Contents

1 Product models and technical specifications ····· 1-1

Product models ····· 1-1
Technical specifications ····· 1-1
Non-PoE models ····· 1-1
PoE models ····· 1-4

2 Chassis views ····· 2-6

S6520X-16ST-SI ····· 2-6
S6520X-24ST-SI ····· 2-7
S6520X-10XT-SI ····· 2-8
S6520X-16XT-SI ····· 2-8
S6520X-18C-SI ····· 2-9
S6520X-26C-SI ····· 2-10
S6520X-26MC-SI ····· 2-11
S6520X-26MC-UPWR-SI ····· 2-12
S6520X-26XC-UPWR-SI ····· 2-13
S6520X-54XC-UPWR-SI ····· 2-14

3 Appendix B Removable components and compatibility matrixes ····· 3-1

Removable power supplies ····· 3-3
Removable fan trays ····· 3-4
Expansion modules ····· 3-4
Connecting cables to the copper ports on the interface cards ····· 3-6

4 Appendix C Ports and LEDs ····· 4-1

Ports ····· 4-1
Console port ····· 4-1
Management Ethernet port ····· 4-1
USB port ····· 4-1
SFP port ····· 4-2
SFP+ port ····· 4-2
SFP28 port ····· 4-6
QSFP+ port ····· 4-8
10/100/1000BASE-T autosensing Ethernet port ····· 4-10
1/10BASE-T autosensing Ethernet port ····· 4-11
5G/2.5G/1000/100BASE-T autosensing Ethernet port ····· 4-11
5G/2.5G/1000BASE-T autosensing Ethernet port ····· 4-12
10G/5G/2.5G/1000BASE-T autosensing Ethernet port ····· 4-12
10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port ····· 4-12
Combo interface ····· 4-13
LEDs ····· 4-13
System status LED ····· 4-13
Power supply status LED ····· 4-13
Mode LED ····· 4-14
Management Ethernet port LED ····· 4-14
1/10GBASE-T autosensing Ethernet port LED ····· 4-14
5G/2.5G/1000/100BASE-T autosensing Ethernet port LED ····· 4-15
10G/5G/2.5G/1000BASE-T autosensing Ethernet port LED ····· 4-15
10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port LED ····· 4-16
SFP+ port LED ····· 4-16
Expansion module status LED ····· 4-17
Port status LED on an expansion module ····· 4-17
Fan tray status LED ····· 4-17

5 Appendix D Cooling system ····· 5-1

1 Product models and technical specifications

Product models

The S6520X-SI switch series includes the following models:

- S6520X-16ST-SI
- S6520X-24ST-SI
- S6520X-10XT-SI
- S6520X-16XT-SI
- S6520X-18C-SI
- S6520X-26C-SI
- S6520X-26MC-SI
- S6520X-26MC-UPWR-SI
- S6520X-26XC-UPWR-SI
- S6520X-54XC-UPWR-SI

Technical specifications

Non-PoE models

Table1-1 Technical specifications of non-PoE switches (1)

Item	S6520X-16ST-SI	S6520X-24ST-SI	S6520X-18C-SI	S6520X-26C-SI	S6520X-26MC-SI
Dimensions (H × W × D)	43.6 × 440 × 360 mm (1.72 × 17.32 × 14.17 in)				
Weight	≤ 5 kg (11.02 lb)	≤ 5 kg (11.02 lb)	≤ 5 kg (11.02 lb)	≤ 5 kg (11.02 lb)	≤ 6 kg (13.23 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	1
Management Ethernet port	1	1	1	1	1
SFP+ port	16 (The two highest-numbered SFP+ ports form combo interfaces with their corresponding 1/10GBASE-T autosensing	24 (The two highest-numbered SFP+ ports form combo interfaces with their corresponding 1/10GBASE-T autosensing	16	24	N/A

Item	S6520X-16ST-SI	S6520X-24ST-SI	S6520X-18C-SI	S6520X-26C-SI	S6520X-26MC-SI
	Ethernet ports, respectively.)	Ethernet ports, respectively.)			
1/10G BASE-T autosensing Ethernet port	2	2	N/A	N/A	N/A
5G/2.5G/1000/100BASE-T autosensing Ethernet port	N/A	N/A	N/A	N/A	24
Expansion slot	N/A	N/A	1, on the rear panel	1, on the rear panel	1, 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	2, on the rear panel

Input voltage	PSR75-12A (not supported on S6520X-26MC-SI):
	• AC input
	  ○ Rated voltage range: 100 to 240 VAC @ 50/60 Hz
	  ○ Max voltage range: 90 to 290 VAC @ 47 to 63 Hz
	• High-voltage DC input
	  ○ Rated voltage range: 240 VDC
	  ○ Max voltage range: 180 to 320 VDC
	PSR150-A1:
	• Rated voltage range: 100 to 240 VAC @ 50/60 Hz
	• Max voltage range: 90 to 264 VAC @ 47 to 63 Hz
	PSR150-D1:
	You can use a –48 VDC power source in the equipment room or an H3C RPS (RPS800-A or RPS1600-A) for the PSR150-D1 power supply.
	• Rated voltage range: –48 VDC to –60 VDC
	• Max voltage range: –36 VDC to –72 VDC				

Typical power consumption (30% flow, tested as required by CQC)	41 W	51 W	51 W	64 W	97 W
Maximum power consumption (100% flow, and fans at full speed)	59 W	73 W	97 W	113 W	134 W
Chassis leakage current compliance	UL60950-1/EN60950-1/IEC60950-1/GB4943.1				
Melting current of power supply fuse	• PSR75-12A: 3.15 A/250 V (not supported on S6520X-26MC-SI) • PSR150-A1: 6.3 A/250 V • PSR150-D1: 8 A/250 V				
Operating temperature	–5°C to +45°C (23°F to 113°F)				
Humidity	5% RH to 95% RH, noncondensing				

Item	S6520X-16ST-SI	S6520X-24ST-SI	S6520X-18C-SI	S6520X-26C-SI	S6520X-26MC-SI
Fire resistance compliance	UL60950-1/EN60950-1/IEC60950-1/GB4943.1				

Table1-2 Technical specifications of non-PoE switches (2)

Item	S6520X-10XT-SI	S6520X-16XT-SI
Dimensions (H × W × D)	43.6 × 440 × 260 mm (1.72 × 17.32 × 10.24 in)	43.6 × 440 × 260 mm (1.72 × 17.32 × 10.24 in)
Weight	≤ 5 kg (11.02 lb)	≤ 5 kg (11.02 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.	• 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	2	2
10G/5G/2.5G/1000BASE-T autosensing Ethernet port	8	14
Input voltage	• Rated voltage range: 100 to 240 VAC @ 50/60 Hz • Max voltage range: 90 to 264 VAC @ 47 to 63 Hz	• Rated voltage range: 100 to 240 VAC @ 50/60 Hz • Max voltage range: 90 to 264 VAC @ 47 to 63 Hz
Maximum power consumption (100% traffic, fan trays at full speed)	37.9 W	57.9 W
Typical power consumption (30% traffic, tested according to CQC)	N/A	N/A
Minimum power consumption	18 W	23 W
Maximum power consumption	38 W	58 W
Chassis leakage current compliance	UL60950-1/EN60950-1/IEC60950-1/GB4943.1	
Melting current of power supply fuse	6.3 A/250 V	
Operating temperature	–5°C to +45°C (23°F to 113°F)	
Operating	5% RH to 95% RH, noncondensing	

Item	S6520X-10XT-SI	S6520X-16XT-SI
humidity		
Fire resistance compliance	UL60950-1/EN60950-1/IEC60950-1/GB4943.1	

PoE models

Table1-3 Technical specifications of PoE switches

Item	S6520X-26MC-UPWR-SI	S6520X-26XC-UPWR-SI	S6520X-54XC-UPWR-SI
Dimensions (H × W × D)	43.6 × 440 × 460 mm (1.72 × 17.32 × 18.11 in)		
Weight	≤ 8.7 kg (19.18 lb)		≤ 10 kg (22.05 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		
Management Ethernet port	1		
QSFP+ port	N/A	N/A	4
5G/2.5G/1000/100BASE-T autosensing Ethernet port	24	N/A	N/A
10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port	N/A	24	48
Expansion slot	1, on the rear panel		
Power supply slot	2, on the rear panel		
Fan tray slot	N/A	2	3
Input voltage	PSR360-56A/PSR720-56A: • Rated voltage range: 100 to 240 VAC @ 50/60 Hz • Max voltage range: 90 to 264 VAC @ 47 to 63 Hz PSR1110-56A: • Rated voltage range: 115 to 240 VAC @ 50/60 Hz • Max voltage range: 102.5 to 264 VAC @ 47 to 63 Hz PSR560-56D: You can use a –48 VDC power source in the equipment room or an H3C RPS (RPS1600-A) for the PSR560-56D power supply. • Rated voltage range: –48 VDC to –60 VDC Max voltage range: –36 VDC to –72 VDC		

