H3C S6530X[-G] Switch Series

Hardware Information and Specifications

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Preface

H3C S6530X[-G] Switch Series Hardware Information and Specifications describes product models, technical specifications, ports,and LEDs of the S6530X[-G] 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.

Contents

1 Product models and technical specifications

Product models

Table1-1 Switch series and models

Switch series	Model	Product code (PID)
S6530X switch series	S6530X-48Y8C	LS-6530X-48Y8C
	S6530X-48X8C	LS-6530X-48X8C
	S6530X-24Y8C	LS-6530X-24Y8C
	S6530X-24X8C	LS-6530X-24X8C
S6530X-G switch series	S6530X-48Y8C-G	LS-6530X-48Y8C-G1
	S6530X-48X8C-G	LS-6530X-48X8C-G1
	S6530X-24Y8C-G	LS-6530X-24Y8C-G1
	S6530X-24X8C-G	LS-6530X-24X8C-G1

Technical specifications

Table1-2 Technical specifications

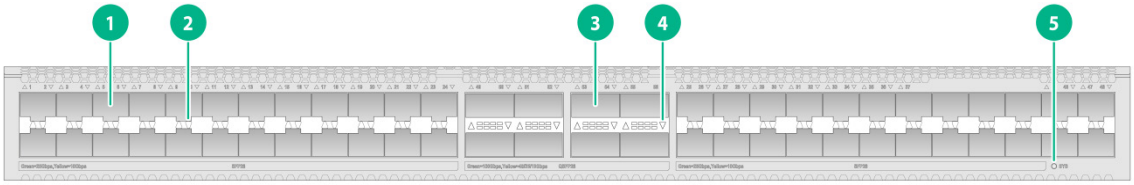
Item	S6530X-48Y8C S6530X-48Y8C-G	S6530X-48X8C S6530X-48X8C-G	S6530X-24Y8C S6530X-24Y8C-G	S6530X-24X8C S6530X-24X8C-G
Dimensions (H × W × D)	44 × 440 × 400 mm (1.73 × 17.32 × 15.75 in)	44 × 440 × 400 mm (1.73 × 17.32 × 15.75 in)	44 × 440 × 400 mm (1.73 × 17.32 × 15.75 in)	44 × 440 × 400 mm (1.73 × 17.32 × 15.75 in)
Weight	≤ 7.6 kg (16.75 lb)	≤ 7.6 kg (16.75 lb)	≤ 7.3 kg (16.09 lb)	≤ 7.3 kg (16.09 lb)
Console port	1 × serial console port			
USB port	1			
Management Ethernet port	1			
SFP+ port	N/A	48	N/A	24
SFP28 port	48	N/A	24	N/A
QSFP28 port	8	8	8	8
Power supply slot	2			
Fan tray slot	5			
Input voltage	AC input for the PSR250-12A/PSR250-12A1 power supply: • Rated voltage range: 100 VAC to 240 VAC @ 50 Hz or 60 Hz			

Item	S6530X-48Y8C S6530X-48Y8C-G	S6530X-48X8C S6530X-48X8C-G	S6530X-24Y8C S6530X-24Y8C-G	S6530X-24X8C S6530X-24X8C-G
	• Max voltage range: 90 VAC to 290 VAC @ 47 Hz to 63 Hz HVDC input for the PSR250-12A/PSR250-12A1 power supply: • Rated voltage: 240 VDC • Max voltage range: 180 VDC to 320 VDC PSR450-12D power supply: • Rated voltage range: –48 VDC to –60 VDC • Max voltage range: –36 VDC to –72 VDC DC power source for the PSR450-12D power supply: –48 VDC power source in the equipment room or an RPS (H3C RPS1600-A)			
Minimum power consumption	Single power input: 76 W Dual power inputs: 83 W	Single power input: 76 W Dual power inputs: 83 W	Single power input: 76 W Dual power inputs: 83 W	Single power input: 76 W Dual power inputs: 83 W
Maximum power consumption	Single power input: 223 W Dual power inputs: 227 W	Single power input: 217 W Dual power inputs: 221 W	Single power input: 188 W Dual power inputs: 193 W	Single power input: 186 W Dual power inputs: 191 W
Chassis leakage current compliance	UL62368-1/EN62368-1/IEC62368-1/UL60950-1/IEC60950-1/GB4943.1			
Melting current of power supply fuse	PSR250-12A/PSR250-12A1 power supply: 6.3 A/250 V PSR450-12D power supply: 20 A/125 V			
Operating temperature	–5°C to +45°C (23°F to 113°F)			
Operating humidity	5% RH to 95% RH, noncondensing			
Fire resistance compliance	UL62368-1/EN62368-1/IEC62368-1/UL60950-1/IEC60950-1/GB4943.1			

