

H3C S7500E Switch Series

Hardware Information and Specifications

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Preface

This document describes hardware information and specifications for H3C S7500E switch series, including chassis views and technical specifications, FRUs and compatibility matrixes, LEDs, and cables.

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.

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.
<i>Italic</i>	<i>Italic</i> 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 .

Convention	Description
>	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.

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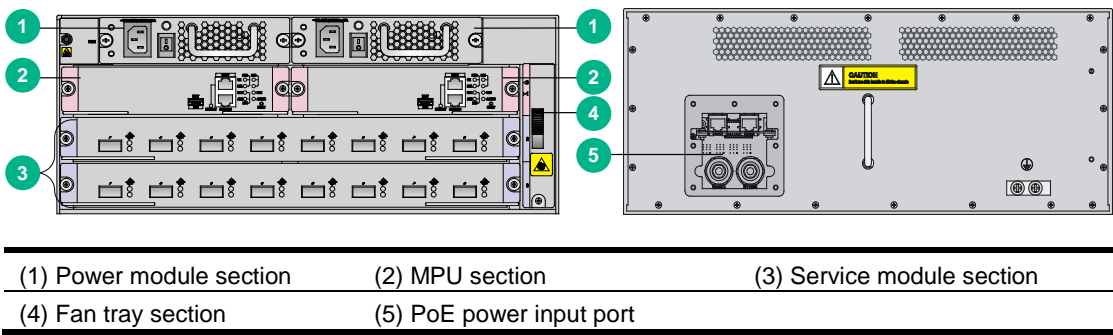
1 Chassis views and technical specifications

Chassis views

The figures in this chapter are for illustration only.

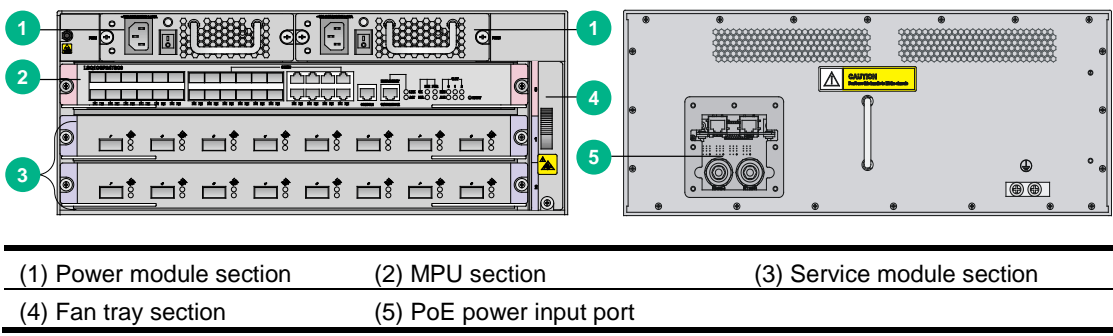
S7502E

Figure 1-1 S7502E front and rear panels



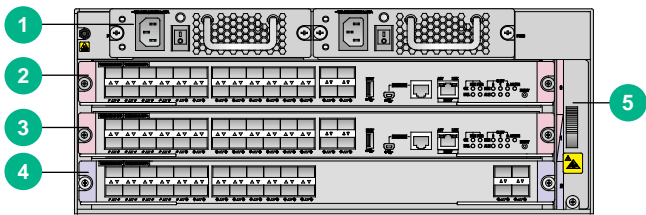
S7503E-S

Figure 1-2 S7503E-S front and rear panels



S7503E-M

Figure 1-3 S7503E-M front panel



(1) Power module section

(2) MPU section

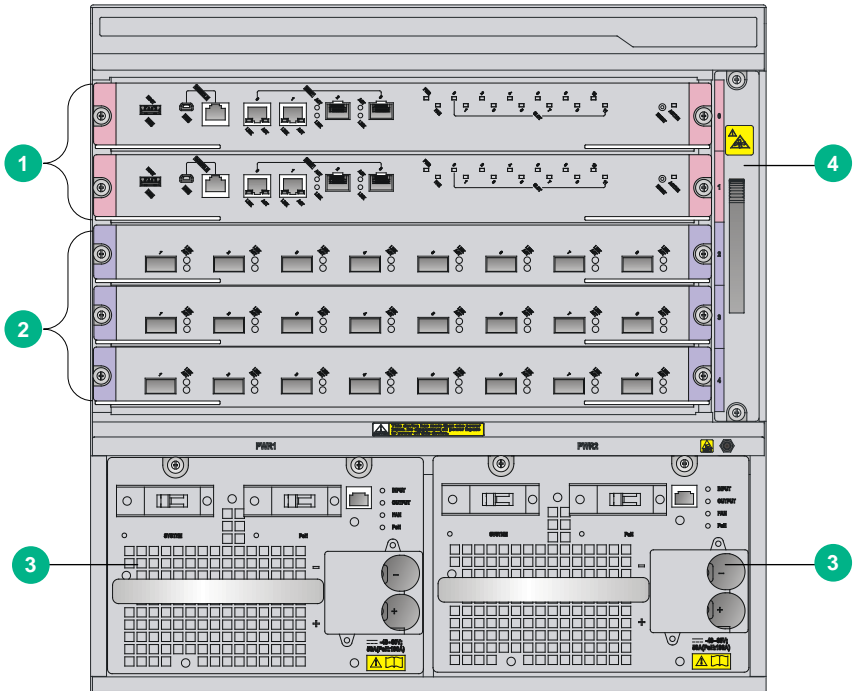
(3) MPU/service module section
(for MPUs or service modules)