Item	S6520X-26MC-UPWR-SI	S6520X-26XC-UPWR-SI	S6520X-54XC-UPWR-SI
Typical power consumption (30% flow, tested as required by CQC)	97 W	90 W	165 W
Maximum power consumption (100% flow and fans at full speed)	Non-PoE: 126 W PoE: 2428 W (including 2040 W for PoE)	Non-PoE: 148 W PoE: 2385 W (including 2010 W for PoE)	Non-PoE: 232 W PoE: 2333 W (including 1920 W for PoE)
Chassis leakage current compliance	UL60950-1/EN60950-1/IEC60950-1/GB4943.1		
Melting current of power supply fuse	• PSR360-56A: 6.3 A/250 V • PSR720-56A: 15 A/250 V • PSR1110-56A: 15 A/250 V • PSR560-56D: 30 A/75 V		
Operating temperature	–5°C to +45°C (23°F to 113°F)		
Humidity	5% RH to 95% RH, noncondensing		
Fire resistance compliance	UL60950-1/EN60950-1/IEC60950-1/GB4943.1		

Table1-4 PoE capabilities for S6520X-26MC-UPWR-SI/S6520X-26XC-UPWR-SI/S6520X-54XC-UPWR-SI

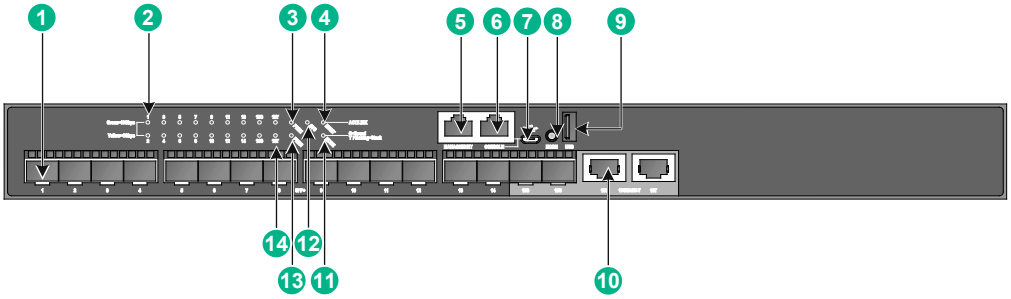
Power supply configuration	S6520X-26MC-UPWR-SI		S6520X-26XC-UPWR-SI		S6520X-54XC-UPWR-SI	
	Total power	Max. power by a single port	Total power	Max. power by a single port	Total power	Max. power by a single port
2 × PSR1110-56A	2040 W	90 W	2010 W	90 W	1920 W	90 W
1 × PSR1110-56A and 1 × PSR720-56A	1650 W	90 W	1620 W	90 W	1530 W	90 W
1 × PSR1110-56A and 1 × PSR560-56D	1500 W	90 W	1440 W	90 W	1350 W	90 W
1 × PSR1110-56A and 1 × PSR360-56A	1260 W	90 W	1260 W	90 W	1170 W	90 W
1 × PSR1110-56A	900 W	90 W	900 W	90 W	810 W	90 W
2 × PSR720-56A	1260 W	90 W	1230 W	90 W	1140 W	90 W
1 × PSR720-56A	1100 W	90 W	1050 W	90 W	960 W	90 W

Power supply configuration	S6520X-26MC-UPWR-SI		S6520X-26XC-UPWR-SI		S6520X-54XC-UPWR-SI	
	Total power	Max. power by a single port	Total power	Max. power by a single port	Total power	Max. power by a single port
and 1 × PSR560-56D						
1 × PSR720-56A and 1 × PSR360-56A	900 W	90 W	870 W	90 W	780 W	90 W
1 × PSR720-56A	540 W	90 W	510 W	90 W	420 W	90 W
2 × PSR560-56D	900 W	90 W	900 W	90 W	810 W	90 W
1 × PSR560-56D and 1 × PSR360-56A	750 W	90 W	690 W	90 W	600 W	90 W
1 × PSR560-56D	390 W	90 W	360 W	90 W	270 W	90 W
2 × PSR360-56A	540 W	90 W	510 W	90 W	420 W	90 W
1 × PSR360-56A	210 W	90 W	180 W	90 W	90 W	90 W

2 Chassis views

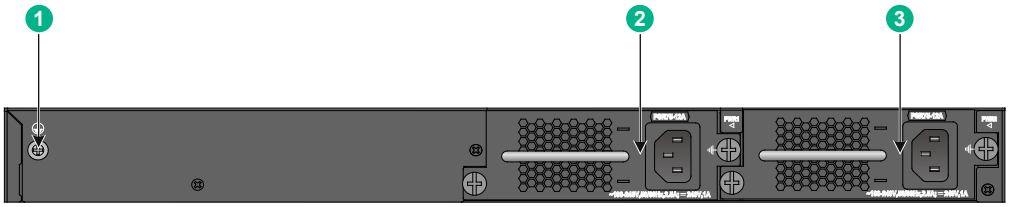
S6520X-16ST-SI

Figure2-1 Front panel



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

Figure2-2 Rear panel

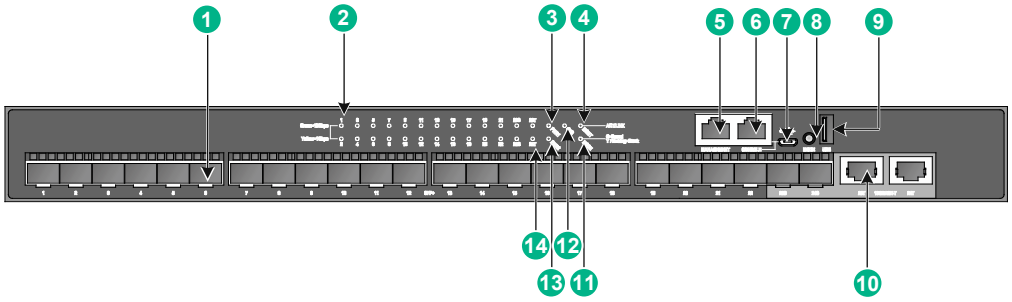


(1) Grounding screw	(2) Power supply 1 (PWR1)
(3) Power supply 2 (PWR2)	

An S6520X-16ST-SI switch comes with power supply slot 1 empty and power supply slot 2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure1-2, two PSR75-12A AC power supplies are installed in the power supply slots.

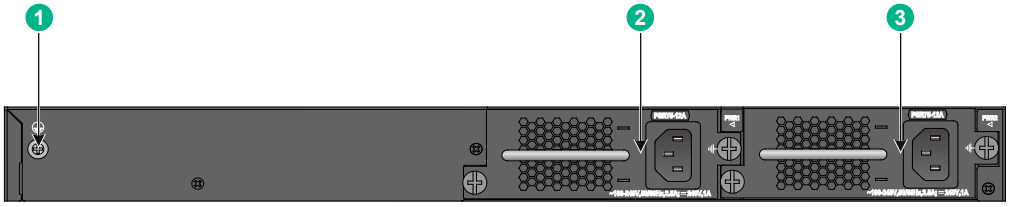
S6520X-24ST-SI

Figure2-3 Front panel



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

Figure2-4 Rear panel

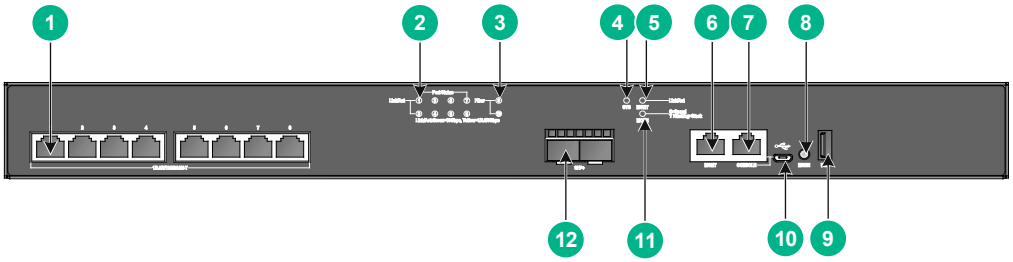


(1) Grounding screw	(2) Power supply 1 (PWR1)
(3) Power supply 2 (PWR2)	

An S6520X-24ST-SI switch comes with power supply slot 1 empty and power supply slot 2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure1-4, two PSR75-12A AC power supplies are installed in the power supply slots.