2 Chassis views

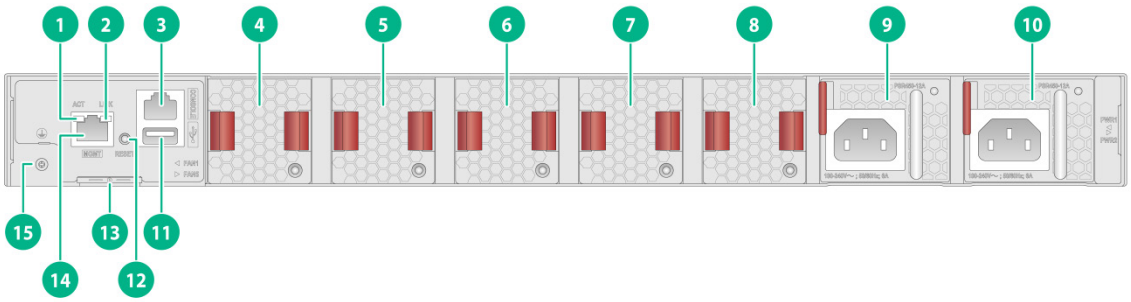
S6530X-48Y8C and S6530X-48Y8C-G

Figure2-1 Front panel



(1) SFP28 port	(2) SFP28 port LED
(3) QSFP28 port	(4) QSFP28 port LED
(5) System status LED (SYS)	

Figure2-2 Rear panel



(1) Management Ethernet port LED (ACT)	(2) Management Ethernet port LED (LINK)
(3) Console port	(4) Fan tray 1
(5) Fan tray 2	(6) Fan tray 3
(7) Fan tray 4	(8) Fan tray 5
(9) Power supply 1	(10) Power supply 2
(11) USB port	(12) Reset button (RESET)
(13) Serial label pull tab	(14) Management Ethernet port (MGMT)
(15) Grounding screw	

The SN serial number and MAC address of the S6530X-48Y8C/S6530X-48Y8C-G switch can be found on the serial label pull tab.

The S6530X-48Y8C/S6530X-48Y8C-G switch came 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 Figure2-2, two PSR250-12A1 AC power supplies are installed in the power supply slots.

The S6530X-48Y8C/S6530X-48Y8C-G switch came with five fan tray slots empty. You must install five fan trays of the same model for the switch. In Figure2-2, five LSPM1FANSB-SN fan trays are installed in the fan tray slots.

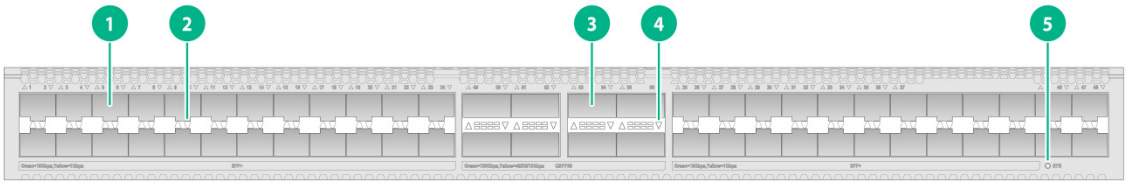
The S6530X-48Y8C/S6530X-48Y8C-G switch provides a reset button on the rear panel for you to reset the switch.

To use both the console port and USB port on the S6530X-48Y8C/S6530X-48Y8C-G switch, use a small-sized USB drive or a USB extension cable.

The S6530X/S6530X-G switch series supports shipping with fan trays and power supplies installed. For the switch to be shipped with fan trays or power supplies installed, contact the marketing staff.

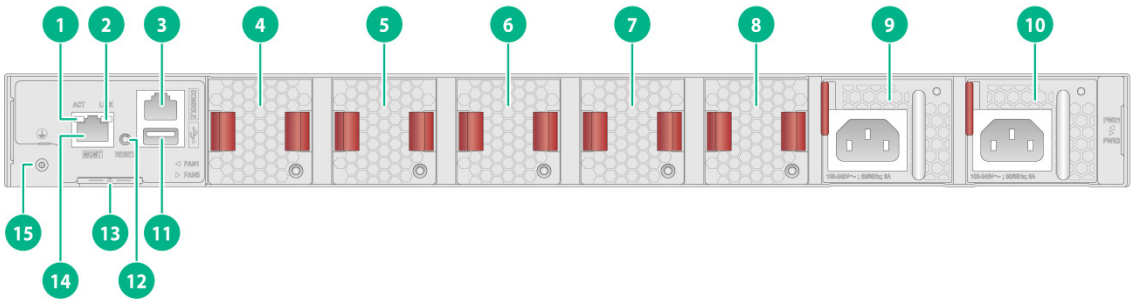
S6530X-48X8C and S6530X-48X8C-G

Figure2-3 Front panel



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

Figure2-4 Rear panel



(1) Management Ethernet port LED (ACT)	(2) Management Ethernet port LED (LINK)
(3) Console port	(4) Fan tray 1
(5) Fan tray 2	(6) Fan tray 3
(7) Fan tray 4	(8) Fan tray 5
(9) Power supply 1	(10) Power supply 2
(11) USB port	(12) Reset button (RESET)
(13) Serial label pull tab	(14) Management Ethernet port (MGMT)
(15) Grounding screw	

