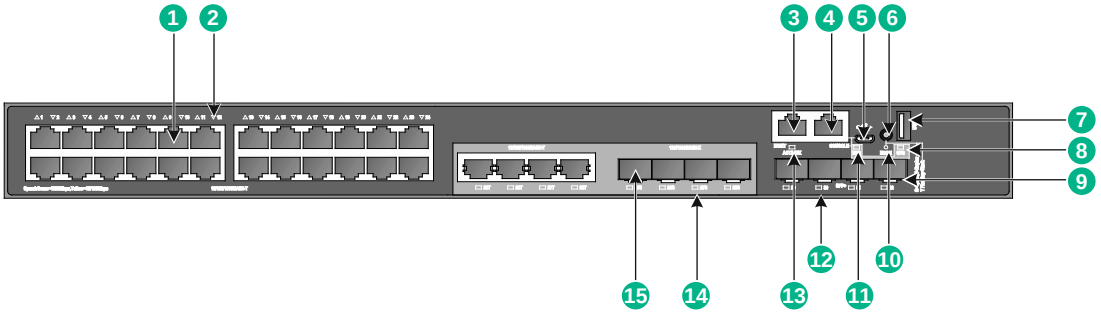
The S5560X-54F-EI switch comes with power module slot 1 empty and power module slot 2 installed with a filler panel. You can install one or two power modules for the switch as required. In this figure, two PSR150-A1 AC power modules are installed in the power module slots.

The S5560X-54F-EI switch comes with the two fan tray slots empty. You must install two fan trays of the same model for the switch. In this figure, two LSPM1FANSB fan trays are installed in the fan tray slots.

The S5560X-54F-EI switch comes with a filler panel in the expansion slot. You can select an expansion card for the switch as required. In this figure, an LSWM2SP2PM interface card is installed in the expansion slot.

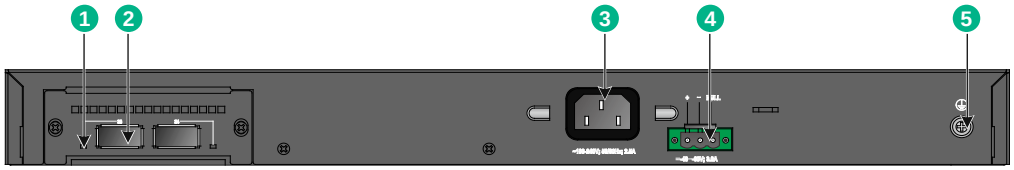
S5560X-34S-EI

Figure2-15 Front panel



(1) 10/100/1000BASE-T autosensing Ethernet port	
(2) 10/100/1000BASE-T autosensing Ethernet port LED	
(3) Management Ethernet port	(4) Console port (CONSOLE)
(5) Micro USB console port	(6) Mode button
(7) USB port	(8) System status LED (SYS)
(9) SFP+ port	(10) Mode LED (MODE)
(11) RPS status LED (RPS)	(12) SFP+ port LED
(13) Management Ethernet port LED (ACT/LINK)	(14) SFP port LED
(15) SFP port	

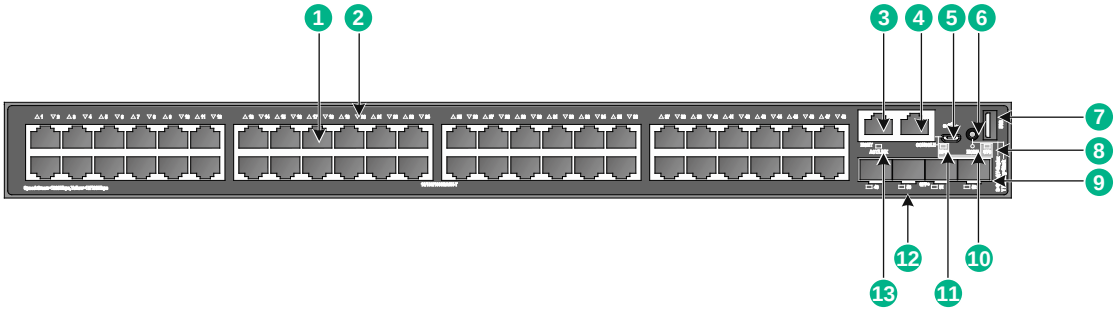
Figure2-16 Rear panel



(1) QSFP+ port LED	(2) QSFP+ port
(3) AC power receptacle	(4) DC power receptacle
(5) Grounding screw	