S6520X-10XT-SI

Figure2-5 Front panel



(1) 10/5G/2.5G/1000BASE-T autosensing Ethernet port	
(2) 10/5G/2.5G/1000BASE-T autosensing Ethernet port LED	
(3) SFP+ port LED	(4) System status LED (SYS)
(5) Management Ethernet port LED (LINK/ACT)	(6) Management Ethernet port
(7) Console port	(8) Mode button
(9) USB port	(10) Micro USB console port
(11) Mode LED (MODE)	(12) SFP+ port

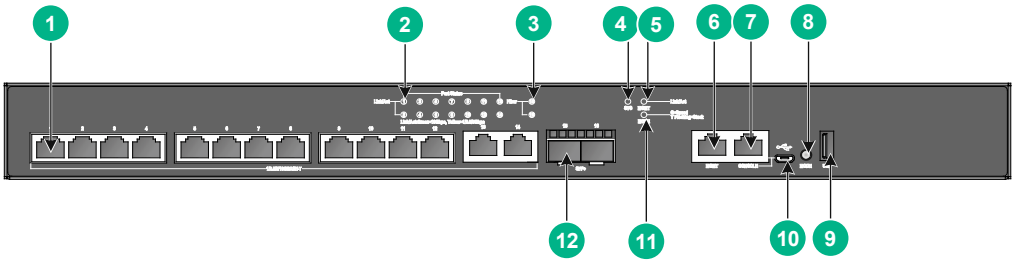
Figure2-6 Rear panel



(1) Grounding screw	(2) AC power receptacle

S6520X-16XT-SI

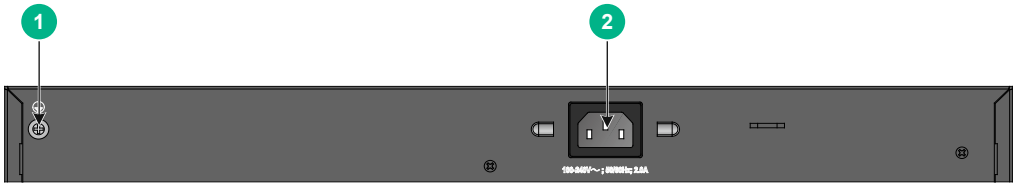
Figure2-7 Front panel



(1) 10/5G/2.5G/1000BASE-T autosensing Ethernet port	
(2) 10/5G/2.5G/1000BASE-T autosensing Ethernet port LED	
(3) SFP+ port LED	(4) System status LED (SYS)
(5) Management Ethernet port LED (LINK/ACT)	(6) Management Ethernet port
(7) Console port	(8) Mode button
(9) USB port	(10) Micro USB console port

(1) 10/5G/2.5G/1000BASE-T autosensing Ethernet port	
(11) Mode LED (MODE)	(12) SFP+ port

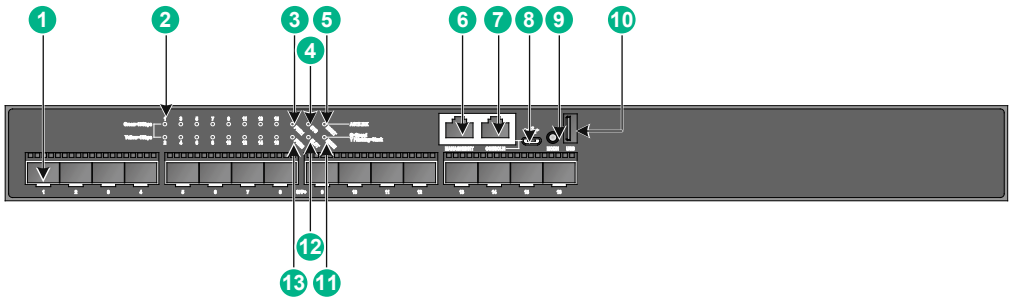
Figure2-8 Rear panel



(1) Grounding screw	(2) AC power receptacle

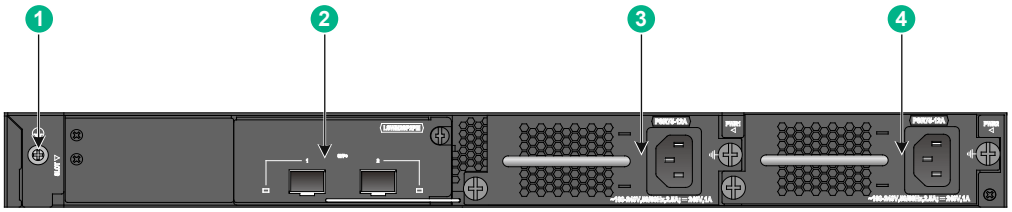
S6520X-18C-SI

Figure2-9 Front panel



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

Figure2-10 Rear panel



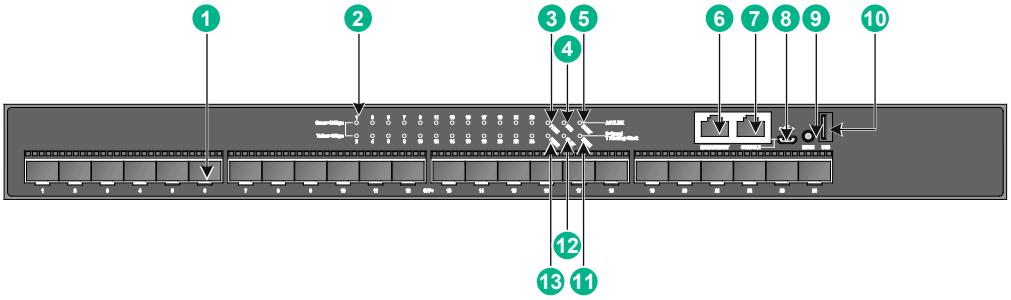
(1) Grounding screw	(2) Expansion module
(3) Power supply 1 (PWR1)	(4) Power supply 2 (PWR2)

An S6520X-18C-SI switch comes with power supply slot 1 empty and power supply slot 2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure1-10, two PSR75-12A AC power supplies are installed in the power supply slots.

An S6520X-18C-SI switch comes with a filler panel in the expansion slot. You can select an expansion module for the switch as required. In Figure1-10, an LSWM2SP2PM interface card is installed in the expansion slot.

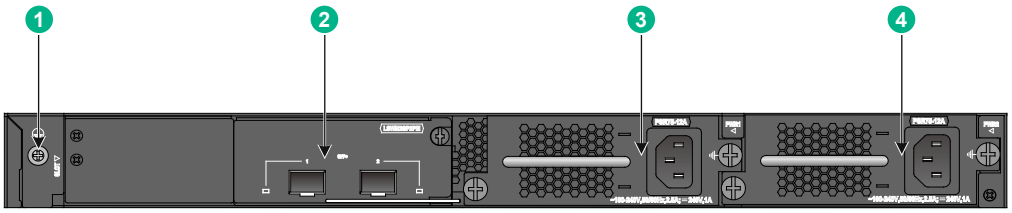
S6520X-26C-SI

Figure2-11 Front panel



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

Figure2-12 Rear panel



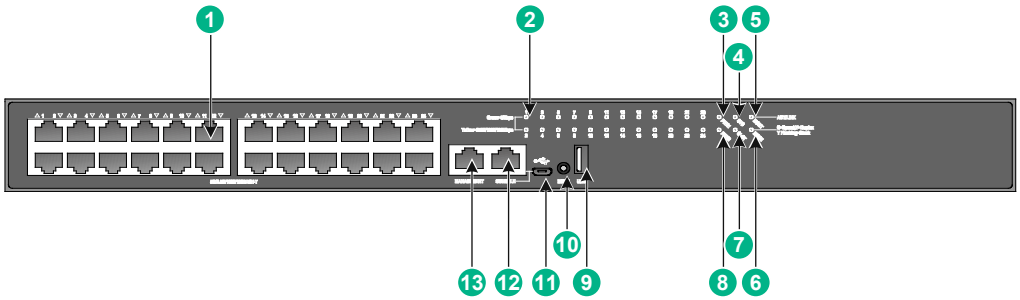
(1) Grounding screw	(2) Expansion module
(3) Power supply 1 (PWR1)	(4) Power supply 2 (PWR2)

An S6520X-26C-SI switch comes with power supply slot 1 empty and power supply slot 2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure1-12, two PSR75-12A AC power supplies are installed in the power supply slots.

An S6520X-26C-SI switch comes with a filler panel in the expansion slot. You can select an expansion module for the switch as required. In Figure1-12, an LSWM2SP2PM interface card is installed in the expansion slot.