The SN serial number and MAC address of the S6530X-48X8C/S6530X-48X8C-G switch can be found on the serial label pull tab.

The S6530X-48X8C/S6530X-48X8C-G switch came 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 Figure2-4, two PSR250-12A1 AC power supplies are installed in the power supply slots.

The S6530X-48X8C/S6530X-48X8C-G switch came with five fan tray slots empty. You must install five fan trays of the same model for the switch. In Figure2-4, five LSPM1FANSB-SN fan trays are installed in the fan tray slots.

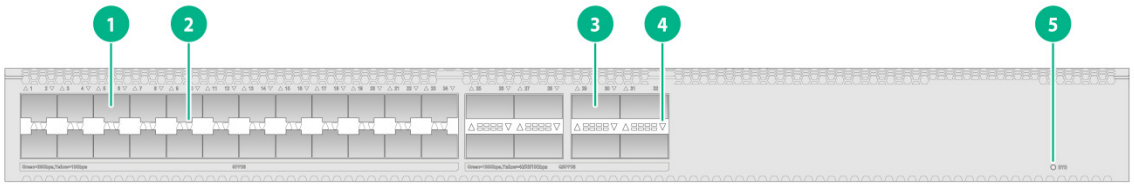
The S6530X-48X8C/S6530X-48X8C-G switch provides a reset button on the rear panel for you to reset the switch.

To use both the console port and USB port on the S6530X-48X8C/S6530X-48X8C-G switch, use a small-sized USB drive or a USB extension cable.

The S6530X/S6530X-G switch series supports shipping with fan trays and power supplies installed. For the switch to be shipped with fan trays or power supplies installed, contact the marketing staff.

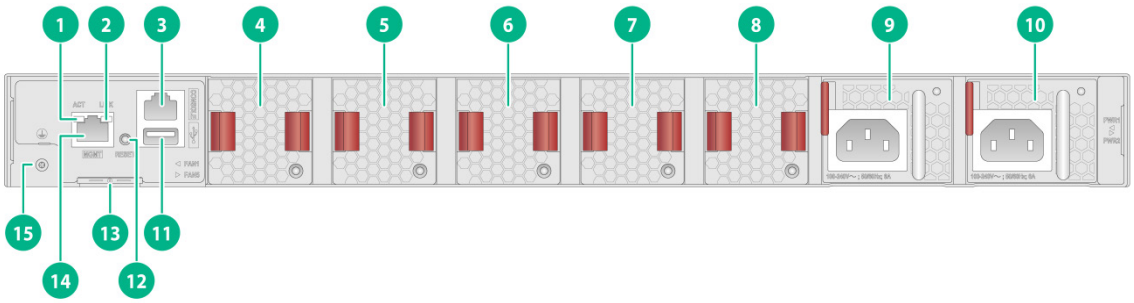
S6530X-24Y8C and S6530X-24Y8C-G

Figure2-5 Front panel



(1) SFP28 port	(2) SFP28 port LED
(3) QSFP28 port	(4) QSFP28 port LED
(5) System status LED (SYS)	

Figure2-6 Rear panel



(1) Management Ethernet port LED (ACT)	(2) Management Ethernet port LED (LINK)
(3) Console port	(4) Fan tray 1
(5) Fan tray 2	(6) Fan tray 3
(7) Fan tray 4	(8) Fan tray 5
(9) Power supply 1	(10) Power supply 2
(11) USB port	(12) Reset button (RESET)
(13) Serial label pull tab	(14) Management Ethernet port (MGMT)
(15) Grounding screw	

The SN serial number and MAC address of the S6530X-24Y8C/S6530X-24Y8C-G switch can be found on the serial label pull tab.

The S6530X-24Y8C/S6530X-24Y8C-G switch came 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 Figure2-6, two PSR250-12A1 AC power supplies are installed in the power supply slots.

The S6530X-24Y8C/S6530X-24Y8C-G switch came with five fan tray slots empty. You must install five fan trays of the same model for the switch. In Figure2-6, five LSPM1FANSB-SN fan trays are installed in the fan tray slots.