(3) Service module section

(4) Fan tray section

S7503E

Figure 1-4 S7503E front panel



(1) MPU section

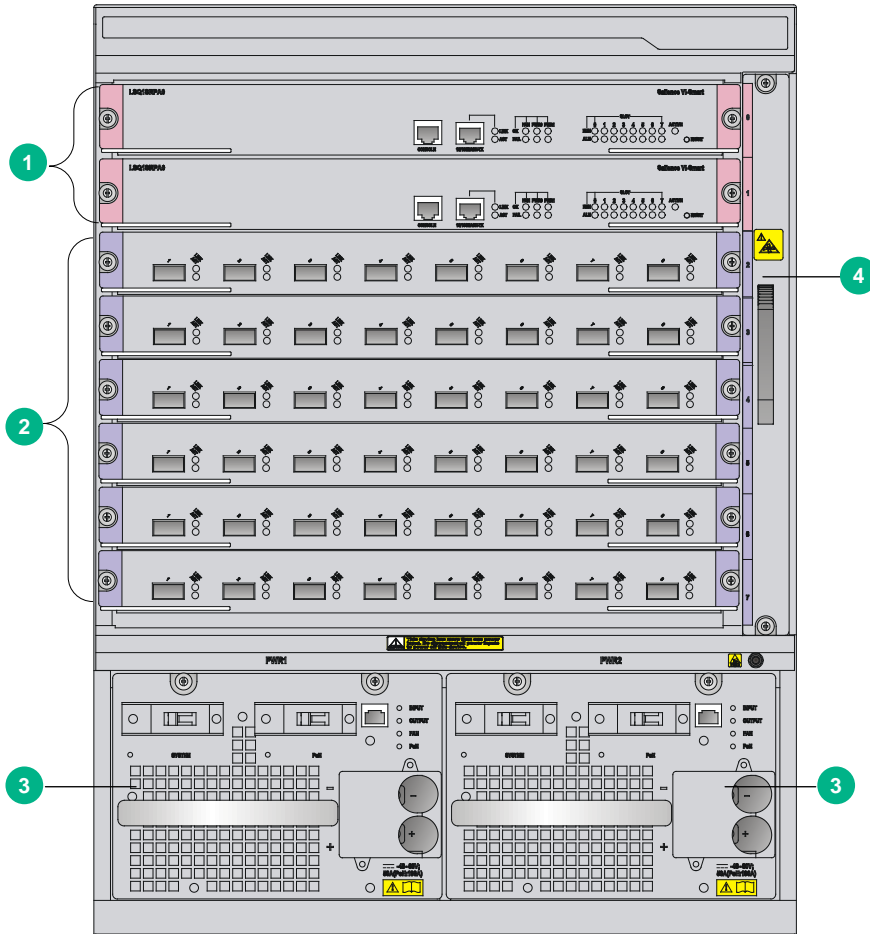
(2) Service module section

(3) Power module section

(4) Fan tray section

S7506E-S

Figure 1-5 S7506E-S front panel



(1) MPU section

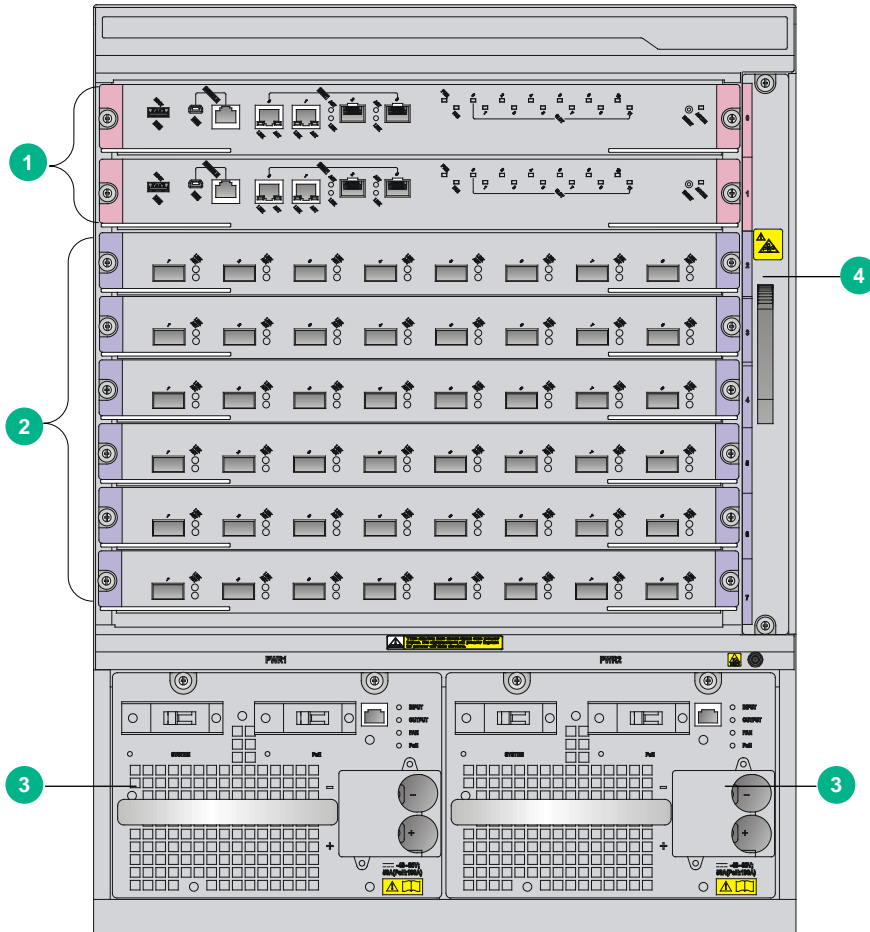
(2) Service module section

(3) Power module section

(4) Fan tray section

S7506E

Figure 1-6 S7506E front panel



(1) MPU section

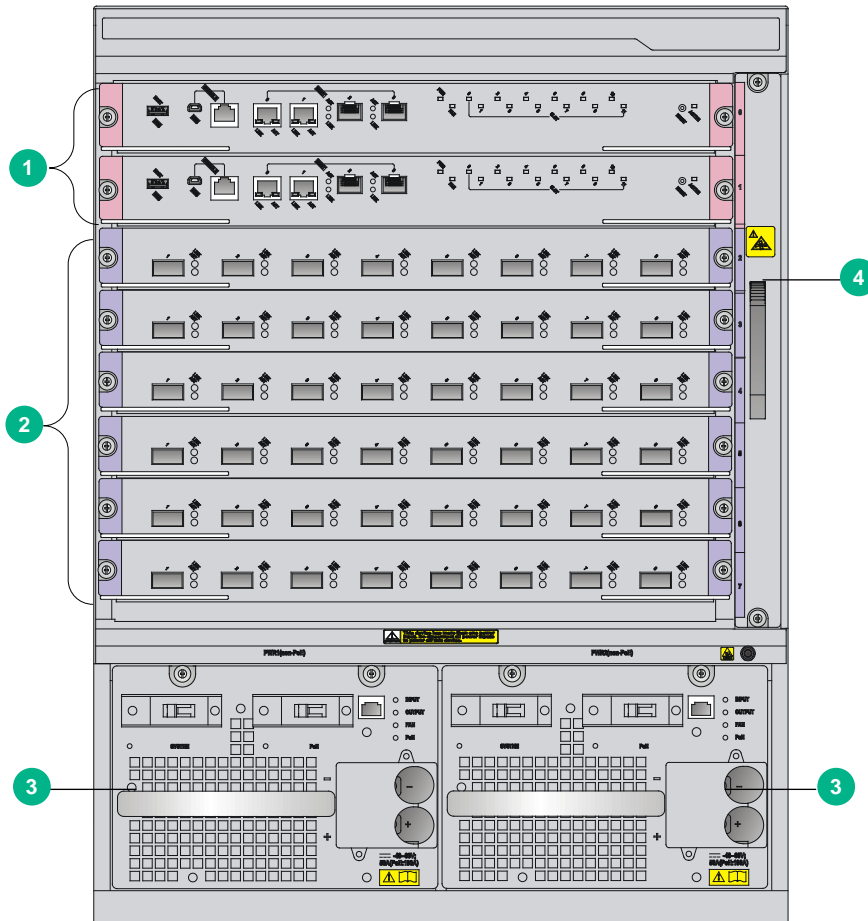
(2) Service module section

(3) Power module section

(4) Fan tray section

S7506E (non-PoE)

Figure 1-7 S7506E (non-PoE) front panel



(1) MPU section

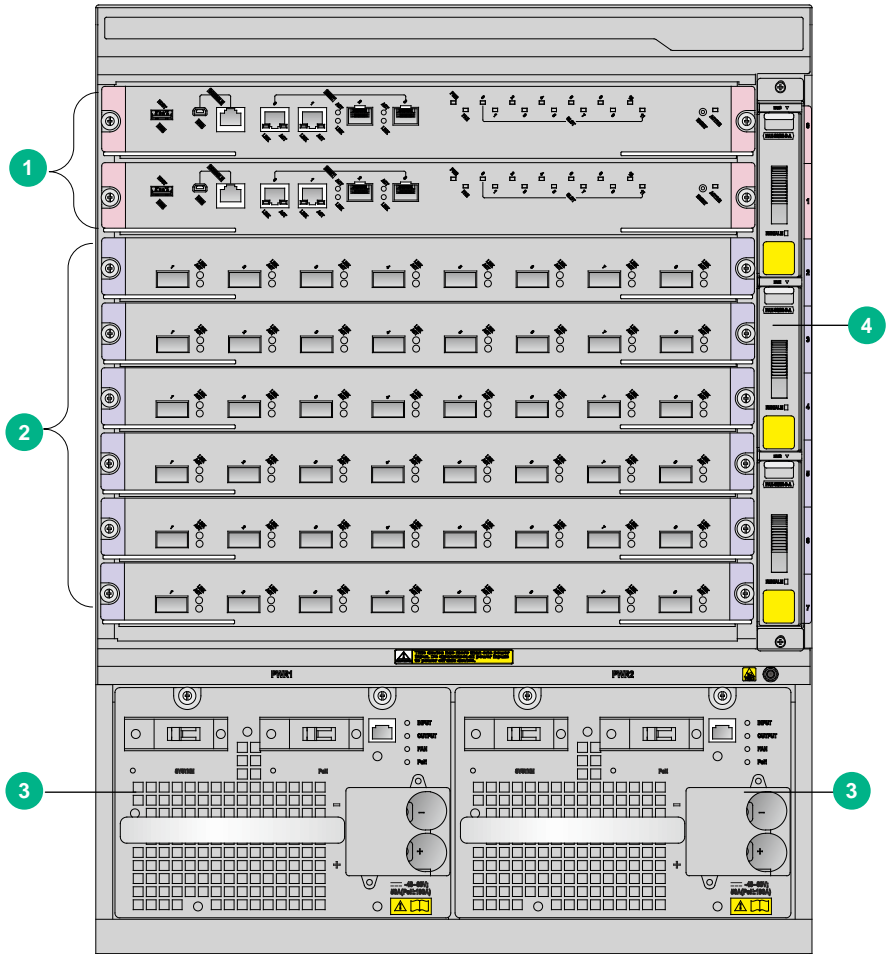
(2) Service module section

(3) Power module section

(4) Fan tray section

S7506E-MF

Figure 1-8 S7506E-MF front panel



(1) MPU section

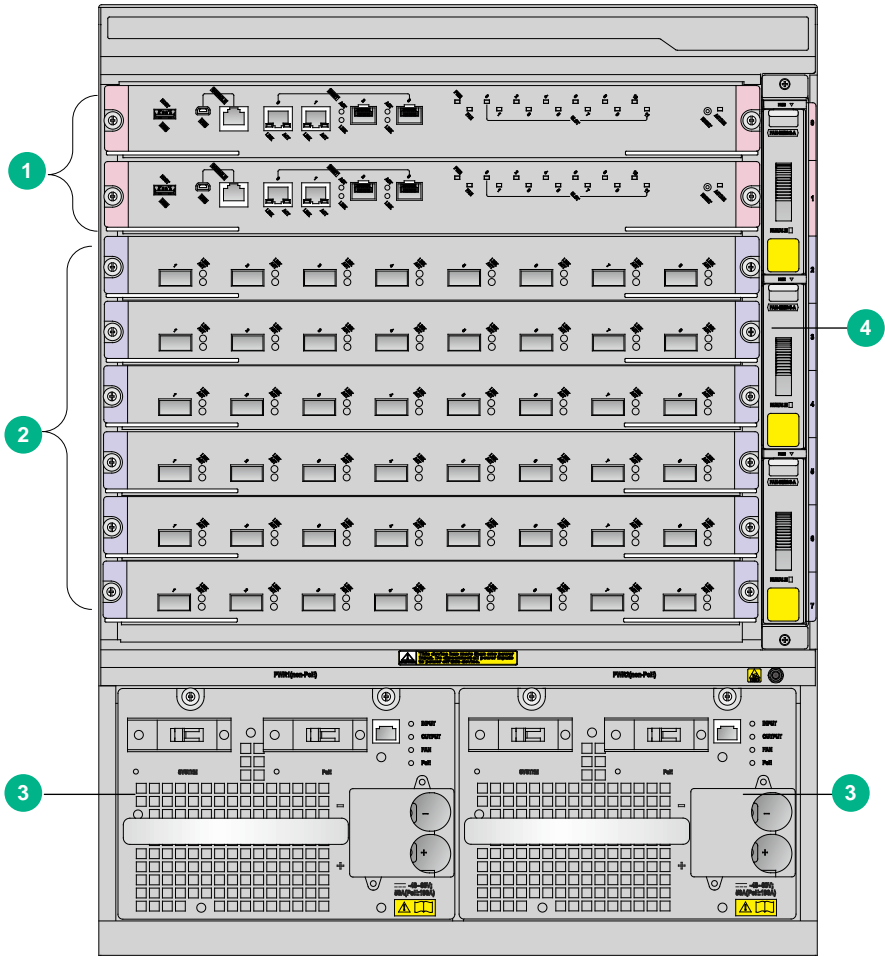
(2) Service module section

(3) Power module section

(4) Fan tray section

S7506E-MF (non-PoE)