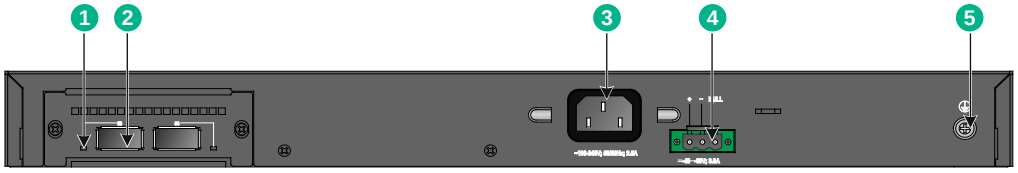
S5560X-54S-EI

Figure2-17 Front panel



(1) 10/100/1000BASE-T autosensing Ethernet port	
(2) 10/100/1000BASE-T autosensing Ethernet port LED	
(3) Management Ethernet port	(4) Console port (CONSOLE)
(5) Micro USB console port	(6) Mode button
(7) USB port	(8) System status LED (SYS)
(9) SFP+ port	(10) Mode LED (MODE)
(11) RPS status LED (RPS)	(12) SFP+ port LED
(13) Management Ethernet port LED (ACT/LINK)	

Figure2-18 Rear panel



(1) QSFP+ port LED	(2) QSFP+ port
(3) AC power receptacle	(4) DC power receptacle
(5) Grounding screw	

3 FRUs and compatibility matrixes

S5560X-EI switches except the S5560X-30F-EIF, S5560X-34S-EI, and S5560X-54S-EI use modular design and support FRUs.

Table3-1 FRUs and compatibility matrixes

FRUs	S5560X-30C-EI S5560X-54C-EI S5560X-30F-EI S5560X-54F-EI	S5560X-30C-PWR-EI S5560X-54C-PWR-EI
Removable power modules		
PSR150-A1	Supported	Not supported
PSR150-A2	Supported	Not supported
PSR150-D1	Supported	Not supported
PSR360-56A	Not supported	Supported
PSR560-56D	Not supported	Supported
PSR720-56A	Not supported	Supported
PSR1110-56A	Not supported	Supported
Removable fan trays		
LSPM1FANSA	Supported	Supported
LSPM1FANSB	Supported	Supported
Expansion cards		
LSWM2QP2P	Supported	Supported
LSWM2SP2PM	Supported	Supported
LSWM4SP8PM	Supported	Supported
LSWM2XGT2PM	Supported	Supported
LSWM2SP8P	Supported	Supported
LSPM4G4T6P	Supported	Supported
LSPM6FWD	Supported	Supported
LSPM6FWDB	Supported	Supported
LSWM2XMGT8P	Supported	Supported
LSWM2MGT8P	Supported	Supported
LSWM2ZSP2P	Supported	Supported
LSWM2SP2PB	Supported	Supported
LSWM2SP4PB	Supported	Supported
LSWM2FPGA	Supported	Supported
LSWM2FPGAB	Supported	Supported

FRUs	S5560X-30C-EI S5560X-54C-EI S5560X-30F-EI S5560X-54F-EI	S5560X-30C-PWR-EI S5560X-54C-PWR-EI
LSWM2EC	Supported	Supported
LSWM2XMGT2PM	Supported	Supported
LSWM2-iMC	Supported	Supported

The power modules support asset management. You can use the **display device manuinfo** command to view the name, sequence number, and vendor of the power modules you have installed on the device.

You can install one power module, or two power modules for redundancy on the S5560X-30C-EI, S5560X-54C-EI, S5560X-30F-EI, and S5560X-54F-EI switches. These switches support mix of an AC power module and a DC power module.

You can install one power module, or two power modules for redundancy on the S5560X-30C-PWR-EI and S5560X-54C-PWR-EI switches. The PoE capabilities of these switches vary by power module configuration. For more information, see Table1-3.

S5560X-EI switches except the S5560X-30F-EIF, S5560X-34S-EI, and S5560X-54S-EI use removable fan trays. Do not power on the switch if it does not have two fan trays of the same model installed.

Removable power modules

S5560X-EI switches except the S5560X-30F-EIF, S5560X-34S-EI, and S5560X-54S-EI provide power module slots and use removable power modules. Select power modules for the switches as required.

Table3-2 Removable power modules

Power module	Specifications	Reference
PSR150-A1	• Rated input voltage range: 100 VAC to 240 VAC @ 50 Hz or 60 Hz • Max input voltage range: 90 VAC to 264 VAC @ 47 Hz to 63 Hz • Max output power: 150 W	*H3C PSR150-A & PSR150-D Series Power Modules User Manual*
PSR150-A2	• Rated input voltage range: 100 VAC to 240 VAC @ 50 Hz or 60 Hz • Max input voltage range: 90 VAC to 264 VAC @ 47 Hz to 63 Hz • Max output power: 150 W	
PSR150-D1	• Rated input voltage range: –48 VDC to –60 VDC • Max input voltage range: –36 VDC to –72 VDC • Max output power: 150 W	
PSR360-56A	• Rated input voltage range: 100 VAC to 240 VAC @ 50 Hz or 60 Hz • Max input voltage range: 90 VAC to 264 VAC @ 47 Hz to 63 Hz • Max output power: 360 W	*H3C PSR360-56A Power Module User Manual*
PSR560-56D	• Rated input voltage range: –48 VDC to –60 VDC	*H3C PSR560-56D Power*

Power module	Specifications	Reference
	• Max input voltage range: –36 VDC to –72 VDC • Max output power: 560 W	*Module User Manual*
PSR720-56A	• Rated input voltage range: 100 VAC to 240 VAC @ 50 Hz or 60 Hz • Max input voltage range: 90 VAC to 264 VAC @ 47 Hz to 63 Hz • Max output power: 720 W	*H3C PSR720-56A Power Module User Manual*
PSR1110-56A	• Rated input voltage range: 115 VAC to 240 VAC @ 50 Hz or 60 Hz • Max input voltage range: 102.5 VAC to 264 VAC @ 47 Hz to 63 Hz • Max output power: 1110 W	*H3C PSR1110-56A Power Module User Manual*

NOTE:

The PSR1110-56A power module adds 64 mm (2.52 in) to the total depth of the switch, which includes the power module handle.