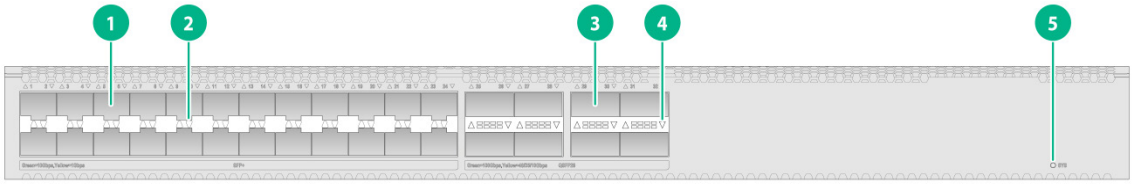
The S6530X-24Y8C/S6530X-24Y8C-G switch provides a reset button on the rear panel for you to reset the switch.

To use both the console port and USB port on the S6530X-24Y8C/S6530X-24Y8C-G switch, use a small-sized USB drive or a USB extension cable.

The S6530X/S6530X-G switch series supports shipping with fan trays and power supplies installed. For the switch to be shipped with fan trays or power supplies installed, contact the marketing staff.

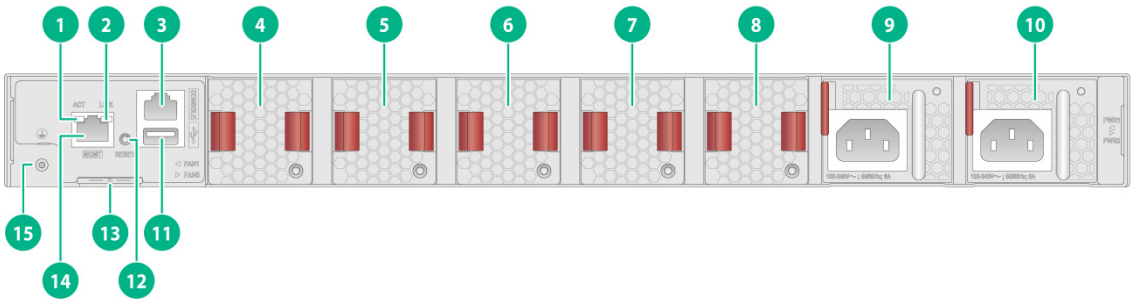
S6530X-24X8C and S6530X-24X8C-G

Figure2-7 Front panel



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

Figure2-8 Rear panel



(1) Management Ethernet port LED (ACT)	(2) Management Ethernet port LED (LINK)
(3) Console port	(4) Fan tray 1
(5) Fan tray 2	(6) Fan tray 3
(7) Fan tray 4	(8) Fan tray 5
(9) Power supply 1	(10) Power supply 2
(11) USB port	(12) Reset button (RESET)
(13) Serial label pull tab	(14) Management Ethernet port (MGMT)
(15) Grounding screw	

The SN serial number and MAC address of the S6530X-24X8C/S6530X-24X8C-G switch can be found on the serial label pull tab.

The S6530X-24X8C/S6530X-24X8C-G switch came 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 Figure2-8, two PSR250-12A1 AC power supplies are installed in the power supply slots.

The S6530X-24X8C/S6530X-24X8C-G switch came with five fan tray slots empty. You must install five fan trays of the same model for the switch. In Figure2-8, five LSPM1FANSB-SN fan trays are installed in the fan tray slots.

The S6530X-24X8C/S6530X-24X8C-G switch provides a reset button on the rear panel for you to reset the switch.

To use both the console port and USB port on the S6530X-24X8C/S6530X-24X8C-G switch, use a small-sized USB drive or a USB extension cable.

The S6530X/S6530X-G switch series supports shipping with fan trays and power supplies installed. For the switch to be shipped with fan trays or power supplies installed, contact the marketing staff.

3 Removable components and compatibility matrixes

The switch supports removable components. Table3-1 describes the removable components available for the switch.

Table3-1 Compatibility matrix between switches and removable components

FRU model	**S6530X-48Y8C** **S6530X-48X8C** **S6530X-24Y8C** **S6530X-24X8C** **S6530X-48Y8C-G** **S6530X-48X8C-G** **S6530X-24Y8C-G** **S6530X-24X8C-G**
Removable power supplies	
PSR250-12A	Supported
PSR250-12A1	Supported
PSR450-12D	Supported
Removable fan trays	
LSPM1FANSA-SN	Supported
LSPM1FANSB-SN	Supported

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

The switch provides two power supply slots. One power supply can meet the power requirement of the switch. You can install two power supplies on the switch for 1+1 redundancy. Do not install power supplies of different models on the same switch.