Figure 1-9 S7506E-MF (non-PoE) front panel



(1) MPU section

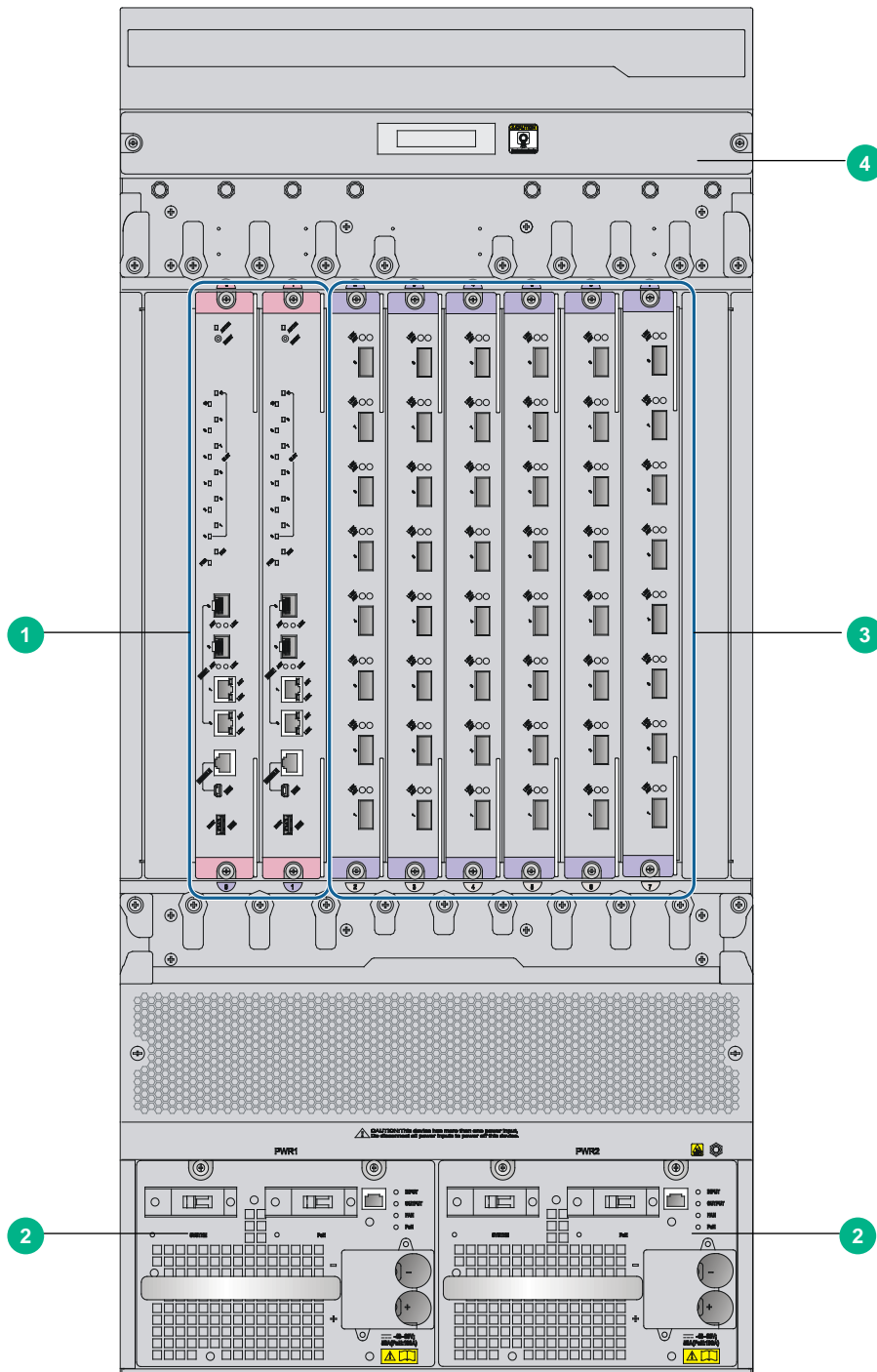
(2) Service module section

(3) Power module section

(4) Fan tray section

S7506E-V

Figure 1-10 S7506E-V front panel



(1) MPU section

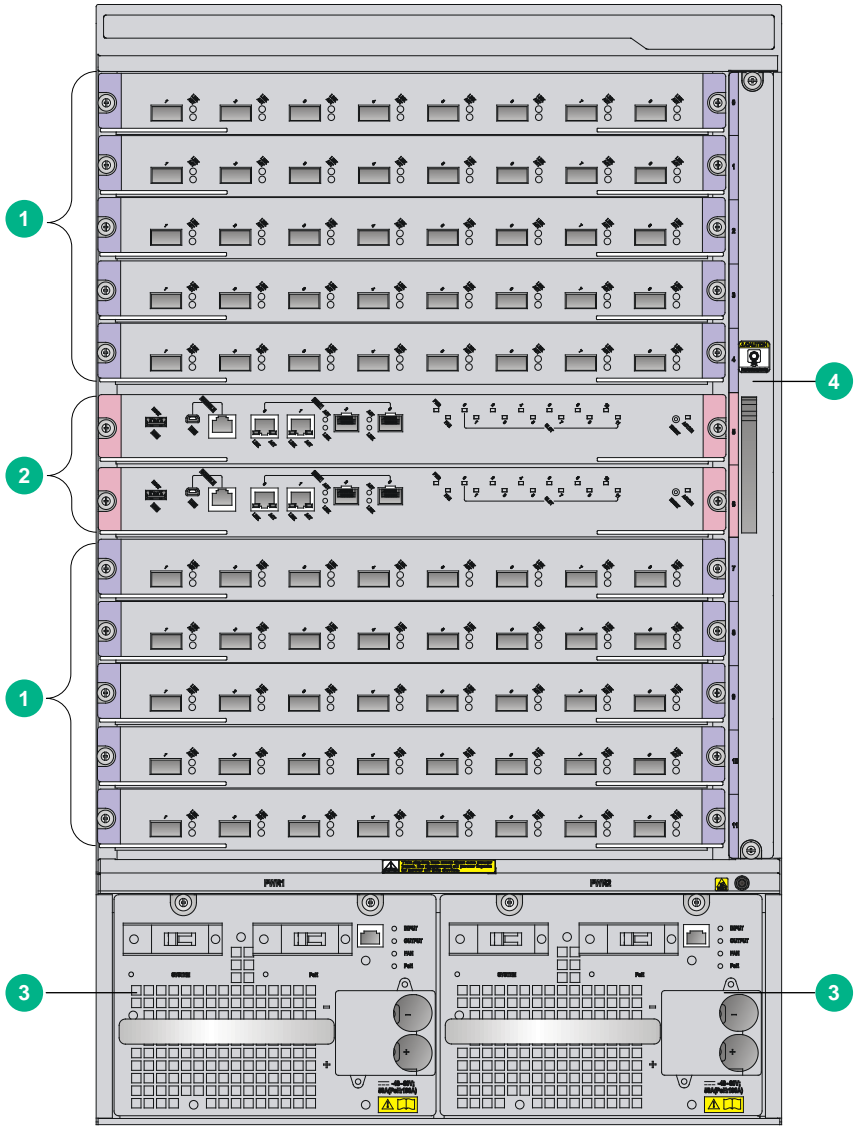
(2) Power module section

(3) Service module section

(4) Fan tray section

S7510E

Figure 1-11 S7510E front panel



(1) Service module section

(2) MPU section

(3) Power module section

(4) Fan tray section

Technical specifications

Weights and dimensions

Table 1-1 Chassis weights and dimensions

Model	Weight (fully configured)	Height	Width	Depth
S7502E	< 30 kg (66.14 lb)	175 mm (6.89 in) (4 RUs)	436 mm (17.17 in)	420 mm (16.54 in)
S7503E-S	< 30 kg (66.14 lb)	175 mm (6.89 in) (4 RUs)	436 mm (17.17 in)	420 mm (16.54 in)
S7503E-M	< 30 kg (66.14 lb)	175 mm (6.89 in) (4 RUs)	436 mm (17.17 in)	420 mm (16.54 in)
S7503E	< 60 kg (132.28 lb)	441 mm (17.36 in) (10 RUs)	436 mm (17.17 in)	420 mm (16.54 in)
S7506E-S	< 75 kg (165.34 lb)	575 mm (22.64 in) (13 RUs)	436 mm (17.17 in)	420 mm (16.54 in)
S7506E (non-PoE)	< 75 kg (165.34 lb)	575 mm (22.64 in) (13 RUs)	436 mm (17.17 in)	420 mm (16.54 in)
S7506E	< 75 kg (165.34 lb)	575 mm (22.64 in) (13 RUs)	436 mm (17.17 in)	420 mm (16.54 in)
S7506E-M F (non-PoE)	< 75 kg (165.34 lb)	575 mm (22.64 in) (13 RUs)	436 mm (17.17 in)	420 mm (16.54 in)
S7506E-M F	< 75 kg (165.34 lb)	575 mm (22.64 in) (13 RUs)	436 mm (17.17 in)	420 mm (16.54 in)
S7506E-V	< 85 kg (187.39 lb)	930 mm (36.61 in) (21 RUs)	436 mm (17.17 in)	420 mm (16.54 in)
S7510E	< 95 kg (209.44 lb)	708 mm (27.87 in) (16 RUs)	436 mm (17.17 in)	420 mm (16.54 in)