Removable fan trays

S5560X-EI switches except the S5560X-30F-EIF, S5560X-34S-EI, and S5560X-54S-EI support the LSPM1FANSA and LSPM1FANSB fan trays.

Table3-3 Removable fan trays

Item	Specifications
LSPM1FANSA fan tray	
Dimensions	40 × 40 × 104 mm (1.57 × 1.57 × 4.09 in)
Fan speed	20000 R.P.M
Max airflow	20 CFM (0.57 m^3/min)
Airflow direction	Back to front (from the power module side to the network port side)
Input voltage	12 V
Maximum power consumption	9.8 W
Reference	*H3C LSPM1FANSA & LSPM1FANSB Fan Trays User Guide*
LSPM1FANSB fan tray	
Dimensions	40 × 40 × 104 mm (1.57 × 1.57 × 4.09 in)
Fan speed	20000 R.P.M
Max airflow	20 CFM (0.57 m^3/min)
Airflow direction	Front to back (from the network port side to the power module side)
Input voltage	12 V
Maximum power consumption	9.8 W
Reference	*H3C LSPM1FANSA & LSPM1FANSB Fan Trays User Guide*

Expansion cards

S5560X-EI switches except the S5560X-30F-EIF, S5560X-34S-EI, and S5560X-54S-EI each provide an expansion slot at the rear. Select expansion cards for the switches as required.

Table3-4 Expansion cards

Item	Specifications
LSWM2QP2P	
Description	2-port 40GE QSFP+ interface card
Port type and quantity	2 × 40 Gbps QSFP+ fiber ports
Available transceiver modules and cables	See Table4-16, Table4-17, and Table4-18.
Reference	*H3C LSWM2QP2P Interface Card User Manual*
LSWM4SP8PM and LSWM2SP8P	
Description	8-port 10GE SFP+ interface card
Port type and quantity	8 × 10 Gbps SFP+ fiber ports
Available transceiver modules and cables	See Table4-10 and Table4-11.
Reference	*H3C LSWM4SP8PM Interface Card User Manual* and *H3C LSWM2SP8PM & LSWM2SP8P Interface Cards User Manual*
LSWM2SP2PM	
Description	2-port 10GE SFP+ interface card
Port type and quantity	2 × 1/10 Gbps SFP+ fiber ports
Available transceiver modules and cables	See Table4-10 and Table4-11.
Reference	*H3C LSWM2SP2PM Interface Card User Manual*
LSWM2XGT2PM	
Description	2-port 1/10GBASE-T interface card
Port type and quantity	2 × 1/10GBASE-T Ethernet ports
Available cables	See Table4-3.
Reference	*H3C LSWM2XGT2PM & LSWM2XGT8PM Interface Cards User Manual*
LSPM4G4T6P	
Description	4-port 10/100/1000BASE-T + 6-port SFP interface card
Port type and quantity	• 4 ×10/100/1000BASE-T autosensing Ethernet ports • 6 × SFP fiber ports SFP ports 5S and 6S form combo interfaces with 10/100/1000BASE-T autosensing Ethernet ports 5T and 6T, respectively.
Available transceiver modules and cables	SFP ports 5S and 6S support FE SFP modules in Table4-8 and GE SFP modules and cables in Table4-9. The other SFP ports support GE SFP modules and cables in Table4-9.
Reference	*H3C LSPM4G4T6P Interface Card User Manual*

Item	Specifications
LSPM6FWD	
Description	The card is a fourth-generation high performance firewall card. 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*
LSPM6FWDB	
Description	The card is a fourth-generation high performance firewall card. 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 LSPM6FWDB Card Manual*
LSWM2XMGT8P	
Description	8-port 1/2.5/5/10GBASE-T interface card
Port type and quantity	8 × 10G/5G/2.5G/1000BASE-T autosensing Ethernet ports
Available cables	See Table4-6.
Reference	*H3C LSWM2MGT8P & LSWM2XMGT8P Interface Cards User Manual*
LSWM2MGT8P	
Description	8-port 1/2.5/5GBASE-T interface card
Port type and quantity	8 × 5G/2.5G/1000BASE-T autosensing Ethernet ports
Available cables	See Table4-5.
Reference	*H3C LSWM2MGT8P & LSWM2XMGT8P Interface Cards User Manual*
LSWM2ZSP2P	
Description	2-port 25G SFP28 interface card
Port type and quantity	2 × SFP28 ports
Available transceiver modules and cables	See Table4-14 and Table4-15.
Reference	*H3C LSWM2ZSP2P Interface Card User Manual*
LSWM2SP2PB	
Description	2-port 10GE SFP+ interface card
Port type and quantity	2 × 1/10GE SFP+ ports
Available transceiver modules and cables	See Table4-9, Table4-10 and Table4-11.
Reference	*H3C LSWM2SP2PB & LSWM2SP4PB Interface Cards User Manual*
LSWM2SP4PB	
Description	4-port 10GE SFP+ interface card
Port type and quantity	4 × 1/10GE SFP+ ports
Available transceiver modules and cables	See Table4-9, Table4-10 and Table4-11.
Reference	*H3C LSWM2SP2PB & LSWM2SP4PB Interface Cards User Manual*