The switch uses removable fan trays. Do not power on the switch if it does not have five fan trays of the same model installed.

Removable power supplies

Table3-2 Power supplies available for the switch

Power supply model	AC or DC input	Specifications
PSR250-12A PSR250-12A1	AC input	• Rated input voltage range: 100 to 240 VAC @ 50/60 Hz • Max input voltage range: 90 to 290 VAC @ 47 to 63 Hz • Max output power: 250 W

Power supply model	AC or DC input	Specifications
	HVDC input	• Rated input voltage: 240 VDC • Max input voltage range: 180 to 320 VDC • Max output power: 250 W
PSR450-12D	DC input	• Rated input voltage range: –48 VDC to –60 VDC • Max input voltage range: –36 VDC to –72 VDC • Max output power: 450 W

Removable fan trays

Table3-3 Fan tray specifications

Fan tray model	Item	Specifications
• LSPM1FANSA-SN (from the power supply side to the port side) • LSPM1FANSB-SN (from the port side to the power supply side)	Quantity	One 40 × 40.6 × 105 mm (1.57 × 1.60 × 4.13 in) fan
	Fan speed	20000 R.P.M
	Max airflow	20 CFM (0.57 m^3/min)
	Input voltage	12 V
	Power consumption	9.8 W
	Documentation reference	*H3C LSPM1FANSA-SN & LSPM1FANSB-SN Fan Trays User Guide*

4 Ports and LEDs

Ports

Console port

Table4-1 Console port specifications

Item	Specification
Connector type	RJ-45
Compliant standard	EIA/TIA-232
Port transmission 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
Compatible devices	All device models

Management Ethernet port

Table4-2 Management Ethernet port specifications

Item	Specification
Connector type	RJ-45
Port transmission rate	• 10 Mbps, half/full duplex • 100 Mbps, half/full duplex • 1000 Mbps, full duplex • MDI/MDI-X autosensing
Transmission medium	Category-5 or above twisted pair cable
Max transmission distance	100 m (328.08 ft)
Compliant standard	IEEE 802.3i, 802.3u, and 802.3ab
Functions and services	Switch software and Boot ROM upgrade, network management
Compatible devices	All device models
Usage guidelines	Do not forcibly configure a management Ethernet port to operate at 1000 Mbps in full duplex mode.

USB port

Table4-3 USB port specifications

Item	Specification
Interface type	USB 2.0

Item	Specification
Compliant standard	OHC
Port transmission rate	Uploads and downloads data at a rate up to 480 Mbps
Functions and services	Accesses the file system on the flash of the switch, for example, to upload or download application and configuration files
Compatible devices	All device models

NOTE:

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

SFP+ port

Table4-4 SFP+ port specifications

Item	Specification
Interface type	SFP+ port
Compatible transceiver modules and cables	• 10GE SFP+ transceiver modules and cables in Table4-5, Table4-6, and Table4-7 • GE SFP transceiver modules and cables in Table4-8
Compatible devices	S6530X-48X8C, S6530X-24X8C, S6530X-48X8C-G, and S6530X-24X8C-G switches
Restrictions and guidelines	Follow these restrictions and guidelines when you use the SFP-10GE-T copper transceiver module: • Support for the SFP-10GE-T copper transceiver module depends on the software version. For more information, see the corresponding software release notes. • Do not install 10G copper transceiver modules in adjacent fiber ports and do not install any other modules in ports adjacent to the ports installed with 10G copper transceiver modules. You can install a maximum of 20 copper transceiver modules. • Do not install copper transceiver modules in the four ports adjacent to a 100G port. Follow these restrictions and guidelines when you use the SFP-GE-T or SFP-GE-T-D copper transceiver module: • Support for the SFP-GE-T and SFP-GE-T-D copper transceiver modules depends on the software version. For more information, see the corresponding software release notes. • There are no usage restrictions if you install the LSPM1FANSA-SN fan trays on the switch. Follow these restrictions and guidelines when you use 10G SFP+ transceiver modules with a maximum transmission distance of 80 km (49.71 miles): • Support for the transceiver modules depends on the software version. For more information, see the corresponding software release notes. • If you install the LSPM1FANSA-SN fan trays on the switch and the operating temperature is not higher than 40°C (104°F), there are no usage restrictions. • If you install the LSPM1FANSA-SN fan trays on the device and the operating temperature is above 40°C (104°F), do not install the transceiver modules in adjacent ports.