NOTE:

- Rack height is measured in RUs. One RU is 44.45 mm (1.75 in).
- The dimensions listed in [Table 1-1](#) are for switch chassis, excluding mounting brackets, cable management brackets, cards, and power modules.

Table 1-2 Card weights and dimensions

Model	Weight	Height	Width	Depth
LSQ1MPUA0	1.35 kg (2.98 lb)	45 mm (1.77 in)	199 mm (7.83 in)	355 mm (13.98 in)
LSQ1CGV24PSC0	2.80 kg (6.17 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1CGP24TSC0	2.86 kg (6.31 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1CTGS16SC0	3.34 kg (7.36 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1MPUB0 (Salience VI-Lite)	3.60 kg (7.94 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1SRPA0 (Salience VI-Smart)	2.61 kg (5.75 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1SRPB0 (Salience VI)	3.60 kg (7.94 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1SRPD0 (Salience VI-Plus)	3.56 kg (7.85 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)

Model	Weight	Height	Width	Depth
LSQ1SRP1CB0 (Saliency VI-Turbo)	3.60 kg (7.94 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1SRP12GB0 (Saliency VI-GE)	3.59 kg (7.91 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1SRP2XB0 (Saliency VI-10GE)	3.60 kg (7.94 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM3MPUA0	1.41 kg (3.11 lb)	45 mm (1.77 in)	199 mm (7.83 in)	355 mm (13.98 in)
LSQM3MPUB0	2.95 kg (6.50 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2MPUC0	4.00 kg (8.82 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2MPUD0	4.10 kg (9.04 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2MPUDS0	4.05 kg (8.93 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1SRP8X2QE0	4.40 kg (9.70 lb)	45 mm (1.77 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1CGP24TSSC0	3.00 kg (6.61 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1CGT24TSSC0	2.85 kg (6.28 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1CTGS24QSFD0	3.15 kg (6.94 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1TGS24QSFD0	3.00 kg (6.61 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1CQGS12SG0	3.20 kg (7.05 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1CGS2FE0	2.82 kg (6.22 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1QGS24RSG0	3.39 kg (7.47 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1QGS4SC0	3.12 kg (6.88 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1QGC4SC0	3.46 kg (7.62 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GP24TXSD0	3.08 kg (6.79 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1P24XGSC0	2.95 kg (6.50 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1T24XGSC0	2.92 kg (6.43 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1TGX8SD0	3.23 kg (7.12 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1TGX4SD0	2.93 kg (6.46 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1TGX4EB0	2.93 kg (6.46 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1TGX2SC0	2.95 kg (6.50 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1TGX2SD0	2.93 kg (6.46 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1TGX2EB0	2.93 kg (6.46 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1TGX1EA0	2.80 kg (6.17 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2GT24PTSSC0	3.21 kg (7.08 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2GT24TSSC0	2.95 kg (6.50 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM3GP44TSSC0	3.00 kg (6.61 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2GP44TSSC0	3.00 kg (6.61 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1GP40TS8FD0	3.20 kg (7.05 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2GP40TS8FD0	3.10 kg (6.83 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1TGS48RSG0	3.50 kg (7.72 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)

Model	Weight	Height	Width	Depth
LSQM2TGS48SG0	3.30 kg (7.28 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1TGS48RFE0	3.60 kg (7.94 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1TGS16GPSA0	3.50 kg (7.72 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1TGS24FD0	3.00 kg (6.61lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1TGS16SC0	3.03 kg (6.68 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1TGS16FD0	2.91 kg (6.42 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2TGS16SF0	3.05 kg (6.72 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1TGS8SC0	3.11 kg (6.86 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1TGS4SC0	2.86 kg (6.31 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2GP24TSSA0	2.85 kg (6.28 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1TGS12EC0	3.30 kg (7.28 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1XPT12TSFD0	3.45 kg (7.61 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2XPT12TSFD0	3.45 kg (7.61 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1PT24TSSC0	2.90 kg (6.39 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1PT8TSSC0	2.75 kg (6.06 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ4PT16PSC0	2.82 kg (6.22 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1PT16PSC0	2.82 kg (6.22 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1PT8PSC0	2.70 kg (5.95 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ4PT8PSC0	2.70 kg (5.95 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1PT4PSC0	2.64 kg (5.82 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ4PT4PSC0	2.64 kg (5.82 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GV40PSC0	3.02 kg (6.66 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GV24PSC0	2.80 kg (6.17 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GV24PSA0	2.80 kg (6.17 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GP24TSA0	2.77 kg (6.11 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GP24TSC0	2.77 kg (6.11 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GP24TEB0	3.04 kg (6.70 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GP24TSD0	3.01 kg (6.64 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GP48SC0	3.04 kg (6.70 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GP48SD0	3.25 kg (7.16 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GP48EB0	3.25 kg (7.16 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2GP48SA0	3.00 kg (6.61 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1GP48FD0	3.10 kg (6.83 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GP24SC0	2.78 kg (6.13 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2GP24SA0	2.81 kg (6.19 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GP12SC0	2.66 kg (5.86 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)

Model	Weight	Height	Width	Depth
LSQ1GP12EA0	2.88 kg (6.35 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1FP48SA0	3.05 kg (6.72 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ2FP48SA0	2.93 kg (6.46 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1TGT24FD0	3.40 kg (7.50 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GV48SA0	3.09 kg (6.81 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GV48SC0	3.09 kg (6.81 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2GT48SA0	3.18 kg (7.01 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GV48SD0	3.31 kg (7.30 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ3GV48SC0	3.31 kg (7.30 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2GT48SC0	3.18 kg (7.01 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1GT48FD0	3.40 kg (7.50 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM4GV48SA0	3.05 kg (6.72 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM4GV48SC0	3.05 kg (6.72 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1GT24SC0	2.72 kg (6.00 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ2FT48SA0	2.74 kg (6.04 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1FV48SA0	2.89 kg (6.37 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSU1WCME0	4.00 kg (8.82 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSU3WCMD0	3.62 kg (7.98 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1WCMD0	3.40 kg (7.50 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1WCMX20	4.00 kg (8.82 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1WCMX40	4.00 kg (8.82 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1FWDSC0	3.80 kg (8.38 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSU1FWCEA0	3.90 kg (8.60 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSU3FWCEA0	3.90 kg (8.60 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSUM1FWCEAB0	3.90 kg (8.60 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ2FWBSC0	3.23 kg (7.12 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1FWBSC0	3.23 kg (7.12 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSU1NSCEA0	3.90 kg (8.60 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1NSMSC0	3.23 kg (7.12 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1NSDSC0	3.80 kg (8.38 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSU1IPSBEA0	3.90 kg (8.60 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1IPSSC0	3.23 kg (7.12 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1IPSDSC0	3.80 kg (8.38 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1SSLSC0	3.10 kg (6.83 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1ACGASC0	3.23 kg (7.12 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1ACGDSC0	3.80 kg (8.38 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)

Model	Weight	Height	Width	Depth
LSU1ADECEA0	3.90 kg (8.60 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1ADEDSC0	3.80 kg (8.38 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQ1LBSC0	3.23 kg (7.12 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM2FWDSC0	3.30 kg (7.28 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1EPSB0	3.40 kg (7.50 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1SDNB0	3.40 kg (7.50 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)
LSQM1WBCZ720X	3.50 kg (7.72 lb)	40 mm (1.57 in)	399 mm (15.71 in)	355 mm (13.98 in)

NOTE:

- Card dimensions are expressed as follows:
 - H**—Height of the front panel of the card.
 - W**—Width of the front panel of the card.
 - D**—Depth from the front panel of the card to the connector.
- The card models listed in [Table 1-2](#) are marked on the card panels. They might be slightly different from the card models marked on the card packages. For example, LSQ1QGS4SC0 and LSQM1QGS4SC0 identify the same card. LSQ1QGS4SC0 is marked on the card panel. When you order the card, you refer to it as LSQM1QGS4SC0.