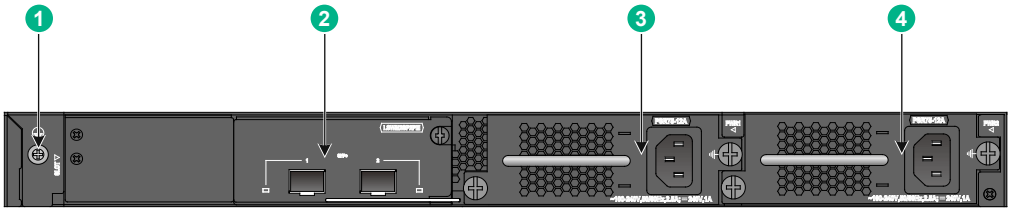
S6520X-26MC-SI

Figure2-13 Front panel



(1) 5G/2.5G/1000/100BASE-T autosensing Ethernet port	(2) 5G/2.5G/1000/100BASE-T autosensing Ethernet port LED
(3) Power supply 1 status LED (PWR1)	(4) System status LED (SYS)
(5) Management Ethernet port LED (LINK/ACT)	(6) Mode LED (MODE)
(7) Expansion module status LED (SLOT)	(8) Power supply 2 status LED (PWR2)
(9) USB port	(10) Mode button
(11) Micro USB console port	(12) Console port (CONSOLE)
(13) Management Ethernet port	

Figure2-14 Rear panel



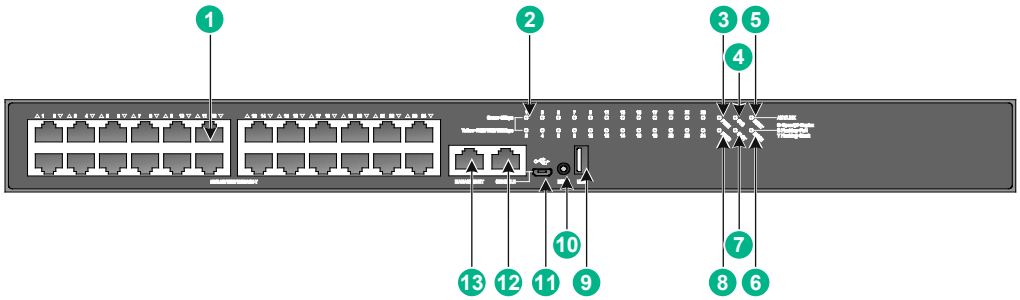
(1) Grounding screw	(2) Expansion card
(3) Power supply 1 (PWR1)	(4) Power supply 2 (PWR2)

An S6520X-26MC-SI switch comes with power supply slot 1 empty and power supply slot 2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure1-14, two PSR75-12A AC power supplies are installed in the power supply slots.

An S6520X-26MC-SI switch comes with a filler panel in the expansion slot. You can select an expansion module for the switch as required. In Figure1-14, an LSWM2SP2PM interface card is installed in the expansion slot.

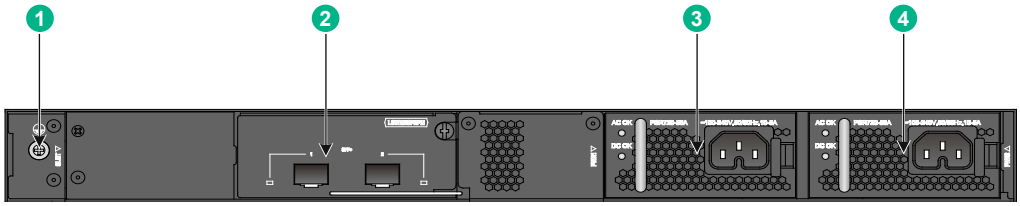
S6520X-26MC-UPWR-SI

Figure2-15 Front panel



(1) 5G/2.5G/1000/100BASE-T autosensing Ethernet port	(2) 5G/2.5G/1000/100BASE-T autosensing Ethernet port LED
(3) Power supply 1 status LED (PWR1)	(4) System status LED (SYS)
(5) Management Ethernet port LED (LINK/ACT)	(6) Mode LED (MODE)
(7) Expansion module status LED (SLOT)	(8) Power supply 2 status LED (PWR2)
(9) USB port	(10) Mode button
(11) Micro USB console port	(12) Console port (CONSOLE)
(13) Management Ethernet port	

Figure2-16 Rear panel



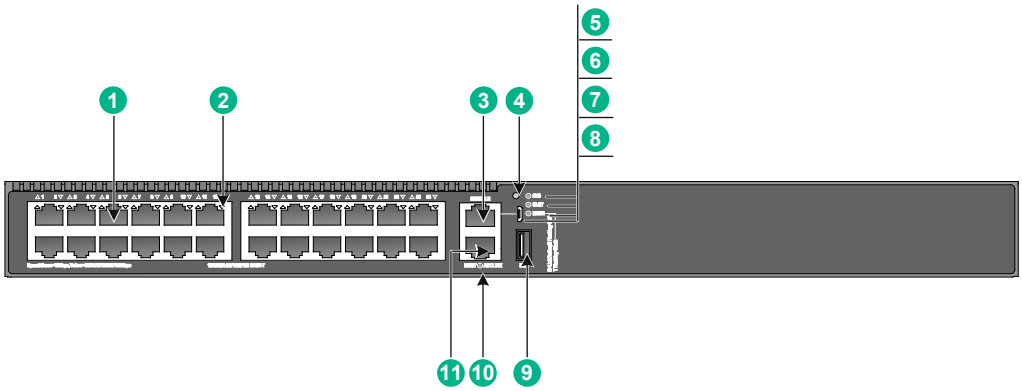
(1) Grounding screw	(2) Expansion module
(3) Power supply 1 (PWR1)	(4) Power supply 2 (PWR2)

An S6520X-26MC-UPWR-SI switch comes with power supply slot 1 empty and power supply slot 2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure1-16, two PSR720-56A AC power supplies are installed in the power supply slots.

An S6520X-26MC-UPWR-SI switch comes with a filler panel in the expansion slot. You can select an expansion module for the switch as required. In Figure1-16, an LSWM2SP2PM interface card is installed in the expansion slot.

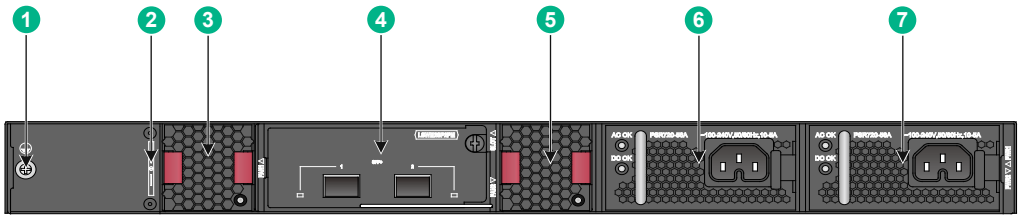
S6520X-26XC-UPWR-SI

Figure2-17 Front panel



(1) 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port	
(2) 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port LED	
(3) Console port (CONSOLE)	(4) Mode button
(5) System status LED (SYS)	(6) Expansion module status LED (SLOT)
(7) Mode LED (MODE)	(8) Micro USB console port
(9) USB port	(10) Management Ethernet port LED (LINK/ACT)
(11) Management Ethernet port	

Figure2-18 Rear panel



(1) Grounding screw	(2) Serial label pull tab
(3) Fan tray 1 (FAN1)	(4) Expansion module
(5) Fan tray 2 (FAN2)	(6) Power supply 1 (PWR1)
(7) Power supply 2 (PWR2)	

The ESN serial number and MAC address of the S6520X-26XC-UPWR-SI switch can be found on the serial label pull tab.

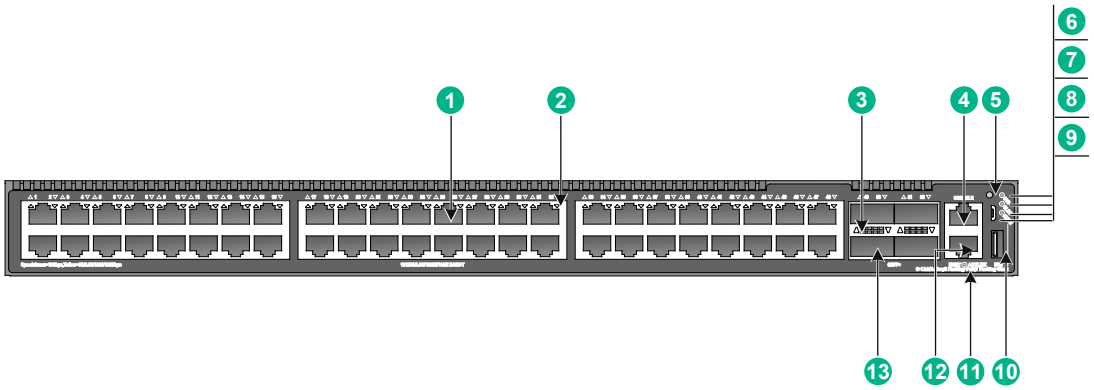
An S6520X-26XC-UPWR-SI switch comes with power supply slot 1 empty and power supply slot 2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure1-18, two PSR720-56A AC power supplies are installed in the power supply slots.

The S6520X-26XC-UPWR-SI switch comes with the two fan tray slots empty. You must install two fan trays of the same model for the switch. In Figure1-18, two LSPM1FANSB fan trays are installed in the fan tray slots.