Item	Specifications
LSWM2XMGT2PM	
Description	2-port 10G/5G/2.5G/1000/100BASE-T interface module
Port type and quantity	2 × 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet ports
Available transceiver modules and cables	See Table4-7.
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*.

NOTE:

- The ports on an LSWM2SP2PM or LSWM2XGT2PM interface card can operate only at 10 Gbps when the interface card is installed on the device.
- An LSPM6FWD or LSPM6FWDB firewall card (including its handle) adds 75 mm (2.95 in) to the chassis depth when installed on the device.

Connecting cables to the copper ports on the interface cards

The LSWM2XGT2PM interface card provides copper ports. To connect cables to the copper ports on the LSWM2XGT2PM interface card, follow these guidelines:

- Use Category-6A or above cables and connectors. The max transmission distance varies by cable type:
  - **Category-6 UTP**—55 m (180.45 ft).
  - **Category-6 STP**—100 m (328.084 ft), no interference.
  - **Category-6 SFTP**—100 m (328.084 ft).

    - **Category-6A and above twisted pair**—100 m (328.084 ft).
- 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 twisted pair 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

The switch has two console ports: a serial console port and a micro USB 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.

Management Ethernet port

The switch provides a management Ethernet port on the front panel. You can connect this 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
Connector quantity	1
Port transmission rate	10/100/1000 Mbps, half/full duplex
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

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.

1/10BASE-T autosensing Ethernet port

The LSWM2XGT2PM interface card provides 1/10BASE-T autosensing Ethernet ports.

Table4-3 1/10BASE-T autosensing Ethernet port specifications

Item	Specification
Connector type	RJ-45
Interface attributes	1/10 Gbps, full duplex, MDI/MDI-X auto-sensing
Max transmission distance	• **Category-6 UTP**—55 m (180.45 ft) • **Category-6 STP**—100 m (328.08 ft) • **Category-6 SFTP**—100 m (328.08 ft) • **Category-6 and above twisted pair**—100 m (328.08 ft)
Transmission medium	Category-6 (or above) twisted pair cable
Standards	IEEE 802.3an, 802.3ab

10/100/1000BASE-T autosensing Ethernet port

All the S5560X-EI switch models, except the S5560X-54F-EI and S5560X-30F-EIF switches, provide 10/100/1000BASE-T autosensing Ethernet ports.

Table4-4 10/100/1000BASE-T autosensing Ethernet port specifications

Item	Specification
Connector type	RJ-45
Interface attributes	• 10 Mbps, half/full duplex • 100 Mbps, half/full duplex • 1000 Mbps, full duplex • MDI/MDI-X, auto-sensing
Max transmission distance	100 m (328.08 ft)
Transmission medium	Category-5 (or above) twisted pair cable
Standards	IEEE 802.3i, 802.3u, 802.3ab

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

The LSWM2MGT8P interface card provides 5G/2.5G/1000BASE-T autosensing Ethernet ports.

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

Item	Specification
Connector type	RJ-45
Port speed, duplex mode, MDIX mode	1/2.5/5 Gbps, full duplex, auto-MDI/MDIX
Transmission medium and max transmission distance	• 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

Item	Specification
	pair cable. • 1G mode: 140 m (459.32 ft) over a Category-5e or above twisted pair cable.
Standards	IEEE 802.3ab, 802.3an

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

The LSWM2XMGT8P interface card provides 10G/5G/2.5G/1000BASE-T autosensing Ethernet ports.

Table4-6 10G/5G/2.5G/1000BASE-T autosensing Ethernet port specifications

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

Transmission medium and max transmission distance	• 10G mode:
	  ○ 100 m (328.08 ft) over a Category-6 or above shielded twisted pair (STP) cable.
	  ○ 55 m (180.45 ft) over a Category-5e twisted pair or Category-6 unshielded twisted pair (UTP) cable.
	• 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.

Standards	IEEE 802.3ab, 802.3an

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

The LSWM2XMGT2PM interface module provides 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet ports.