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

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

Type	10GE SFP+ transceiver module	Central wavelength (nm)	Connector	Fiber diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
Copper transceiver modules	SFP-10GE-T	N/A	RJ-45	Category 6a STP or Category 7 STP	N/A	30 m (98.43 ft)

IMPORTANT:

The SFP-XG-LX-SM1270-BIDI and SFP-XG-LX-SM1330-BIDI transceiver modules, SFP-XG-LH40-SM1270-BIDI and SFP-XG-LH40-SM1330-BIDI transceiver modules, and SFP-XG-LH80-SM1490-BIDI and SFP-XG-LH80-SM1550-BIDI transceiver modules must be used in pairs. For example, if one end uses an SFP-XG-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	Cable length
SFP-XG-D-AOC-7M	7 m (22.97 ft)
SFP-XG-D-AOC-10M	10 m (32.81 ft)
SFP-XG-D-AOC-20M	20 m (65.62 ft)

Table4-8 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 modules					
SFP-GE-T	N/A	RJ-45	Twisted pair cable	N/A	100 m (328.08 ft)
SFP-GE-T-D	N/A	RJ-45	Twisted pair cable	N/A	100 m (328.08 ft)
SFP fiber transceiver modules					
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,	200	275 m (902.23 ft)

GE SFP transceiver module and cable	Central wavelength (nm)	Connector	Cable/Fiber type and diameter (μm)	Modal bandwidth (MHz × km)	Max transmission distance
			62.5/125	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-LX-SM1310-A	1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
			Multi-mode, 50/125	500 or 400	550 m (1804.46 ft)
			Multi-mode, 62.5/125	500	550 m (1804.46 ft)
SFP-GE-LH40-SM1310	1310	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-GE-LH40-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-LH80-SM1550	1550	LC	Single-mode, 9/125	N/A	80 km (49.71 miles)
SFP-GE-LH80-SM1550-D	1550	LC	Single-mode, 9/125	N/A	80 km (49.71 miles)
SFP-GE-LH100-SM1550	1550	LC	Single-mode, 9/125	N/A	100 km (62.14 miles)
SFP-GE-LX-SM1310-BIDI	TX: 1310 RX: 1490	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-GE-LX-SM1490-BIDI	TX: 1490 RX: 1310	LC	Single-mode, 9/125	N/A	10 km (6.21 miles)
SFP-GE-LH40-SM1310-BIDI	TX: 1310 RX: 1550	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP-GE-LH40-SM1550-BIDI	TX: 1550 RX: 1310	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)
SFP cable					
SFP-STACK-Kit	N/A	N/A	SFP cable	N/A	1.5 m (4.92 ft)

IMPORTANT:

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

Figure4-1 SFP+ cable

(1) Connector	(2) Pull latch

NOTE:

The H3C transceiver modules and network cables are subject to change over time. For the most recent list of H3C transceiver modules and cables, contact H3C Support or marketing staff.

SFP28 port

Table4-9 SFP28 port specifications

Item	Specification
Interface type	SFP28 port
Compatible transceiver modules and cables	• SFP28 transceiver modules and cables in Table4-10 and Table4-11 • 10GE SFP+ transceiver modules and cables in Table4-5, Table4-6, and Table4-7 • GE SFP transceiver modules and cables in Table4-8
Compatible devices	S6530X-48Y8C, S6530X-24Y8C, S6530X-48Y8C-G, and S6530X-24Y8C-G
Restrictions and guidelines	Follow these restrictions and guidelines when you use the SFP-10GE-T copper transceiver module: • Support for the SFP-10GE-T copper transceiver module depends on the software version. For more information, see the corresponding software release notes. • Do not install 10G copper transceiver modules in adjacent fiber ports and do not install any other modules in ports adjacent to the ports installed with 10G copper transceiver modules. You can install a maximum of 20 copper transceiver modules. • Do not install copper transceiver modules in the four ports adjacent to a 100G port. Follow these restrictions and guidelines when you use the SFP-GE-T or SFP-GE-T-D copper transceiver module: • Support for the SFP-GE-T and SFP-GE-T-D copper transceiver modules depends on the software version. For more information, see the corresponding software release notes. • There are no usage restrictions if you install the LSPM1FANSA-SN fan trays on the switch. Follow these restrictions and guidelines when you use 10G SFP+

Item	Specification
	transceiver modules with a maximum transmission distance of 80 km (49.71 miles): • Support for the transceiver modules depends on the software version. For more information, see the corresponding software release notes. • If you install the LSPM1FANSA-SN fan trays on the switch and the operating temperature is not higher than 40°C (104°F), there are no usage restrictions. • If you install the LSPM1FANSA-SN fan trays on the device and the operating temperature is above 40°C (104°F), do not install the transceiver modules in adjacent ports.

Table4-10 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)

Table4-11 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)

Figure4-2 SFP28 cable

(1) Connector (2) Pull latch

NOTE:

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.