Table 1-3 Power module adapter weights and dimensions

Model	Weight	Height	Width	Depth
LSQM1PWRSPA	4.42 kg (9.74 lb)	128 mm (5.04 in)	196 mm (7.72 in)	382 mm (15.04 in)
LSQM1PWRSPB	4.95 kg (10.91 lb)	128 mm (5.04 in)	196 mm (7.72 in)	382 mm (15.04 in)

Table 1-4 Power module weights and dimensions

Model	Weight	Height	Width	Depth
PSR320-A	2.00 kg (4.41 lb)	40 mm (1.57 in)/1 RU	140 mm (5.51 in)	350 mm (13.78 in)
PSR320-D	1.85 kg (4.08 lb)	40 mm (1.57 in)/1 RU	140 mm (5.51 in)	350 mm (13.78 in)
PSR650-A	1.90 kg (4.19 lb)	40 mm (1.57 in)/1 RU	140 mm (5.51 in)	350 mm (13.78 in)
PSR650-D	3.20 kg (7.05 lb)	40 mm (1.57 in)/1 RU	140 mm (5.51 in)	350 mm (13.78 in)
PSR650C-12A	5.15 kg (11.35 lb)	128 mm (5.04 in)/3 RUs	196 mm (7.72 in)	382 mm (15.04 in)
PSR650C-12D	4.20 kg (9.26 lb)	128 mm (5.04 in)/3 RUs	196 mm (7.72 in)	382 mm (15.04 in)
PSR1200-A	2.56 kg (5.64 lb)	40 mm (1.57 in)/1 RU	140 mm (5.51 in)	350 mm (13.78 in)
PSR1200-D	2.51 kg (5.53 lb)	40 mm (1.57 in)/1 RU	140 mm (5.51 in)	350 mm (13.78 in)
PSR1400-A	8.30 kg (18.30 lb)	128 mm (5.04 in)/3 RUs	196 mm (7.72 in)	382 mm (15.04 in)
PSR1400-12A1-F	4.30 kg (9.48 lb)	128 mm (5.04 in)/3 RUs	196 mm (7.72 in)	382 mm (15.04 in)
PSR1400-D	4.20 kg (9.26 lb)	128 mm (5.04 in)/3 RUs	196 mm (7.72 in)	382 mm (15.04 in)
PSR1400-12D1	6.39 kg (14.09 lb)	128 mm (5.04 in)/3 RUs	196 mm (7.72 in)	382 mm (15.04 in)
PSR2500-12AHD	5.45 kg (12.02 lb)	128 mm (5.04 in)/3 RUs	196 mm (7.72 in)	382 mm (15.04 in)
PSR2500-12D	5.55 kg (12.24 lb)	128 mm (5.04 in)/3 RUs	196 mm (7.72 in)	382 mm (15.04 in)

Model	Weight	Height	Width	Depth
PSR2800-ACV	8.00 kg (17.64 lb)	128 mm (5.04 in)/3 RUs	196 mm (7.72 in)	382 mm (15.04 in)
PSR2800-A1-F	5.45 kg (12.02 lb)	128 mm (5.04 in)/3 RUs	196 mm (7.72 in)	382 mm (15.04 in)
PSR6000-ACV	12.16 kg (26.81 lb)	128 mm (5.04 in)/3 RUs	196 mm (7.72 in)	382 mm (15.04 in)

Table 1-5 Fan tray weights and dimensions

Model	Weight	Height	Width	Depth
S7502E fan tray	0.82 kg (1.81 lb)	30 mm (1.18 in)	127 mm (5 in)	351 mm (13.82 in)
S7503E-S fan tray	0.82 kg (1.81 lb)	30 mm (1.18 in)	127 mm (5 in)	351 mm (13.82 in)
S7503E-M fan tray	0.80 kg (1.76 lb)	30 mm (1.18 in)	127 mm (5 in)	351 mm (13.82 in)
S7503E fan tray	1.58 kg (3.48 lb)	29 mm (1.14 in)	225 mm (8.86 in)	367 mm (14.45 in)
S7506E-S fan tray	2.20 kg (4.85 lb)	29 mm (1.14 in)	347 mm (13.66 in)	367 mm (14.45 in)
S7506E fan tray	2.20 kg (4.85 lb)	29 mm (1.14 in)	347 mm (13.66 in)	367 mm (14.45 in)
S7506E fan tray (non-PoE)	2.20 kg (4.85 lb)	29 mm (1.14 in)	347 mm (13.66 in)	367 mm (14.45 in)
S7506E-MF fan tray	0.70 kg (1.54 lb)	27 mm (1.06 in)	100 mm (3.94 in)	347 mm (13.66 in)
S7506E-MF fan tray (non-PoE)	0.70 kg (1.54 lb)	27 mm (1.06 in)	100 mm (3.94 in)	347 mm (13.66 in)
S7506E-V fan tray	3.14 kg (6.92 lb)	45 mm (1.77 in)	435 mm (17.13 in)	377 mm (14.84 in)
S7510E fan tray	2.94 kg (6.48 lb)	28 mm (1.10 in)	497 mm (19.57 in)	351 mm (13.82 in)

Module power consumption

Card power consumption

The power consumption of the cards depends on the card model and state. [Table 1-6](#) shows the power consumption for different card models.

- **Static power consumption (min)**—Power consumed by the card when the following conditions exist:
 - The card is running but all ports on the card are down.
 - No transceiver module is available on the optical interface of the card.
- **Dynamic power consumption (max)**—Power consumed by the card when all the ports on the card are link up and are sending broadcasts.

Table 1-6 Card power consumption

Model	Static power consumption (min)	Dynamic power consumption (max)
LSQ1MPUA0	10 W	15 W
LSQ1CGV24PSC0	25 W	45 W
LSQ1CGP24TSC0	30 W	60 W
LSQ1CTGS16SC0	83 W	110 W
LSQ1MPUB0 (Salience VI-Lite)	40 W	45 W

Model	Static power consumption (min)	Dynamic power consumption (max)
LSQ1SRPA0 (Saliency VI-Smart)	25 W	30 W
LSQ1SRPB0 (Saliency VI)	42 W	50 W
LSQ1SRPD0 (Saliency VI-Plus)	50 W	60 W
LSQ1SRP1CB0 (Saliency VI-Turbo)	53 W	60 W
LSQ1SRP12GB0 (Saliency VI-GE)	42 W	60 W
LSQ1SRP2XB0 (Saliency VI-10GE)	55 W	65 W
LSQM3MPUA0	17 W	23 W
LSQM3MPUB0	36 W	60 W
LSQM2MPUC0	38 W	63 W
LSQM2MPUD0	55 W	96 W
LSQM2MPUDS0	45 W	86 W
LSQM1SRP8X2QE0	60 W	140 W
LSQM1CGP24TSSC0	28 W	55 W
LSQM1CGT24TSSC0	30 W	46 W
LSQM1CTGS24QSFD0	60 W	110 W
LSQM1TGS24QSFD0	60 W	107 W
LSQM1CQGS12SG0	55 W	147 W
LSQM1CGS2FE0	55 W	77 W
LSQM1QGS24RSG0	65 W	198 W
LSQ1QGS4SC0	70 W	90 W
LSQ1QGC4SC0	52 W	85 W
LSQ1GP24TXSD0	54 W	95 W
LSQ1P24XGSC0	40 W	55 W
LSQ1T24XGSC0	50 W	75 W
LSQ1TGX8SD0	73 W	120 W
LSQ1TGX4SD0	53 W	80 W
LSQ1TGX4EB0	53 W	80 W
LSQ1TGX2SC0	30 W	40 W
LSQ1TGX2SD0	43 W	55 W
LSQ1TGX2EB0	46 W	65 W
LSQ1TGX1EA0	35 W	45 W
LSQM2GT24PTSSC0	36 W	59 W
LSQM2GT24TSSC0	32 W	43 W
LSQM3GP44TSSC0	34 W	69 W
LSQM2GP44TSSC0	31 W	65 W
LSQM1GP40TS8FD0	47 W	96 W

Model	Static power consumption (min)	Dynamic power consumption (max)
LSQM2GP40TS8FD0	42 W	81 W
LSQM1TGS48RSG0	60 W	149 W
LSQM2TGS48SG0	67 W	152 W
LSQM1TGS48RFE0	50 W	122 W
LSQM1TGS16GPSA0	28 W	64 W
LSQM1TGS24FD0	50 W	104 W
LSQ1TGS16SC0	84 W	115 W
LSQM1TGS16FD0	54 W	90 W
LSQM2TGS16SF0	52 W	75 W
LSQ1TGS8SC0	75 W	95 W
LSQ1TGS4SC0	52 W	60 W
LSQM2GP24TSSA0	25 W	49 W
LSQM1TGS12EC0	82 W	130 W
LSQM1XPT12TSFD0	100 W	162 W
LSQM2XPT12TSFD0	100 W	162 W
LSQM1PT24TSSC0	80 W	115 W
LSQM1PT8TSSC0	56 W	80 W
LSQ4PT16PSC0	55 W	65 W
LSQ1PT16PSC0	55 W	65 W
LSQ1PT8PSC0	38 W	45 W
LSQ4PT8PSC0	38 W	45 W
LSQ1PT4PSC0	33 W	40 W
LSQ4PT4PSC0	33 W	40 W
LSQ1GV40PSC0	41 W	95 W
LSQ1GV24PSC0	30 W	60 W
LSQ1GV24PSA0	30 W	60 W
LSQ1GP24TSA0	25 W	45 W
LSQ1GP24TSC0	25 W	45 W
LSQ1GP24TEB0	50 W	90 W
LSQ1GP24TSD0	47 W	75 W
LSQ1GP48SC0	43 W	85 W
LSQ1GP48SD0	44 W	95 W
LSQ1GP48EB0	43 W	110 W
LSQM2GP48SA0	28 W	58 W
LSQM1GP48FD0	49 W	78 W
LSQ1GP24SC0	38 W	55 W