Table4-7 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port specifications

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

Transmission medium and max transmission distance	• 10G mode:
	  ○ 100 m (328.08 ft) over a Category-6 or above STP cable.
	  ○ 55 m (180.45 ft) over a Category-5e twisted pair cable or Category-6 UTP cable.
	• 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

Item	Specification
	cable. • 100M mode: 140 m (459.32 ft) over a Category-5e or above twisted pair cable.
Standards	IEEE 802.3ab, 802.3an

SFP port

The S5560X-30C-EI, S5560X-30F-EI, S5560X-30F-EIF, S5560X-54F-EI, and S5560X-34S-EI switches provide 8, 24, 24, 48, and 4 fixed SFP ports on the front panel, respectively.

You can install the FE SFP modules in Table4-8 and GE SFP transceiver modules and cables in Table4-9 in the SFP ports.

NOTE:

You can install a maximum of 24 SFP copper transceiver modules (SFP-GE-T and SFP-GE-T-D) on an S5560X-54F-EI switch.

Table4-8 FE SFP transceiver modules available for the SFP ports

FE SFP module	Central wavelength (nm)	Connector	Fiber diameter (μm)	Max transmission distance
SFP-FE-SX-MM1310-A	1310	LC	Multi-mode, 50/125	2 km (1.24 miles)
			Multi-mode, 62.5/125	
SFP-FE-LX-SM1310-A	1310	LC	Single-mode, 9/125	15 km (9.32 miles)
SFP-FE-LX-SM1310-D	1310	LC	Single-mode, 9/125	15 km (9.32 miles)
SFP-FE-LH40-SM1310	1310	LC	Single-mode, 9/125	40 km (24.86 miles)
SFP-FE-LH80-SM1550	1550	LC	Single-mode, 9/125	80 km (49.71 miles)
SFP-FE-LX-SM1310-BIDI	• TX: 1310 • RX: 1550	LC	Single-mode, 9/125	15 km (9.32 miles)
SFP-FE-LX-SM1550-BIDI	• TX: 1550 • RX: 1310			

IMPORTANT:

The SFP-FE-LX-SM1310-BIDI and SFP-FE-LX-SM1550-BIDI modules must be used in pairs.

Table4-9 GE SFP transceiver modules and cables available for the SFP ports

GE SFP transceiver module and cable	Central wavelength (nm)	Connector	Cable/Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
SFP copper transceiver module					
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)

GE SFP transceiver module and cable	Central wavelength (nm)	Connector	Cable/Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
SFP fiber transceiver module					
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-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-LH40-SM1310	1310	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
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-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)

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-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)
SFP cable					
SFP-STACK-Kit	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 an SFP-GE-LX-SM1310-BIDI transceiver module, the other end must uses an SFP-GE-LX-SM1490-BIDI transceiver module.
- To install multiple SFP-GE-LH100-SM1550 transceiver modules on the S5560X-30C-EI, S5560X-30F-EI, S5560X-30F-EIF, and S5560X-54F-EI switches, separate these transceiver modules by other types of transceiver modules. For example, you can install SFP-GE-LH100-SM1550 transceiver modules in ports 1 and 2, other types of transceiver modules in ports 3 and 4, and SFP-GE-LH100-SM1550 transceiver modules in ports 5 and 6.

NOTE:

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

SFP+ port

The switch provides four fixed SFP+ ports on the front panel. You can install the GE SFP transceiver module and cables in Table4-9, 10-GE SFP+ transceiver modules in Table4-10, and 10-GE SFP+ cables in Table4-11 in the SFP+ ports.

NOTE:

The SFP-10GE-T copper transceiver module is only supported by the following switches: S5560X-30C-EI, S5560X-30C-PWR-EI, S5560X-30F-EI, S5560X-34C-EI, S5560X-34S-EI, S5560X-54C-EI, S5560X-54C-PWR-EI, S5560X-54F-EI and S5560X-54S-EI. Follow these restrictions and guidelines when you use SFP-10GE-T copper transceiver modules:

- Support for the SFP-10GE-T copper transceiver module depends on the software version. For more information, see the corresponding software release notes.
- On a switch with a left-to-right airflow design, do not install 10G copper transceiver modules in

adjacent ports or install other transceiver modules between two 10G copper transceiver modules. Make sure the ambient temperature is not higher than 40°C (104°F).

- On a switch with a front-to-rear airflow design, do not install 10G copper transceiver modules in adjacent ports or install other transceiver modules between two 10G copper transceiver modules. Make sure the ambient temperature is not higher than 45°C (113°F).
- Do not install SFP-10GE-T copper transceiver modules on expansion cards.

Table4-10 10-GE SFP+ transceiver modules available for the SFP+ ports

10-GE SFP+ transceiver module	Central wavelength (nm)	Connector	Fiber diameter (μm)	Multimode fiber 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-SX-MM850-E	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-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 km (6.21 miles)

10-GE SFP+ transceiver module	Central wavelength (nm)	Connector	Fiber diameter (μm)	Multimode fiber modal bandwidth (MHz × km)	Max transmission distance
SFP-XG-LX-SM1330-BIDI	TX: 1330 RX: 1270	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
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)

IMPORTANT:

The SFP-XG-LX-SM1270-BIDI and SFP-XG-LX-SM1330-BIDI transceiver modules and 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-LX-SM1270-BIDI transceiver module, the other end must use an SFP-XG-LX-SM1330-BIDI transceiver module.