QSFP28 ports

Table4-12 QSFP28 port specifications

Item	Specification
Interface type	QSFP28 port
Compatible transceiver modules and cables	• QSFP28 transceiver modules and cables in Table4-13, Table4-14, Table4-15, and Table4-16 • QSFP+ transceiver modules and cables in Table4-17, Table4-18, Table4-19, and Table4-20
Compatible devices	All device models
Usage guidelines	• On an S6530X-48X8C or S6530X-24X8C switch, a QSFP28 port operates at 40 Gbps by default. You can increase the port speed to 100 Gbps by installing a license. To have the port operate at 100 Gbps, active the license by executing the **`active port basic-license`** command. For more information about the command, see Ethernet interface commands in the command reference for the switch. • You can install two types of licenses on the S6530X-48X8C or S6530X-24X8C switch to increase the speed of two or four QSFP28 ports to 100 Gbps. • You can install multiple licenses on the S6530X-48X8C or S6530X-24X8C switch and increase the speed of a maximum of eight QSFP28 ports to 100 Gbps. • For more information about licenses, see *H3C Switches & Routers Licensing Guide*. • When you connect an S6530X-24Y8C, S6530X-24Y8C-G, S6530X-48Y8C, or S6530X-48Y8C-G switch to a device (not an S6530X switch) through a SFP28 port installed with a 25G transceiver module, make sure the two ports on the local and peer ends are in the same FEC mode.

Table4-13 QSFP28 transceiver modules available for the QSFP28 ports

QSFP28 transceiver module	Central wavelength (nm)	Connector	Fiber type and diameter (μm)	Modal bandwidth (MHz*km)	Maximum transmission distance
QSFP-100G-SR4-MM850	850	MPO	Multi-mode, 50/125	2000	70 m (229.66 ft)
				4700	100 m (328.08 ft)
QSFP-100G-eSR4-MM850	850	MPO	Multi-mode, 50/125	4700	300 m (984.25 ft)
QSFP-100G-LR4-WDM1300	Four lanes: • 1295.56 • 1300.05 • 1304.58 • 1309.14	LC	Single mode, 9/125	N/A	10 km (6.21 miles)
QSFP-100G-LR4L-WDM1300	Four lanes: • 1271 • 1291 • 1311 • 1331	LC	Single mode, 9/125	N/A	2 km (1.24 miles)
QSFP-100G-ER4L-WDM1	Four lanes: • 1295.56	LC	Single mode, 9/125	N/A	40 km (24.86 miles)

QSFP28 transceiver module	Central wavelength (nm)	Connector	Fiber type and diameter (μm)	Modal bandwidth (MHz*km)	Maximum transmission distance
300	• 1300.05 • 1304.58 • 1309.14				

Table4-14 100G QSFP28 fiber cables available for the QSFP28 ports

QSFP28 fiber cable	Cable length
QSFP-100G-D-AOC-7M	7 m (22.97 ft)
QSFP-100G-D-AOC-10M	10 m (32.81 ft)

Table4-15 QSFP28 to SFP28 copper cables available for the QSFP28 ports

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

Table4-16 100G QSFP28 copper cables available for the QSFP28 ports

QSFP28 copper cable	Cable length
QSFP-100G-D-CAB-1M	1 m (3.28 ft)
QSFP-100G-D-CAB-3M	3 m (9.84 ft)
QSFP-100G-D-CAB-5M	5 m (16.40 ft)

Table4-17 QSFP+ transceiver modules available for the QSFP28 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 (492.13 ft)
QSFP-40G-CSR4-MM850	850	MPO	Multi-mode, 50/125	2000	300 m (984.25 ft)
				4700	400 m (1312.34 ft)
QSFP-40G-BIDI-SR-MM850	Two lanes: • 850 • 900	LC	Multi-mode, 50/125	2000	100 m (328.08 ft)
				4700	150 m (492.13 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:	LC	Single-mode, 9/125	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
	• 1271 • 1291 • 1311 • 1331				
QSFP-40G-ER4-WDM1300	Four lanes: • 1271 • 1291 • 1311 • 1331	LC	Single-mode, 9/125	N/A	40 km (24.86 miles)

Table4-18 40G QSFP+ copper cables available for the QSFP28 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)

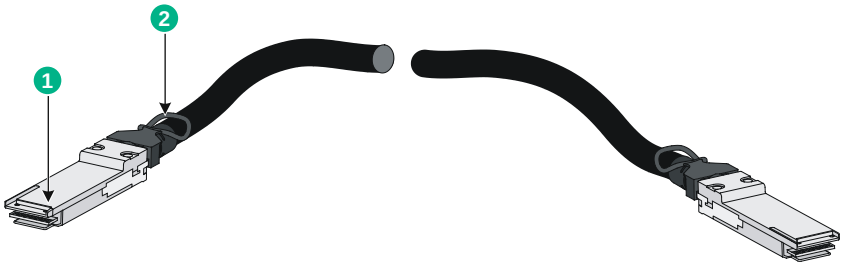
Table4-19 QSFP+ to SFP+ copper cables available for the QSFP28 ports

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

Table4-20 40G QSFP+ fiber cables available for the QSFP28 ports

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

Figure4-3 100G QSFP28/40G QSFP+ copper cable



(1) Connector	(2) Pull tab

NOTE:

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.