Model	Static power consumption (min)	Dynamic power consumption (max)
LSQM2GP24SA0	24 W	45 W
LSQ1GP12SC0	26 W	35 W
LSQ1GP12EA0	40 W	50 W
LSQ1FP48SA0	34 W	85 W
LSQ2FP48SA0	30 W	75 W
LSQM1TGT24FD0	60 W	112 W
LSQ1GV48SA0	60 W	80 W
LSQ1GV48SC0	60 W	90 W
LSQM2GT48SA0	35 W	45 W
LSQ1GV48SD0	67 W	95 W
LSQ3GV48SC0	67 W	95 W
LSQM2GT48SC0	38 W	48 W
LSQM1GT48FD0	48 W	65 W
LSQM4GV48SA0	34 W	44 W
LSQM4GV48SC0	38 W	48 W
LSQ1GT24SC0	42 W	50 W
LSQ2FT48SA0	24 W	30 W
LSQ1FV48SA0	30 W	35 W
LSU1WCME0	125 W	180 W
LSU3WCMD0	118 W	150 W
LSQ1WCMD0	86 W	117 W
LSQM1WCMX20	125 W	180 W
LSQM1WCMX40	125 W	180 W
LSQM1FWDSC0	115 W	123 W
LSU1FWCEA0	109 W	157 W
LSU3FWCEA0	109 W	157 W
LSUM1FWCEAB0	109 W	157 W
LSQ2FWBSC0	80 W	104 W
LSQ1FWBSC0	80 W	104 W
LSU1NSCEA0	109 W	157 W
LSQ1NSMSC0	80 W	104 W
LSQM1NSDSC0	115 W	123 W
LSU1IPSBEA0	109 W	157 W
LSQ1IPSSC0	80 W	104 W
LSQM1IPSDSC0	116 W	124 W
LSQ1SSLSC0	80 W	89 W

Model	Static power consumption (min)	Dynamic power consumption (max)
LSQ1ACGASC0	80 W	104 W
LSQM1ACGDSC0	116 W	124 W
LSU1ADECEA0	109 W	157 W
LSQM1ADEDSC0	116 W	124 W
LSQ1LBSC0	80 W	104 W
LSQM2FWDSC0	60 W	66 W
LSQM1EPSB0	102 W	124 W
LSQM1SDNB0	102 W	124 W
LSQM1WBCZ720X	160 W	210 W

Fan tray power consumption

The switch uses fan trays that can automatically adjust the fan speed based on the heat dissipation condition of the switch. The power consumed by a fan tray depends on the fan speed. [Table 1-7](#) shows the power consumption of different fan trays.

Table 1-7 Fan tray power consumption

Model	Minimum fan tray power consumption	Maximum fan tray power consumption
S7502E	7.5 W	14.5 W
S7503E-S	7.5 W	14.5 W
S7503E-M	7.5 W	14.5 W
S7503E	15.5 W	27.5 W
S7506E-S	24.5 W	42.5 W
S7506E	24.5 W	42.5 W
S7506E (non-PoE)	24.5 W	42.5 W
S7506E-MF	7.00 W	14.00 W
S7506E-MF (non-PoE)	7.00 W	14.00 W
S7506E-V	30 W	45.5 W
S7510E	28 W	48.5 W

Total power consumption

For the S7506E-S, S7506E (non-PoE), or S7506E-MF (non-PoE), the total power consumption of the switch equals its system power consumption.

For the S7502E, S7503E-S, S7503E, S7506E, S7506E-MF, S7506E-V, or S7510E, the total power consumption of the switch equals its system power consumption plus its PoE power consumption.

System power consumption

The system power consumption of the switch depends on the type and number of the running cards and the fan tray power consumption.

- The minimum system power consumption is the total static power consumption of all cards plus the minimum fan tray power consumption. For example, an S7503E switch is installed with two LSQM2MPUC0 MPUs, three LSQ3GV48SC0 (LSQM3GV48SC0) service modules, and one fan tray. The minimum system power consumption of the switch is $2 \times 38 + 3 \times 67 + 15.5 = 292.5$ W.
- The maximum system power consumption is the total dynamic power consumption of all cards plus the maximum fan tray power consumption. For example, an S7503E switch is installed with two LSQM2MPUC0 MPUs, three LSQ3GV48SC0 (LSQM3GV48SC0) service modules, and one fan tray. The maximum system power consumption of the switch is $2 \times 63 + 3 \times 95 + 27.5 = 438.5$ W.

PoE power consumption

The power over Ethernet (PoE) power consumption refers to the sum of power consumptions of all powered devices (PDs) connected to the switch.

The maximum PoE power consumption refers to the sum of the power consumption of all PDs when all power interfaces (PIs) are connected to PDs and consume the maximum power. The maximum PoE power consumption is decided by the following items:

- Number of the PoE cards (PSEs) installed on the switch.
- Number of the PIs that each PoE card provides.
- Maximum power of each PoE card.
- Maximum PoE power that each slot of the switch provides.

Each slot of the switch can provide a maximum PoE power of 800 W.

Table 1-8 shows the specifications for each PoE card model.

For example, an S7503E switch is installed with three LSQ3GV48SC0 (LSQM3GV48SC0) PoE cards. The maximum PoE power consumption of the switch is $3 \times 800 = 2400$ W.

Table 1-8 PoE card specifications

Model	PI quantity	PI power	Maximum PSE power	Maximum number
LSQ1GV48SD0	48	0 to 30 W	800 W	<ul style="list-style-type: none"> • S7502E: 2 • S7503E: 3 • S7506E: 6 • S7506E-MF: 6 • S7506E-V: 6 • S7510E: 10
LSQ3GV48SC0	48	0 to 30 W	800 W	<ul style="list-style-type: none"> • S7502E: 2 • S7503E: 3 • S7506E: 6 • S7506E-MF: 6 • S7506E-V: 6 • S7510E: 10
LSQM4GV48SA0	48	0 to 30 W	1440 W	<ul style="list-style-type: none"> • S7502E: 2 • S7503E: 3 • S7506E: 6 • S7506E-MF: 6 • S7506E-V: 6 • S7510E: 10
LSQM4GV48SC0	48	0 to 30 W	1440 W	<ul style="list-style-type: none"> • S7502E: 2 • S7503E: 3 • S7506E: 6

Model	PI quantity	PI power	Maximum PSE power	Maximum number
				<ul style="list-style-type: none"> • S7506E-MF: 6 • S7506E-V: 6 • S7510E: 10
LSQ1CGV24PSC0	24	0 to 15.4 W	370 W	<ul style="list-style-type: none"> • S7502E: 2 • S7503E: 3 • S7506E: 6 • S7506E-MF: 6 • S7506E-V: 6 • S7510E: 10
LSQ1GV24PSC0	24	0 to 15.4 W	370 W	<ul style="list-style-type: none"> • S7502E: 2 • S7503E: 3 • S7506E: 6 • S7506E-MF: 6 • S7506E-V: 6 • S7510E: 10
LSQ1GV24PSA0	24	0 to 15.4 W	370 W	<ul style="list-style-type: none"> • S7502E: 2 • S7503E: 3 • S7506E: 6 • S7506E-MF: 6 • S7506E-V: 6 • S7510E: 10
LSQ1FV48SA0	48	0 to 15.4 W	740 W	<ul style="list-style-type: none"> • S7502E: 2 • S7503E: 3 • S7506E: 6 • S7506E-MF: 6 • S7506E-V: 6 • S7510E: 10
LSQ1GV48SA0	48	0 to 15.4 W	740 W	<ul style="list-style-type: none"> • S7502E: 2 • S7503E: 3 • S7506E: 6 • S7506E-MF: 6 • S7506E-V: 6 • S7510E: 10
LSQ1GV48SC0	48	0 to 15.4 W	740 W	<ul style="list-style-type: none"> • S7502E: 2 • S7503E: 3 • S7506E: 6 • S7506E-MF: 6 • S7506E-V: 6 • S7510E: 10
LSQ1GV40PSC0	40	0 to 15.4 W	616 W	<ul style="list-style-type: none"> • S7502E: 2 • S7503E: 3 • S7506E: 6 • S7506E-MF: 6 • S7506E-V: 6 • S7510E: 10

NOTE:

- The PoE power consumption is 0 if the switch does not supply PoE.
- The maximum PoE power consumption of the S7510E switch is 10000 W.
- For more information about PoE power supply, see *H3C S7500E Switch Series Installation Guide*.

Heat dissipation

Heat dissipation is measured in BTU/h, and 1 W equals 3.4121BTU/h.

The heat dissipation of a switch depends on its power consumption. To calculate heat dissipation of the switch, assume 90% power consumption is converted to heat, and the efficiency of the power module is 90%. Heat dissipation/hour of the switch is $0.9 \times (\text{total power consumption of the cards plus power consumption of the fan tray}) / 0.9 \times 3.4121$.

Table 1-9 shows the heat dissipation for each switch model.