Table4-11 10-GE SFP+ copper transceiver modules available for the SFP+ ports

SFP+ copper transceiver module	Connector	Cable type	Max transmission distance
SFP-10GE-T	RJ-45	Category-6A STP cable/Category-7 twisted pair cable	30 m (98.43 ft)

Table4-12 SFP+ copper cables available for the SFP+ ports

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)

Table4-13 SFP+ fiber cables available for the SFP+ ports

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)

Figure4-1 SFP+ cable

(1) Connector	(2) Pull latch

NOTE:

- The S5560X-30C-EI switch does not support the SFP-XG-LX-SM1270-BIDI, SFP-XG-LX-SM1330-BIDI, SFP-XG-LH40-SM1270-BIDI, and SFP-XG-LH40-SM1330-BIDI transceiver modules.
- As a best practice, use H3C transceiver modules and cables for the switch.
- The H3C transceiver modules and cables are subject to change over time. For the most recent list of H3C transceiver modules and cables, contact your H3C Support or marketing staff.
- For more information about H3C transceiver modules and cables, see *H3C Transceiver Modules User Guide*.

SFP28 port

The LSWM2ZSP2P interface card provides two SFP28 ports. The SFP28 transceiver modules in Table4-14 and SFP28 cables in Table4-15 are available for the SFP28 ports.

Table4-14 SFP28 transceiver modules available for the SFP28 ports

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

Table4-15 SFP28 cables available for the SFP28 ports

SFP28 cable	Cable length
SFP-25G-D-CAB-1M	1 m (3.28 ft)
SFP-25G-D-CAB-3M	3 m (9.84 ft)
SFP-25G-D-CAB-5M	5 m (16.40 ft)

SFP28 cable	Cable length
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) Connector (2) Pull latch

NOTE:

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

QSFP+ port

The S5560X-30F-EIF, S5560X-34S-EI, and S5560X-54S-EI switches each provide two QSFP+ ports. You can install the QSFP+ transceiver modules in Table4-16, the QSFP+ cables in Table4-17, and the QSFP+ to SFP+ cables in Table4-18 in the QSFP+ ports.

Table4-16 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-40G-CSR4-MM850	850	MPO	Multi-mode, 50/125	2000	300 m (984.25 ft)
				4700	400 m (1312.33 ft)
QSFP-40G-LR	1310	MPO	Single-mode,	N/A	10 km (6.21 miles)

QSFP+ transceiver module	Central wavelength (nm)	Connector	Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
4-PSM1310			9/125		
QSFP-40G-BIDI-SR-MM850	850	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 (787.40ft)
				4700	350 m (1148.29 ft)
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)

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

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

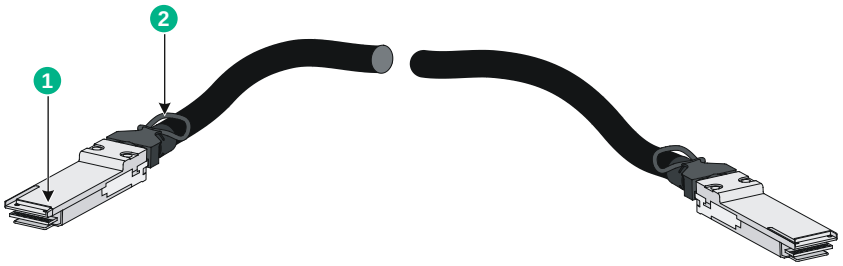
Table4-18 QSFP+ to SFP+ copper cables available for the QSFP+ ports

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

Table4-19 QSFP+ fiber cables available for the QSFP+ ports

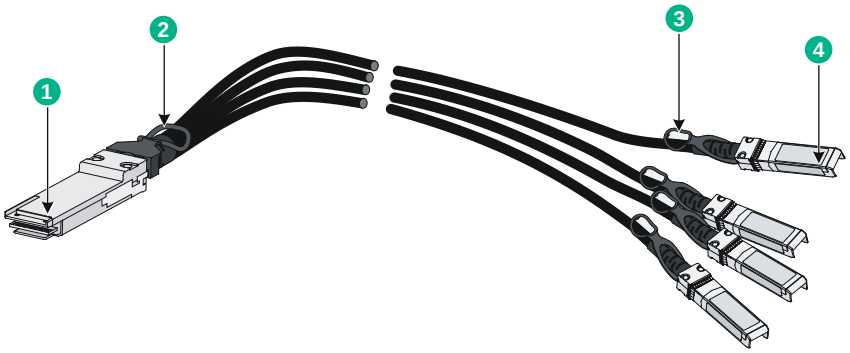
QSFP+ fiber cable	Max transmission distance
QSFP-40G-D-AOC-3M	3 m (9.84 ft)
QSFP-40G-D-AOC-7M	7 m (22.97 ft)
QSFP-40G-D-AOC-10M	10 m (32.81 ft)
QSFP-40G-D-AOC-20M	20 m (65.62 ft)

Figure4-3 40G QSFP+ cable



(1) Connector	(2) Pull tab

Figure4-4 40G QSFP+ to SFP+ cable



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

NOTE:

- As a best practice, use H3C transceiver modules and cables for the switch.
- You can use a QSFP-40G-SR4-MM850, QSFP-40G-CSR4-MM850, or QSFP-40G-LR4-PSM1310 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.
- The H3C transceiver modules and cables are subject to change over time. For the most recent list of H3C transceiver modules and cables, contact your H3C Support or marketing staff.
- For more information about H3C transceiver modules and cables, see *H3C Transceiver Modules User Guide*.