An S6520X-26XC-UPWR-SI switch comes with a filler panel in the expansion slot. You can select an expansion module for the switch as required. In Figure1-18, an LSWM2SP2PM interface card is installed in the expansion slot.

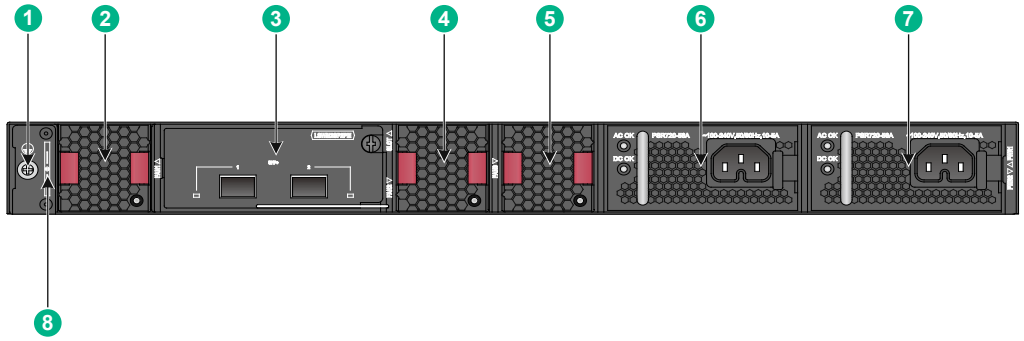
S6520X-54XC-UPWR-SI

Figure2-19 Front panel



(1) 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port	
(2) 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port LED	
(3) QSFP+ port LED	(4) Console port (CONSOLE)
(5) Mode button	(6) System status LED (SYS)
(7) Expansion module status LED (SLOT)	(8) Mode LED (MODE)
(9) Micro USB console port	(10) USB port
(11) Management Ethernet port LED (LINK/ACT)	(12) Management Ethernet port
(13) QSFP+ port	

Figure2-20 Rear panel



(1) Grounding screw	(2) Fan tray 1 (FAN1)
(3) Expansion module	(4) Fan tray 2 (FAN2)
(5) Fan tray 3 (FAN3)	(6) Power supply 1 (PWR1)
(7) Power supply 2 (PWR2)	(8) Serial label pull tab

The ESN serial number and MAC address of the S6520X-54XC-UPWR-SI switch can be found on the serial label pull tab.

An S6520X-54XC-UPWR-SI switch comes with power supply slot 1 empty and power supply slot 2 installed with a filler panel. You can install one or two power supplies for the switch as required. In Figure1-20, two PSR720-56A AC power supplies are installed in the power supply slots.

The S6520X-54XC-UPWR-SI switch comes with the three fan tray slots empty. You must install three fan trays of the same model for the switch. In Figure1-20, three LSPM1FANSB fan trays are installed in the fan tray slots.

An S6520X-54XC-UPWR-SI switch comes with a filler panel in the expansion slot. You can select an expansion module for the switch as required. In Figure1-20, an LSWM2SP2PM interface card is installed in the expansion slot.

3 Appendix B Removable components and compatibility matrixes

The S6520X-SI switches (except the S6520X-10XT-SI and S6520X-16XT-SI) use modular design and support removable components. Table2-1 and Table2-2 describe the removable components available for the switches and the compatibility between the removable components and the switches.

The S6520X-10XT-SI and S6520X-16XT-SI switches use one built-in power supply and two built-in fan trays and do not support removable components.

Table3-1 Removable components and their compatibility with the switches (1)

Removable component	S6520X-16ST-SI/S6520X-24ST-SI	S6520X-18C-SI/S6520X-18C-SI	S6520X-26MC-SI
Removable power supplies			
PSR75-12A	Supported	Supported	Not supported
PSR150-A1	Supported	Supported	Supported
PSR150-D1	Supported	Supported	Supported
Expansion modules			
LSWM2QP2P	Not supported	Supported	Supported
LSWM4SP8PM	Not supported	Supported	Supported
LSWM2SP8P	Not supported	Supported	Supported
LSWM2SP2PM	Not supported	Supported	Supported
LSWM2XGT2PM	Not supported	Supported	Supported
LSPM4G4T6P	Not supported	Supported	Supported
LSPM6FWD	Not supported	Supported	Supported
LSPM6FWD8	Not supported	Supported	Supported
LSWM2MGT8P	Not supported	Supported	Supported
LSWM2XMGT8P	Not supported	Supported	Supported
LSWM2ZSP2P	Not supported	Supported	Supported
LSWM2SP2PB	Not supported	Supported	Supported
LSWM2SP4PB	Not supported	Supported	Supported

Table3-2 Removable components and their compatibility with the switches (2)

Removable component	S6520X-26MC-UPWR-SI	S6520X-26XC-UPWR-SI	S6520X-54XC-UPWR-SI
Removable power supplies			
PSR360-56A	Supported	Supported	Supported
PSR720-56A	Supported	Supported	Supported

Removable component	S6520X-26MC-UPWR-SI	S6520X-26XC-UPWR-SI	S6520X-54XC-UPWR-SI
PSR1110-56A	Supported	Supported	Supported
PSR560-56D	Supported	Supported	Supported
Removable fan trays			
LSPM1FANSB	Not supported	Supported	Supported
Expansion modules			
LSWM2QP2P	Supported	Supported	Supported
LSWM4SP8PM	Supported	Supported	Supported
LSWM2SP8P	Supported	Supported	Supported
LSWM2SP2PM	Supported	Supported	Not supported
LSWM2XGT2PM	Supported	Supported	Not supported
LSPM4G4T6P	Supported	Supported	Supported
LSPM6FWD	Supported	Supported	Supported
LSPM6FWD8	Supported	Supported	Supported
LSWM2MGT8P	Supported	Supported	Supported
LSWM2XMGT8P	Supported	Supported	Supported
LSWM2ZSP2P	Supported	Supported	Supported
LSWM2SP2PB	Supported	Supported	Supported
LSWM2SP4PB	Supported	Supported	Supported

IMPORTANT:

- An S6520X-18C-SI switch must use PSR150-A1 or PSR150-D1 power supplies for power supply when it is installed with an LSPM6FWD or LSPM6FWD8 firewall module.
- An S6520X-26C-SI switch must use PSR150-A1 or PSR150-D1 power supplies for power supply when it is installed with an LSWM2SP8P, SWM4SP8PM, LSWM2XMGT8P, or LSWM2MGT8P interface card or an LSPM6FWD firewall module.

For an S6520X-16ST-SI, S6520X-24ST-SI, S6520X-18C-SI, S6520X-26C-SI, or S6520X-26MC-SI switch, you can install one power supply, or two power supplies for redundancy on the switch. AC and DC power supplies can be installed in the same chassis.

For an S6520X-26MC-UPWR-SI, S6520X-26XC-UPWR-SI, or S6520X-54XC-UPWR-SI switch, you can install one power supply, or two power supplies for redundancy on the switch. PoE capabilities vary by power supply configuration. When a power supply fails, PoE capabilities of the switch might decrease. For more information about PoE power, see Table1-4.

The S6520X-26XC-UPWR-SI and S6520X-54XC-UPWR-SI switches use removable fan trays. Before powering on the switch, make sure all fan tray slots have fan trays installed and the fan trays are the same model.

The removable components available for the switch are subject to change over time. For the most recent list of removable components available for the switch, see the release notes that come with the switch.

Removable power supplies

Table3-3 Removable power supplies

Power supply	Specifications	Reference

PSR75-12A	• AC input
	  ○ Rated voltage range: 100 to 240 VAC @ 50/60 Hz
	  ○ Max voltage range: 90 to 290 VAC @ 47 to 63 Hz
	  ○ Max output power: 75 W
	• High-voltage DC input:
	  ○ Rated voltage range: 240 VDC
	  ○ Max voltage range: 180 to 320 VDC
	  ○ Max output power: 75 W
		H3C PSR75-12A Power Module User Manual

PSR150-A1	• 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: 150 W	*H3C PSR150-A & PSR150-D Series Power Supplies User Manual*
PSR150-D1	• Rated input voltage range: –48 to –60 VDC • Max input voltage range: –36 to –72 VDC • Max output power: 150 W	
PSR360-56A	• 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: 360 W	*H3C PSR360-56A Series Power Module User Manual*
PSR720-56A	• 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: 720 W	*H3C PSR720-56A Series Power Module User Manual*
PSR1110-56A	• Rated input voltage range: 115 to 240 VAC @ 50/60 Hz • Max input voltage range: 102.5 to 264 VAC @ 47 to 63 Hz • Max output power: 1110 W	*H3C PSR1110-56A Series Power Module User Manual*
PSR560-56D	• Rated input voltage range: –48 to –60 VDC • Max input voltage range: –36 to –72 VDC • Max output power: 560 W	*H3C PSR560-56D Series Power Module User Manual*

NOTE:

The PSR1110-56A power supply, including the handle, adds 64 mm (2.52 in) to the chassis depth.