Table 1-9 Heat dissipation

Model	Heat dissipation (BTU/h)
S7502E	1223
S7503E-S	1190
S7503E-M	1441
S7503E	2574
S7506E-S	3605
S7506E	4151
S7506E (non-PoE)	3605
S7506E-MF	4151
S7506E-MF (non-PoE)	3605
S7506E-V	4161
S7510E	6195

For the power consumption of the cards and fan trays of the S7500E series switches, see "[Module power consumption](#)."

Noise

The switch uses fan trays that can adjust the fan speed automatically based on the device temperature. The sound pressure levels vary by fan speed. For more information, see [Table 1-10](#).

Table 1-10 Sound pressure levels

Model	Sound pressure level when the fan tray operates at low speed	Sound pressure level when the fan tray operates at middle speed	Sound pressure level when the fan tray operates at full speed
S7502E	49.8 dBA	51.6 dBA	56.7 dBA
S7503E-S	49.8 dBA	51.6 dBA	56.7 dBA

Model	Sound pressure level when the fan tray operates at low speed	Sound pressure level when the fan tray operates at middle speed	Sound pressure level when the fan tray operates at full speed
S7503E-M	49.8 dBA	51.6 dBA	56.7 dBA
S7503E	51.6 dBA	54.6 dBA	56.1 dBA
S7506E-S	53.6 dBA	56.2 dBA	57.7 dBA
S7506E	53.6 dBA	56.2 dBA	57.7 dBA
S7506E (non-PoE)	53.6 dBA	56.2 dBA	56.7 dBA
S7506E-MF	53.6 dBA	56.2 dBA	57.7 dBA
S7506E-MF (non-PoE)	53.6 dBA	56.2 dBA	56.7 dBA
S7506E-V	52.1 dBA	55.1 dBA	56.2 dBA
S7510E	53.5 dBA	55.8 dBA	56.7 dBA

2 FRUs and compatibility matrixes

For the compatibility between transceiver modules and cards, see *H3C S7500E Switch Series Cards and Transceiver Modules Compatibility Matrixes*.

MPUs

You can install one MPU, or two MPUs for redundancy on the S7500E switches except the S7503E-S switch.

Table 2-1 MPU specifications (1)

Model	Port quantity			
	Console port	Network management port	CF card slot	Other ports
LSQ1MPUA0	1	1	1	N/A
LSQ1CGV24PSC0	1	1	N/A	<ul style="list-style-type: none">20 × 10/100/1000BASE-T RJ-45 ports4 x combo interfaces
LSQ1CGP24TSC0	1	1	N/A	<ul style="list-style-type: none">16 × FE/GE SFP ports (LC)8 x combo interfaces
LSQ1CTGS16SC0	1	1	N/A	16 × 10GE SFP+ ports (LC)
LSQ1MPUB0 (Saliency VI-Lite)	1	1	1	N/A
LSQ1SRPA0 (Saliency VI-Smart)	1	1	N/A	N/A
LSQ1SRPB0 (Saliency VI)	1	1	1	N/A
LSQ1SRPD0 (Saliency VI-Plus)	1	1	1	N/A
LSQ1SRP1CB0 (Saliency VI-Turbo)	1	1	1	N/A
LSQ1SRP12GB0 (Saliency VI-GE)	1	1	1	12 × FE/GE SFP ports (LC)
LSQ1SRP2XB0 (Saliency VI-10GE)	1	1	1	2 × 10GE XFP ports (LC)

Table 2-2 MPU specifications (2)

Model	Specifications			
	Flash memory	NVRAM	SDRAM	Ports
LSQM3MPUA0	1 GB	1 MB	4 GB	<ul style="list-style-type: none"> • 1 × console port • 1 × network management port • 1 × USB port
LSQM3MPUB0	1 GB	1 MB	2 GB	<ul style="list-style-type: none"> • 1 × console port • 1 × USB console port • 2 × network management ports (one 10/100/1000BASE-T port and one SFP port) • 1 × USB port
LSQM2MPUC0	1 GB	1 MB	4 GB	<ul style="list-style-type: none"> • 1 × console port • 1 × USB console port • 4 × network management ports (two 10/100/1000BASE-T ports and two SFP ports) • 1 × USB port
LSQM2MPUD0	1 GB	1 MB	4 GB	<ul style="list-style-type: none"> • 1 × console port • 1 × USB console port • 4 × network management ports (two 10/100/1000BASE-T ports and two SFP ports) • 2 × QSFP+ ports • 1 × USB port
LSQM2MPUDS0	1 GB	1 MB	4 GB	<ul style="list-style-type: none"> • 1 × console port • 1 × USB console port • 4 × network management ports (two 10/100/1000BASE-T ports and two SFP ports) • 1 × USB port
LSQM1SRP8X2QE0	1 GB	1 MB	4 GB	<ul style="list-style-type: none"> • 1 × console port • 1 × USB console port • 4 × network management ports (two 10/100/1000BASE-T ports and two SFP ports) • 8 × SFP+ ports • 2 × QSFP+ ports • 1 × USB port
LSQM1CGP24TSC0	2 GB	1 MB	2 GB	<ul style="list-style-type: none"> • 1 × console port • 1 × USB console port • 1 × 10/100/1000BASE-T network management port • 24 × SFP ports • 4 × SFP+ ports • 1 × USB port

Model	Specifications			
	Flash memory	NVRAM	SDRAM	Ports
LSQM1CGT24TSSC0	2 GB	1 MB	2 GB	<ul style="list-style-type: none"> 1 × console port 1 × USB console port 1 × 10/100/1000BASE-T network management port 24 × RJ-45 ports 4 × SFP+ ports 1 × USB port
LSQM1CTGS24QSFD0	2 GB	1 MB	2 GB	<ul style="list-style-type: none"> 1 × console port 1 × USB console port 2 × network management ports (One RJ-45 port and one SFP port) 24 × 10GBASE-R-SFP+ fiber ports 2 × 40GBASE-R-QSFP+ fiber ports or 1 × 100G QSFP28 fiber port 1 × USB port

ⓘ IMPORTANT:

- Among the network management ports on the LSQM3MPUB0, LSQM2MPUC0, LSQM2MPUD0, LSQM1CTGS24QSFD0, LSQM2MPUDS0, and LSQM1SRP8X2QE0 MPUs, only port 0 is available during the startup of the switch.
- The two QSFP+ ports on the LSQM2MPUD0 MPU are designed only for IRF connection. They do not forward service packets.
- To connect an SFP management Ethernet port on the MPUs, make sure the peer port operates at 1000 Mbps in full-duplex mode.
- The USB ports on the MPUs do not support USB extension cables.
- The switch does not support mixture of different models of MPUs, except the mixture of an LSQM1CGP24TSSC0 and an LSQM1CGT24TSSC0 MPU.
- For an S7503E-M switch, you can install either an MPU or a service module in slot 1.

Table 2-3 MPU and chassis compatibility matrix

Power module	Chassis								
	S7502E	S7503E-S	S7503E-M	S7503E	S7506E-S	S7506E/S7506E-MF	S7506E (non-PoE)/S7506E-MF (non-PoE)	S7506E-V	S7510E
LSQ1MPUA0	Yes	No	No	No	No	No	No	No	No
LSQ1CGP24TSC0	No	Yes	No	No	No	No	No	No	No
LSQ1CGV24PSC0	No	Yes	No	No	No	No	No	No	No
LSQ1CTGS16SC0	No	Yes	No	No	No	No	No	No	No

Power module	Chassis								
	S750 2E	S7503 E-S	S750 3E-M	S7503 E	S7506E -S	S750 6E/S 7506 E-MF	S7506E (non-PoE)/ S7506E-M F (non-PoE)	S750 6E-V	S75 10E
LSQ1MPUB 0 (Saliency VI-Lite)	No	No	No	Yes	No	Yes	No	Yes	Yes
LSQ1SRPA 0 (Saliency VI-Smart)	No	No	No	No	Yes	No	No	No	No
LSQ1SRPB 0 (Saliency VI)	No	No	No	Yes	No	Yes	No	Yes	Yes
LSQ1SRPD 0 (Saliency VI-Plus)	No	No	No	Yes	No	Yes	No	Yes	Yes
LSQ1SRP1 CB0 (Saliency VI-Turbo)	No	No	No	Yes	No	Yes	No	Yes	Yes
LSQ1SRP1 2GB0 (Saliency VI-GE)	No	No	No	Yes	No	Yes	No	Yes	Yes
LSQ1SRP2 XB0 (Saliency VI-10GE)	No	No	No	Yes	No	Yes	No	Yes	Yes
LSQM3MP UA0	Yes	No	No	No	No	No	No	No	No
LSQM3MP UB0	No	No	No	No	No	No	Yes	No	No
LSQM2MP UC0	No	No	No	Yes	No	Yes	No	Yes	Yes
LSQM2MP UD0	No	No	No	Yes	No	Yes	No	Yes	Yes
LSQM2MP UDS0	No	No	No	Yes	No	Yes	No	Yes	Yes
LSQM1SRP 8X2QE0	No	No	No	Yes	No	Yes	No	Yes	Yes
LSQM1CG P24TSSC0	No	No	Yes	No	No	No	No	No	No
LSQM1CGT 24TSSC0	No	No	Yes	No	No	No	No	No	No
LSQM1CTG S24QSFD0	No	No	Yes	No	No	No	No	No	No

NOTE:

For the system software versions that an MPU is compatible with, see the MPU manual.