Combo interface

The S5560X-30C-EI and S5560X-30F-EI switches each provide eight combo interfaces. The S5560X-34S-EI switch provides four combo interfaces. A combo interface contains an SFP port and a 10/100/1000BASE-T autosensing Ethernet port. Only one of these two ports can operate at a time.

LEDs

System status LED

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

Table4-20 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 module status LED

The S5560X-EI switches except the S5560X-34S-EI and S5560X-54S-EI each provide two power module slots at the rear. For each power module, the switch provides a power module status LED on the front panel.

Table4-21 Power module status LED description

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

AC/DC power input status LED

The S5560X-30F-EIF switch supports AC and DC power inputs and use an AC and a DC power input status LED to indicate the AC and DC power input status.

Table4-22 AC/DC power input status LED

LED mark	Status	Description
AC PWR	Steady green	Normal AC input
	Off	Abnormal or no AC input
DC PWR	Steady green	Normal DC input
	Off	Abnormal or no DC input

RPS status LED

The S5560X-34S-EI and S5560X-54S-EI switches support RPS power input and use an RPS status LED to indicate the AC and DC power input status.

Table4-23 RPS status LED description

LED mark	Status	Description
RPS	Steady green	Normal AC and DC input
	Steady yellow	Normal DC input but abnormal or no AC input

LED mark	Status	Description
	Off	Abnormal or no DC input

MODE LED

To show more information about the switch through the port status LEDs, the switch provides a MODE LED 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.

Table4-24 Description for the MODE LED

LED mark	Status	Description
MODE	Steady green	The port status LEDs indicate port rates.
	Steady yellow	The port status LEDs indicate the duplex mode of the ports.
	Flashing green (1 Hz) (available only for S5560X-30C-PWR-EI and S5560X-54C-PWR-EI switches)	The port status LEDs indicate the PoE power supply status of the ports.
	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 a Release 63xx version earlier than Release 6326 or Release 65xx version earlier than Release 6522, 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.

10/100/1000BASE-T autosensing Ethernet port LED

The switch provides a status LED for each 10/100/1000BASE-T autosensing Ethernet port. The port LED and the mode LED work in conjunction to indicate the operating status of the 10/100/1000BASE-T autosensing Ethernet port.

Table4-25 10/100/1000BASE-T autosensing Ethernet port LED description

Mode LED status	10/100/1000BASE-T autosensing Ethernet port LED status	Description
Steady green (rate mode)	Steady green	A link is present on the port and the port is operating at 1000 Mbps.
	Flashing green	The port is sending or receiving data at 1000 Mbps
	Steady yellow	The port is operating at 10/100 Mbps.
	Flashing yellow	The port is sending or receiving data at 10/100 Mbps

Mode LED status	10/100/1000BASE-T autosensing Ethernet port LED status	Description
	Off	No link is present on the port.
Steady yellow (duplex mode)	Steady green	The port is operating at full-duplex mode and a link is present on the port.
	Flashing green	The port is sending and receiving data at full-duplex mode.
	Steady yellow	The port is operating at half-duplex mode and a link is present on the port.
	Flashing yellow	The port is sending and receiving data at half-duplex mode.
	Off	No link is present on the port.
Flashing green (1 Hz) (PoE mode, available only for S5560X-30C-PWR-EI and S5560X-54C-PWR-EI switches)	Steady green	PoE power supply is normal.
	Flashing green (1 Hz)	The device attached to the port requires power higher than the maximum or currently available PoE output power on the port.
	Steady yellow	The port is experiencing a PoE failure.
	Off	The port is not supplying power through PoE.
Flashing yellow (IRF mode)	• The S5560X-30C-EI, S5560X-54C-EI, S5560X-34S-EI, S5560X-54S-EI, S5560X-30C-PWR-EI, and S5560X-54C-PWR-EI switches use the 10/100/1000BASE-T autosensing Ethernet port LEDs to indicate the IRF member ID. 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. • An S5560X-30F-EI switch uses SFP port LEDs to indicate the IRF member ID. When the Mode LED is flashing yellow (IRF mode), the 10/100/1000BASE-T autosensing Ethernet port LEDs are off.	

SFP port LED

The SFP port LED and the mode LED work in conjunction to indicate the operating status of the SFP port.