Removable fan trays

Table3-4 Fan tray specifications

Fan tray model	Item	Specifications
LSPM1FANSB (from the port side to the power supply side)	Fans	One 40 × 40 × 28 mm (1.57 × 1.57 × 1.10 in) fan
	Fan speed	20000 R.P.M
	Max airflow	20 CFM
	Input voltage	12 V
	Maximum power consumption	9.8 W
	Documentation reference	*H3C LSPM1FANSA & LSPM1FANSB Fan Tray User Guide*

Expansion modules

Table3-5 Expansion modules

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	QSFP+ transceiver modules and cables described in Table3-9, Table3-10, and Table3-11, except the QSFP-40G-LR4-PSM1310
Reference	*H3C LSWM2QP2P Interface Card User Manual*
LSWM4SP8PM	
Description	8-port 10GE SFP+ interface module
Port type and quantity	8 × 10 Gbps SFP+ fiber ports
Available transceiver modules and cables	See Table3-5 and Table3-6.
Reference	*H3C LSWM4SP8PM Interface Card User Manual*
LSWM2SP8P	
Description	8-port 10GE SFP+ interface card
Port type and quantity	8 × 10 Gbps SFP+ fiber ports
Available transceiver modules and cables	See Table3-5 and Table3-6.
Reference	*H3C LSWM2SP8PM & LSWM2SP8P Interface Card User Manual*
LSWM2SP2PM	
Description	2-port 10GE SFP+ interface card
Port type and quantity	2 × 1/10 Gbps SFP+ fiber ports

Item	Specifications
Available transceiver modules and cables	See Table3-5 and Table3-6.
Reference	*H3C LSWM2SP2PM Interface Card User Manual*
LSWM2XGT2PM	
Description	2-port 1/10GBASE-T interface card
Port type and quantity	2 × 1/10GBASE-T autosensing Ethernet ports
Port specifications	See Table3-13.
Reference	*H3C LSWM2XGT2PM & LSWM2XGT8PM Interface Cards User Manual*
LSPM4G4T6P	
Description	4-port 10/100/1000BASE-T + 6-port SFP interface module
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	The SFP ports support GE SFP transceiver modules in Table3-3 and GE SFP cables in Table3-4.
Reference	*H3C LSPM4G4T6P Interface Card User Manual*
LSPM6FWD	
Description	The module 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 module on a switch, you can enhance the switch security capabilities without changing the network topology.
Reference	*H3C LSPM6FWD Card Manual*
LSPM6FWD8	
Description	The module 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 module on a switch, you can enhance the switch security capabilities without changing the network topology.
Reference	*H3C LSPM6FWD8 Card Manual*
LSWM2MGT8P	
Description	8-port 5G/2.5G/1000BASE-T interface module
Port type and quantity	8 × 5G/2.5G/1000BASE-T autosensing Ethernet ports
Port specifications	See Table3-15.
Reference	*H3C LSWM2MGT8P & LSWM2XMGT8P Interface Cards User Manual*
LSWM2XMGT8P	
Description	8-port 10G/5G/2.5G/1000BASE-T interface module
Port type and quantity	8 × 10G/5G/2.5G/1000BASE-T autosensing Ethernet ports
Port specifications	See Table3-16.

Item	Specifications
Reference	*H3C LSWM2MGT8P & LSWM2XMGT8P Interface Cards User Manual*
LSWM2ZSP2P	
Description	2-port 25GE SFP28 interface module
Port type and quantity	2 × 25 Gbps SFP28 fiber ports
Available transceiver modules and cables	See Table3-7 and Table3-8.
Reference	*H3C LSWM2ZSP2P Interface Card User Manual*
LSWM2SP2PB	
Description	2-port 10GE SFP+ interface module
Port type and quantity	2 × 1/10 Gbps SFP+ fiber ports
Available transceiver modules and cables	See Table3-3, Table3-4, Table3-5, and Table3-6.
Reference	*H3C LSWM2SP2PB & LSWM2SP4PB Interface Cards User Manual*
LSWM2SP4PB	
Description	4-port 10GE SFP+ interface module
Port type and quantity	4 × 1/10 Gbps SFP+ fiber ports
Available transceiver modules and cables	See Table3-3, Table3-4, Table3-5, and Table3-6.
Reference	*H3C LSWM2SP2PB & LSWM2SP4PB Interface Cards User Manual*

IMPORTANT:

The ports on the LSWM2SP2PM and LSWM2XGT2PM interface cards can operate only at 10 Gbps when the cards are installed on the switch.

NOTE:

An LSPM6FWD or LSPM6FWD8 firewall module (including its handle) adds 75 mm (2.95 in) to the chassis depth when installed on the switch.

Connecting cables to the copper ports on the interface cards

An LSWM2XGT2PM interface card provides copper ports. To connect cables to the copper ports on an 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 (328.08 ft), no interference.
  - **Category-6 SFTP**—100 m (328.08 ft).
  - **Category-6A or above twisted pair**—100 m (328.08 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 Appendix C 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 Mbps, half/full duplex, MDI/MDI-X autosensing • 1 Gbps, 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

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

An LSP4G4T6P interface module provides six SFP ports. You can install GE SFP transceiver modules in Table3-3 and GE SFP cables in Table3-4 in the SFP ports.

SFP+ port

The following switches provide fixed SFP+ ports on the front panel:

- S6520X-16ST-SI
- S6520X-24ST-SI
- S6520X-18C-SI
- S6520X-10XT-SI
- S6520X-16XT-SI
- S6520X-26C-SI

To connect peer SFP+ ports over a long distance, use SFP/SFP+ transceiver modules and fibers. To connect peer SFP+ ports over a short distance, use SFP/SFP+ cables. You can install GE SFP transceiver modules in Table3-3, GE SFP cables in Table3-4,10-GE SFP+ transceiver modules in Table3-5, and 10-GE SFP+ cables in Table3-6 in the SFP+ ports.

Table4-3 GE SFP transceiver modules available for the SFP and SFP+ ports

GE SFP transceiver module	Central wavelength (nm)	Connector	Cable/Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
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-MM 850-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-MM 850-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-MM 850-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)

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

IMPORTANT:

The following transceiver modules must be used in pairs:

- SFP-GE-LX-SM1310-BIDI and SFP-GE-LX-SM1490-BIDI
- SFP-GE-LH40-SM1310-BIDI and SFP-GE-LH40-SM1550-BIDI
- SFP-GE-LH70-SM1490-BIDI and SFP-GE-LH70-SM1550-BIDI

For example, if one end of a connection uses an SFP-GE-LX-SM1310-BIDI transceiver module, the other end must use an SFP-GE-LX-SM1490-BIDI transceiver module.

Table4-4 GE SFP cables available for the SFP ports

GE SFP cable	Cable length
SFP-STACK-Kit	1.5 m (4.92 ft)

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

10-GE SFP+ module	Central wavelength (nm)	Connector	Fiber diameter (μm)	Multimode fiber 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-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-S	1310	LC	Single-mode,	N/A	10 km (6.21 miles)

10-GE SFP+ module	Central wavelength (nm)	Connector	Fiber diameter (μm)	Multimode fiber modal bandwidth (MHz × km)	Max transmission distance
M1310-E			9/125		
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	9/125 μm single-mode optical fiber	N/A	10 km (6.21 miles)
SFP-XG-LX-SM1330-BIDI	• TX: 1330 • RX: 1270	LC	9/125 μm single-mode optical fiber	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)
SFP-XG-LH80-SM1490-BIDI	• TX: 1490 • RX: 1550	LC	Single-mode, 9/125	N/A	80 km (49.71 miles)
SFP-XG-LH80-SM1490-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, the SFP-XG-LH40-SM1270-BIDI and SFP-XG-LH40-SM1330-BIDI transceiver modules, and the SFP-XG-LH80-SM1490-BIDI and SFP-XG-LH80-SM1550-BIDI transceiver modules must be used in pairs. For example, if one ends uses an SFP-XG-LX-SM1270-BIDI transceiver module, the other end must use an SFP-XG-LX-SM1330-BIDI transceiver module.

Table4-6 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)

Table4-7 SFP+ fiber cables available for the SFP+ ports

SFP+ fiber cable	Max transmission distance
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

IMPORTANT:

The S6520X-18C-SI and S6520X-26C-SI switches must use PSR150-A1 or PSR150-D1 power supplies for power supply when the switches are installed with SFP-XG-LH80-SM1550 transceiver modules.