LEDs

System status LED

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

Table4-21 System status LED description

LED mark	Status	Description
SYS	Steady green	The switch has started 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.
	Flashing yellow	The mode LED is used for switch locating. You can configure the mode LED to flash yellow by executing the **`locator blink`** command to locate the switch.
	Off	The switch is powered off.

Management Ethernet port LED

Table4-22 Management Ethernet port LED description

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

QSFP28 port LED

Table4-23 QSFP28 port LED description

LED status	Description
Steady green	A transceiver module or cable has been correctly installed. The port has a link and is operating at 100 Gbps.
Flashing green	The port is sending or receiving data at 100 Gbps.
Steady yellow	A transceiver module or cable has been correctly installed. The port has a link and is operating at 10 Gbps, 25 Gbps, or 40 Gbps.
Flashing yellow	The port is sending or receiving data at 10 Gbps, 25 Gbps, or 40 Gbps.
Off	No transceiver module or cable has been installed or no link is present on the port.

SFP28 port LEDs

Table4-24 SFP28 port LED description

LED status	Description
Steady green	A transceiver module or cable has been correctly installed. The port has a link and is operating at 25 Gbps.
Flashing green	The port is sending or receiving data at 25 Gbps.
Steady yellow	A transceiver module or cable has been correctly installed. The port has a link and is operating at 1Gbps or 10 Gbps.
Flashing yellow	The port is sending or receiving data at 1 Gbps or 10 Gbps.
Off	No transceiver module or cable has been installed or no link is present on the port.

SFP+ port LED

Table4-25 SFP+ port LED description

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

Status LED on a power supply

The power supplies each have a LED to indicate the power supply operating status. For more information, see the user manual for the power supply.

Fan tray status LED on a fan tray

The LSPM1FANSA-SN and LSPM1FANSB-SN fan trays each have a LED to indicate the fan tray operating status.

Table4-26 Fan tray status LED description

Status	Description
On	The fan tray is faulty.
Off	The fan tray is operating correctly.

5 Cooling system

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

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

Table5-1 Fan trays available for the switch

Switch model	Fan tray model	Airflow direction
S6530X-48X8C	LSPM1FANSA-SN	From the power supply side to the port side
S6530X-48Y8C S6530X-24Y8C S6530X-24X8C S6530X-48X8C-G S6530X-48Y8C-G S6530X-24Y8C-G S6530X-24X8C-G	LSPM1FANSB-SN	From the port side to the power supply side

Figure5-1 Airflow direction for LSPM1FANSA-SN (S6530X-48Y8C)

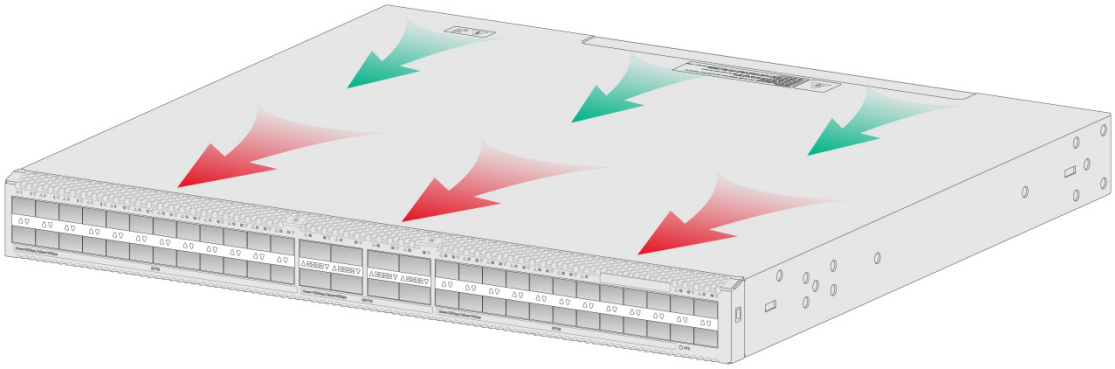


Figure5-2 Airflow direction for LSPM1FANSB-SN (S6530X-48Y8C)