Table4-26 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 1000 Mbps.
	Flashing green	The port is sending or receiving data at 1000 Mbps.
	Steady yellow	A link is present on the port and the port is operating at 100 Mbps.
	Flashing yellow	The port is sending or receiving data at 100 Mbps.
	Off	No link is present on the port.
Steady yellow (duplex mode)	Steady green	The port is operating at full-duplex mode and a link is present on the port.
	Flashing green	The port is sending and receiving data at full-duplex mode.

Mode LED status	SFP port LED status	Description
	Steady yellow	The port is operating at half-duplex mode and a link is present on the port.
	Flashing yellow	The port is sending and receiving data at half-duplex mode.
	Off	No link is present on the port.
Flashing yellow (IRF mode)	• The S5560X-30F-EI, S5560X-30F-EIF, and S5560X-54F-EI switches use the SFP port LEDs to indicate the IRF member ID. 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. • The S5560X-30C-EI and S5560X-34S-EI switches use 10/100/1000BASE-T autosensing Ethernet port LEDs to indicate the IRF member ID. When the Mode LED is flashing yellow (IRF mode), the SFP port LEDs are off.	

SFP+ port LED

Table4-27 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.
Steady yellow (duplex mode)	Steady green	The port is operating at full-duplex mode and a link is present on the port.
	Flashing green	The port is sending and receiving data at full-duplex mode.
	Steady yellow	The port is operating at half-duplex mode and a link is present on the port.
	Flashing yellow	The port is sending and receiving data at half-duplex mode.
	Off	No link is present on the port.
Flashing yellow (IRF mode)	Off	When the Mode LED is flashing yellow (IRF mode), the port LEDs are off.

QSFP+ port LED

The S5560X-30F-EIF, S5560X-34S-EI, and S5560X-54S-EI switches each provide two QSFP+ ports on the rear panel.

Table4-28 QSFP+ port LED description

Mode LED status	QSFP+ port LED status	Description
Steady green (rate mode)	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 link is present on the port.
Steady yellow (duplex mode)	Steady green	The port is operating at full-duplex mode and a link is present on the port.
	Flashing green	The port is sending and receiving data at full-duplex mode.
	Steady yellow	The port is operating at half-duplex mode and a link is present on the port.
	Flashing yellow	The port is sending and receiving data at half-duplex mode.
	Off	No link is present on the port.
Flashing yellow (IRF mode)	Off	When the Mode LED is flashing yellow (IRF mode), the port LEDs are off.

Management Ethernet port LED

Table4-29 Management Ethernet port LED description

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.

Expansion card status LED

The S5560X-EI switches except the S5560X-34S-EI and S5560X-54S-EI each provide an expansion slot at the rear. The expansion card status LED on the front panel indicates the operating state of the expansion card.

Table4-30 Expansion card status LED description

LED mark	Status	Description
SLOT	Steady green	The expansion card is in position and is operating correctly.
	Flashing yellow	The switch does not support the card model, or the card has failed.
	Off	The expansion slot is empty.

Port status LED on the expansion card

The expansion cards provide a port status LED for each port. For more information about the LEDs, see the manuals for the expansion cards.

Input status LED and output status LED on the power module

The PSR360-56A, PSR560-56D, PSR720-56A, and PSR1110-56A power modules each have an input status LED and an output status LED. For more information about the LEDs, see the manuals for the power modules.

Fan tray status LED on the fan tray

The LSPM1FANSA and LSPM1FANSB fan trays each have a fan tray status LED. The fan tray status LED on the fan tray indicates the operating state of the fan tray.

Table4-31 Fan tray status LED description

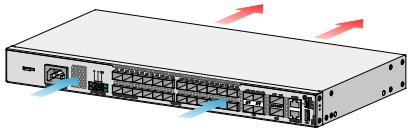
LED mark	Status	Description
FAN	Steady yellow	The fan tray is operating correctly.
	Flashing yellow (1 Hz)	The fan tray is faulty.
	Off	The fan tray is not installed securely or has no power input.

5 Cooling system

The switch uses a high-performance cooling system for fast heat dissipation and system stability. Consider the site ventilation design when you plan the installation site for the switch.

Some switch models use removable fan trays. You can choose fan tray models for these switches to provide airflow directions that match the heat dissipation requirements at the installation site. You must fully configure fan trays for these switches, and the fan trays on a switch must be the same model.

Table5-1 Cooling system

Device model	Fan tray type and model	Airflow direction
S5560X-30C-EI S5560X-54C-EI S5560X-30F-EI S5560X-54F-EI S5560X-30C-PWR-EI S5560X-54C-PWR-EI	Removable fan tray LSPM1FANSA	From the power module side to the port side and side panels (S5560X-54C-EI switch as an example) 
	Removable fan tray LSPM1FANSB	From the port side and side panels to the power module side (S5560X-54C-EI switch as an example) 
S5560X-30F-EIF	Fixed fan tray	From the port side to the grounding screw side (S5560X-30F-EIF switch as an example) 
S5560X-34S-EI S5560X-54S-EI	Fixed fan tray	From the left side to the right side (face the port side of the device to identify the left and right sides) (S5560X-34S-EI switch as an example)