NOTE:

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

SFP28 port

The LSWM2ZSP2PM interface card provides the fixed SFP28 ports. To connect peer SFP28 ports over a long distance, use SFP28 transceiver modules and fibers. To connect peer SFP28 ports over a short distance, use SFP28 cables. You can install 25G SFP28 transceiver modules in Table3-7 and 25GE SFP28 cables in Table3-8.

Table4-8 25G SFP28 transceiver modules available for the SFP28 ports

25G SFP28 transceiver module	Central wavelength (nm)	Connector	Cable/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	• **FEC negotiation disabled**—30 m (98.43 ft) • **FEC negotiation enabled**—70 m (229.66 ft)
				4700	• **FEC negotiation disabled**—40 m (131.23 ft) • **FEC negotiation enabled**—100 m (328.08 ft)

Table4-9 25G SFP28 cables available for the SFP28 ports

25G 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)
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 SFP28 transceiver modules and cables for the SFP28 ports on the switch.
- The H3C SFP28 transceiver modules and cables available for the SFP28 ports on the switch are subject to change over time. For the most recent list of SFP28 transceiver modules and cables available for the SFP28 ports, contact your H3C Support or marketing staff.
- For more information about H3C SFP28 transceiver modules and cables, see *H3C Transceiver Modules User Guide*.

QSFP+ port

The S6520X-54XC-UPWR-SI switch provides fixed QSFP+ ports on the front panel and the LSWM2QP2P interface card provides QSFP+ ports. You can install QSFP+ transceiver modules in Table3-9, QSFP+ cables in Table3-10, and QSFP+ to SFP+ cables in Table3-11 in the QSFP+ ports.

Table4-10 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-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-LR	Four lanes:	LC	Single-mode,	N/A	2 km (1.24 miles)

QSFP+ transceiver module	Central wavelength (nm)	Connector	Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
4L-WDM1300	• 1271 • 1291 • 1311 • 1331		9/125		
QSFP-40G-ER4-WDM1300	Four lanes: • 1271 • 1291 • 1311 • 1331	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
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 (787.40 ft)
				4700	350 m (1148.29 ft)

Table4-11 QSFP+ cables available for the QSFP+ ports

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

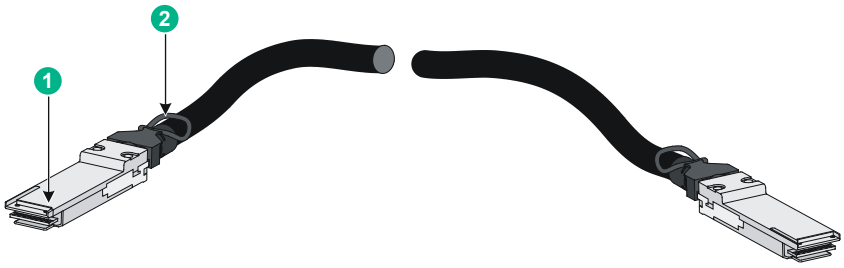
Table4-12 QSFP+ to SFP+ cables available for the QSFP+ ports

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)

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

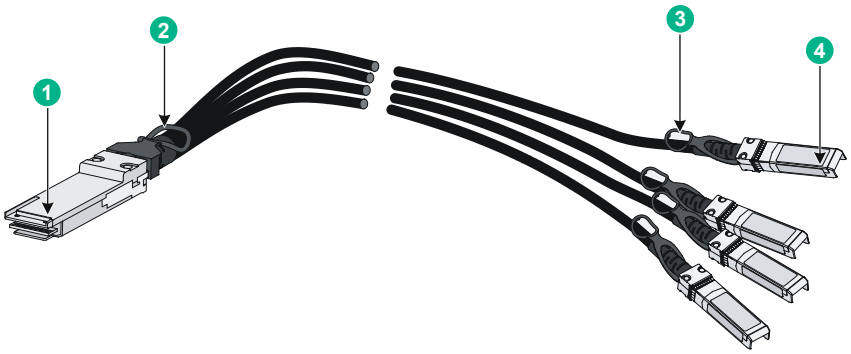
QSFP+ fiber cable	Max transmission distance
QSFP-40G-D-AOC-3M	3 m (9.84 ft)
QSFP-40G-D-AOC-7M	7 m (22.97 ft)
QSFP-40G-D-AOC-10M	10 m (32.81 ft)
QSFP-40G-D-AOC-20M	20 m (65.62 ft)

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

IMPORTANT:

The QSFP+ ports on an LSWM2QP2P interface card do not support the QSFP-40G-LR4-PSM1310 transceiver module.

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.

NOTE:

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

10/100/1000BASE-T autosensing Ethernet port

An LSPM4G4T6P interface module provides 10/100/1000BASE-T autosensing Ethernet ports.

Table4-14 10/100/1000BASE-T autosensing Ethernet port specifications

Item	Specification
Connector type	RJ-45
Interface attributes	• 10/100 Mbps, full/half duplex, MDI/MDI-X, auto-sensing • 1 Gbps, 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

1/10BASE-T autosensing Ethernet port

The S6520X-16ST-SI and S6520X-24ST-SI switches each provide two 1/10BASE-T autosensing Ethernet ports on the front panel. An LSWM2XGT2PM interface card also provides 1/10BASE-T autosensing Ethernet ports.

Table4-15 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 or above twisted pair**—100 m (328.08 ft)
Transmission medium	Category-6 or above twisted pair cable
Standards	IEEE 802.3ab, 802.3an

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

The S6520X-26MC-SI and S6520X-26MC-UPWR-SI switches each provide 24 5G/2.5G/1000/100BASE-T autosensing Ethernet ports on the front panel.

Table4-16 5G/2.5G/1000/100BASE-T autosensing Ethernet port specifications

Item	Specification
Connector type	RJ-45
Interface attributes	• 100 Mbps, full/half duplex, MDI/MDI-X, auto-sensing • 1/2.5/5 Gbps, full duplex, MDI/MDI-X, auto-sensing
Max transmission distance	• 5G mode: 100 m (328.08 ft) over Category-5e or above twisted pair • 2.5G mode: 200 m (656.17 ft) over Category-5e or above twisted pair • 1G mode: 200 m (656.17 ft) over Category-5e or above twisted pair • 100M mode: 200 m (656.17 ft) over Category-5e or above twisted pair
Transmission medium	Category-5e or above twisted pair cable
Standards	IEEE 802.3ab, 802.3an, 802.3bz

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

An LSWM2MGT8P interface module provides 5G/2.5G/1000 BASE-T autosensing Ethernet ports.

Table4-17 5G/2.5G/1000BASE-T autosensing Ethernet port specifications

Item	Specification
Connector type	RJ-45
Interface attributes	1/2.5/5 Gbps, full duplex, MDI/MDI-X, auto-sensing
Max transmission distance	• 5G mode: 100 m (328.08 ft) over Category-5e or above twisted pair • 2.5G mode: 200 m (656.17 ft) over Category-5e or above twisted pair • 1G mode: 140 m (459.32 ft) over Category-5e or above twisted pair
Transmission medium	Category-5e or above twisted pair cable
Standards	IEEE 802.3ab, 802.3an, 802.3bz

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

The S6520X-10XT-SI and S6520X-16XT-SI switches and the LSWM2XMGT8P interface module provide 10G/5G/2.5G/1000 BASE-T autosensing Ethernet ports.

Table4-18 10G/5G/2.5G/1000BASE-T autosensing Ethernet port specifications

Item	Specification
Connector type	RJ-45
Interface attributes	1/2.5/5/10 Gbps, full duplex, MDI/MDI-X, auto-sensing

Max transmission distance	• 10G mode:
	  ◦ 100 m (328.08 ft) over Category-6 or above S/FTP
	  ◦ 55 m (180.45 ft) over Category-5e twisted pair or Category-6 UTP
	• 5G mode: 100 m (328.08 ft) over Category-5e or above twisted pair
	• 2.5G mode: 200 m (656.17 ft) over Category-5e or above twisted pair
	• 1G mode: 140 m (459.32 ft) over Category-5e or above twisted pair

Transmission medium	Category-5e or above twisted pair cable
Standards	IEEE 802.3ab, 802.3an, 802.3bz

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

The S6520X-26XC-UPWR-SI and S6520X-54XC-UPWR-SI switches provide 10G/5G/2.5G/1000/100 BASE-T autosensing Ethernet ports.

Table4-19 10G/5G/2.5G/1000/100 BASE-T autosensing Ethernet port specifications

Item	Specification
Connector type	RJ-45
Interface attributes	• 100 Mbps, full/half duplex, MDI/MDI-X, auto-sensing • 1/2.5/5/10 Gbps, full duplex, MDI/MDI-X, auto-sensing

Item	Specification

Max transmission distance	• 10G mode:
	  ○ 100 m (328.08 ft) over Category-6 or above S/FTP
	  ○ 55 m (180.45 ft) over Category-5e twisted pair or Category-6 UTP
	• 5G mode: 100 m (328.08 ft) over Category-5e or above twisted pair
	• 2.5G mode: 200 m (656.17 ft) over Category-5e or above twisted pair
	• 1G mode: 140 m (459.32 ft) over Category-5e or above twisted pair
	• 100M mode: 200 m (656.17 ft) over Category-5e or above twisted pair

Transmission medium	Category-5e or above twisted pair cable
Standards	IEEE 802.3ab, 802.3an, 802.3bz

Combo interface

The S6520X-16ST-SI and S6520X-24ST-SI switches each provide two combo interfaces on the front panel. Each combo interface contains an SFP+ port and a 1/10GBASE-T autosensing Ethernet port. Only one of these two ports is active at a time.

An LSPM4G4T6P interface module provides two combo interfaces. Each combo interface contains an SFP port and a 10/100/1000BASE-T autosensing Ethernet port. Only one of these two ports is active 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 supply status LED

The S6520X-SI switches (except the S6520X-10XT-SI and S6520X-16XT-SI) each provide two power supply slots on the rear panel. The power status LEDs PWR1 and PWR2 on the front panel show the operating status of power supply 1 (PWR1) and power supply 2 (PWR2), respectively.

Table4-21 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 switch provides a mode LED (MODE) to indicate the type of information that the port LEDs are showing.

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

Table4-22 Description for the mode LED

LED mark	Status	Description
MODE	Steady green	The port LEDs indicate port rates.
	Flashing yellow	The port 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.

Management Ethernet port LED

Table4-23 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.

1/10GBASE-T autosensing Ethernet port LED

The S6520X-16ST-SI and S6520X-24ST-SI switches each provide a status LED for each 1/10GBASE-T autosensing Ethernet port to indicate their operating status.

Table4-24 1/10GBASE-T autosensing Ethernet port LED description

1/10GBASE-T autosensing Ethernet 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

1/10GBASE-T autosensing Ethernet port LED status	Description
Off	No link is present on the port.

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

The S6520X-26MC-SI and S6520X-26MC-UPWR-SI switches each provide a status LED for each 5G/2.5G/1000/100GBASE-T autosensing Ethernet port to indicate their operating status.

Table4-25 5G/2.5G/1000/100BASE-T autosensing Ethernet port LED description

MODE LED status	5G/2.5G/1000/100BASE-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 5 Gbps.
	Flashing green	The port is sending or receiving data at 5 Gbps.
	Steady yellow	A link is present on the port and the port is operating at 1 or 2.5 Gbps, or 100 Mbps.
	Flashing yellow	The port is sending or receiving data at 1 or 2.5 Gbps, or 100 Mbps.
	Off	No link is present on the port.
Flashing yellow (IRF mode)	Steady green	The port status LEDs on the switch indicate the IRF member IDs 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.

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

The S6520X-10XT-SI and S6520X-16XT-SI switches provide a status LED for each 10G/5G/2.5G/1000BASE-T autosensing Ethernet port to indicate their operating status.

Table4-26 10G/5G/2.5G/1000BASE-T autosensing Ethernet port LED description

MODE LED status	10G/5G/2.5G/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 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, 2.5 Gbps, or 5 Gbps.
	Flashing yellow	The port is sending or receiving data at 1 Gbps, 2.5 Gbps, or 5 Gbps.
	Off	No link is present on the port.
Flashing yellow (IRF	Steady green	The port status LEDs on the switch indicate

MODE LED status	10G/5G/2.5G/1000BASE-T autosensing Ethernet port LED status	Description
mode)		the IRF member IDs 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.

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

The S6520X-26XC-UPWR-SI and S6520X-54XC-UPWR-SI switches provide a status LED for each 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port to indicate their operating status.

Table4-27 10G/5G/2.5G/1000/100BASE-T autosensing Ethernet port LED description

MODE LED status	10G/5G/2.5G/1000/100BASE-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 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 100 Mbps, 1 Gbps, 2.5 Gbps, or 5 Gbps.
	Flashing yellow	The port is sending or receiving data at 100 Mbps, 1 Gbps, 2.5 Gbps, or 5 Gbps.
	Off	No link is present on the port.
Flashing yellow (IRF mode)	Steady green	The port status LEDs on the switch indicate the IRF member IDs 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.

SFP+ port LED

The following switches provide a status LED for each SFP+ port to indicate their operating status:

- S6520X-16ST-SI
- S6520X-24ST-SI
- S6520X-10XT-SI
- S6520X-16XT-SI
- S6520X-18C-SI
- S6520X-26C-SI

Table4-28 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 indicate the IRF member IDs 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.

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.

Expansion module status LED

The S6520X-18C-SI, S6520X-26C-SI, S6520X-26MC-SI, S6520X-26MC-UPWR-SI, S6520X-26XC-UPWR-SI, and S6520X-54XC-UPWR-SI switches each provide an expansion slot on the rear panel. The expansion module status LED on the front panel indicates the operating state of the expansion module.

Table4-29 Expansion module status LED description

LED mark	Status	Description
SLOT	Steady green	The expansion module is present 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 an expansion module

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

Fan tray status LED

The LSPM1FANSB fan tray provides a status LED.

Table4-30 Fan tray status LED description

Status	Description
On	The fan tray is operating correctly.
Flashing	The fan tray is operating incorrectly.
Off	The fan tray is installed incorrectly or not power is present on the fan tray.

5 Appendix D 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.

- **S6520X-26MC-SI and S6520X-26MC-UPWR-SI switches**—The fan tray draws ambient air into the chassis from the left side and blows out air from the right side. Figure4-1 uses the S6520X-26MC-UPWR-SI switch as an example to show the airflow direction. (Left and right refer to the directions when you face the port side of the switch.)
- **S6520X-26XC-UPWR-SI and S6520X-54XC-UPWR-SI**—The fan tray draws ambient air into the chassis from the left, right, and port sides, and blows out air from the power supply side. Figure4-2 uses the S6520X-26XC-UPWR-SI switch as an example to show the airflow direction. (Left and right refer to the directions when you face the port side of the switch.)
- **Other S6520X-SI switches**—The fan tray draws ambient air into the chassis from the left side and port side and blows out air from the right side. Figure4-3 uses the S6520X-26C-SI switch as an example to show the airflow direction.

Figure5-1 Airflow direction (S6520X-26MC-UPWR-SI)

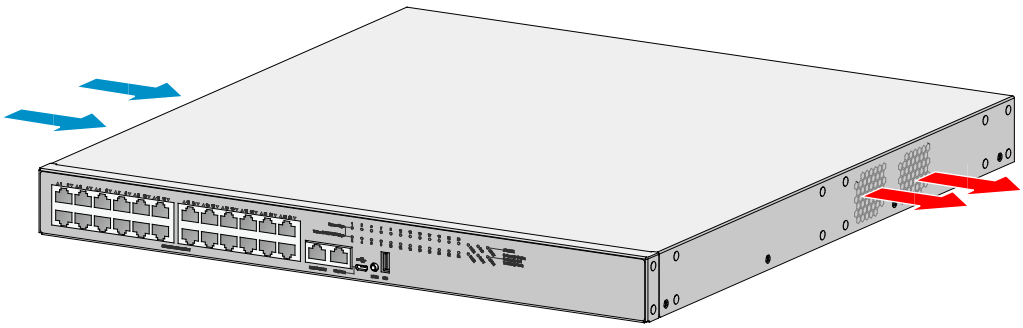


Figure5-2 Airflow direction (S6520X-26XC-UPWR-SI)

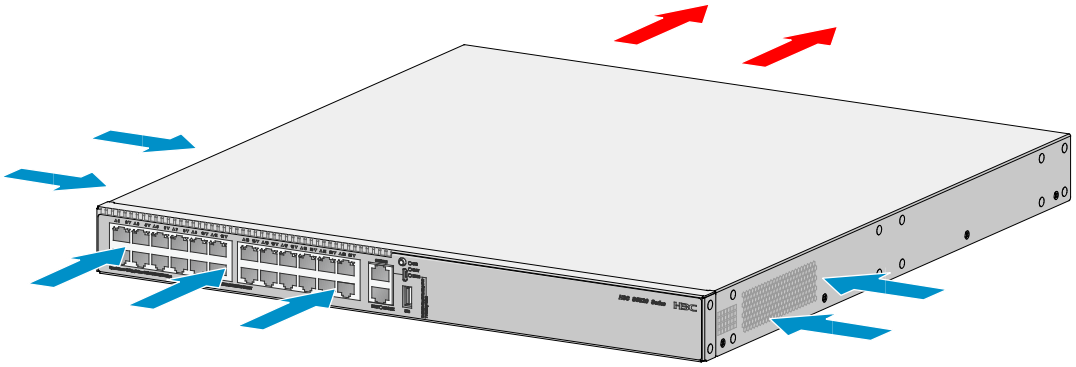


Figure5-3 Airflow direction (S6520X-26C-SI)