Service modules

Restrictions and guidelines

Follow these restrictions and guidelines to use service modules:

- For the switch models and system software versions that a service module is compatible with, see the service module manual.
- The model name marked on the front panel of a module might be slightly different from the model name used for sale. For example, LSQ1QGS4SC0 and LSQM1QGS4SC0 identify the same module. LSQ1QGS4SC0 is marked on the module panel. When you order the module, you refer to it as LSQM1QGS4SC0.
- A combo interface is a logical interface that contains an SFP port and an RJ-45 Ethernet port. Only one of them can be activated at a time.
- Service modules supported by the S7510E switch vary by the forwarding mode of the slots. For more information, see device management configuration in *H3C S7500E Switch Series Fundamentals Configuration Guide*.
- For an S7503E-M switch, you can install either an MPU or a service module in slot 1.
- Follow these guidelines to use service modules on an S7502E switch:
 - Do not use an LSQM1TGS16FD0 interface module with the following modules:
 - EC interface modules.
 - SD interface modules.
 - EB interface modules.
 - LSQ1TGS8SC0 interface module.
 - LSQ3GV48SC0 interface module.
 - OAA modules: LSU1FWCEA0, LSU3FWCEA0, LSU3WCMD0, LSU1ADECEA0, LSU1NSCEA0, LSUM1FWCEAB0, LSU1IPSBFA0, LSU1WCME0, LSQM1WCMX40, and LSQM1WCMX20.
 - Do not use an FD interface module (except the LSQM1TGS16FD0), FE interface module, LSQM1EPSB0 module, or LSQM1SDNB0 module with the following modules:
 - SA interface modules.
 - EC interface modules.
 - SD interface modules.
 - EB interface modules.
 - LSQ1TGS8SC0 interface module.
 - LSQ3GV48SC0 interface module.
 - OAA modules: LSU1FWCEA0, LSU3FWCEA0, LSU3WCMD0, LSU1ADECEA0, LSU1NSCEA0, LSUM1FWCEAB0, LSU1IPSBFA0, LSU1WCME0, LSQM1WCMX40, and LSQM1WCMX20.
 - Do not use an LSQM1TGS16GPSA0 interface module with the following modules:
 - SD interface modules.
 - EB interface modules.
 - LSQ1TGS8SC0 interface module.

- LSQ3GV48SC0 interface module.
- OAA modules: LSU1FWCEA0, LSU3FWCEA0, LSU3WCMD0, LSU1ADECEA0, LSU1NSCEA0, LSUM1FWCEAB0, LSU1IPSBFA0, LSU1WCME0, LSQM1WCMX40, and LSQM1WCMX20.
- For an S7510E switch installed with an LSQM2MPUC0 MPU, support for FD and FE interface modules depends on the system version:
 - In a version earlier than R7577P02, the S7510E switch does not support FD or FE interface modules.
 - In a version between R7577P02 and R7577P04, the S7510E switch supports only LSQM1TGS16FD0 and LSQM1GP40TS8FD0 interface modules.
 - In a version between R7577P05 and R7577P06, the S7510E switch supports only LSQM1TGS16FD0, LSQM1GP40TS8FD0, and LSQM1TGS48RFE0 interface modules.
 - In R7585 or later, the S7510E switch supports all FD and FE interface modules.
- After you convert 40G ports on an LSQM1CQGS12SG0 interface module to 100G ports, only ports 1, 4, 7, and 10 are available.
- To avoid module damage, do not install an LSQM2TGS48SG0, LSQM1CGS2FE0, or LSQM1CQGS12SG0 interface module in slot 10 on an S7510E switch.
- 7522 and later versions do not support the LSQ2FWBSC0, LSQ1NSMSC0, LSQ1FWBSC0, LSQ1LBSC0, LSQ1SSLSC0, LSQ1ACGASC0, LSQ1IPSSC0, or LSQ1WCMD0 module.

Interface modules

Table 2-4 Interface module specifications

Model	Port quantity	Port type	Available transceiver modules and network cables
LSQM1TGS24QSF0	26	<ul style="list-style-type: none"> • 2 × 40GBASE-R-QSFP+ fiber ports or 1 × 100G QSFP28 fiber port • 24 × 10GBASE-R-SFP+ fiber ports 	<ul style="list-style-type: none"> • QSFP28 transceiver module • QSFP28 DAC cable • QSFP+ transceiver module • QSFP+ DAC cable • QSFP+ to SFP+ DAC cable • 10-GE SFP+ transceiver module • 10-GE SFP+ DAC cable • GE SFP transceiver module
LSQM1CQGS12SG0	12	4 × 100GBASE-R QSFP28 fiber ports or 12 × 40GBASE-R QSFP+ fiber ports	<ul style="list-style-type: none"> • QSFP28 transceiver module • QSFP28 DAC cable • QSFP+ transceiver module • QSFP+ DAC cable • QSFP+ to SFP+ DAC cable
LSQM1CGS2FE0	2	100GBASE-R QSFP28 fiber port	<ul style="list-style-type: none"> • QSFP28 transceiver module • QSFP28 DAC cable

Model	Port quantity	Port type	Available transceiver modules and network cables
LSQM1QGS24RSG0	24	40GBASE-R QSFP+ fiber port	<ul style="list-style-type: none"> • QSFP+ transceiver module • QSFP+ DAC cable • QSFP+ to SFP+ DAC cable
LSQ1QGS4SC0	4	40GBASE-R QSFP+ fiber port	<ul style="list-style-type: none"> • QSFP+ transceiver module • QSFP+ DAC cable • QSFP+ to SFP+ DAC cable
LSQ1QGC4SC0	4	40GBASE-R-CFP fiber port	10-GE CFP transceiver module
LSQ1GP24TXSD0	26	<ul style="list-style-type: none"> • 2 × 10GBASE-R/W XFP/LC fiber ports • 16 × 1000BASE-X-SFP/LC fiber ports • 8 × combo interfaces 	<ul style="list-style-type: none"> • 10-GE XFP transceiver module • FE/GE SFP transceiver module • Category 5 twisted-pair cable
LSQ1P24XGSC0	26	<ul style="list-style-type: none"> • 2 × 10GBASE-R XFP/LC fiber ports • 24 × 1000BASE-X-SFP/LC fiber ports 	<ul style="list-style-type: none"> • 10-GE XFP transceiver module • FE/GE SFP transceiver module
LSQ1T24XGSC0	26	<ul style="list-style-type: none"> • 2 × 10GBASE-R XFP/LC fiber ports • 24 × 10/100/1000BASE-T-RJ45 copper ports 	<ul style="list-style-type: none"> • 10-GE XFP transceiver module • Category 5 twisted-pair cable
LSQ1TGX8SD0	8	10GBASE-R XFP/LC fiber port	10-GE XFP transceiver module
LSQ1TGX4SD0	4	10GBASE-R XFP/LC fiber port	10-GE XFP transceiver module
LSQ1TGX4EB0	4	10GBASE-R XFP/LC fiber port	10-GE XFP transceiver module
LSQ1TGX2SC0	2	10GBASE-R XFP/LC fiber port	10-GE XFP transceiver module
LSQ1TGX2SD0	2	10GBASE-R XFP/LC fiber port	10-GE XFP transceiver module
LSQ1TGX2EB0	2	10GBASE-R XFP/LC fiber port	10-GE XFP transceiver module
LSQ1TGX1EA0	1	10GBASE-R XFP/LC fiber port	10-GE XFP transceiver module
LSQM2GT24PTSC0	48	<ul style="list-style-type: none"> • 4 × 10GBASE-R SFP+/LC fiber ports • 20 × 1000BASE-X-SFP/LC fiber ports • 24 × 10/100/1000BASE-T-RJ45 copper ports 	<ul style="list-style-type: none"> • 10-GE SFP+ transceiver module • 10-GE SFP+ DAC cable • FE/GE SFP transceiver module • Category 5 twisted-pair cable
LSQM2GT24TSSC0	28	<ul style="list-style-type: none"> • 4 × 10GBASE-R SFP+/LC fiber ports • 24 × 10/100/1000BASE-T-RJ45 copper ports 	<ul style="list-style-type: none"> • 10-GE SFP+ transceiver module • 10-GE SFP+ DAC cable • GE SFP transceiver module • Category 5 twisted-pair cable
LSQM3GP44TSS	48	<ul style="list-style-type: none"> • 4 × 10GBASE-R-SFP+ fiber 	<ul style="list-style-type: none"> • 10-GE SFP+ transceiver

Model	Port quantity	Port type	Available transceiver modules and network cables
C0		ports (support for MACsec) <ul style="list-style-type: none"> 44 × 1000BASE-X-SFP fiber ports (support for MACsec) 	module <ul style="list-style-type: none"> 10-GE SFP+ DAC cable FE/GE SFP transceiver module
LSQM2GP44TSS C0	48	<ul style="list-style-type: none"> 4 × 10GBASE-R SFP+/LC fiber ports 44 × 1000BASE-X-SFP/LC fiber ports 	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable FE/GE SFP transceiver module
LSQM1GP40TS8 FD0	48	<ul style="list-style-type: none"> 8 × 10GBASE-R-SFP+/LC fiber ports 40 × 1000BASE-X-SFP/LC fiber ports 	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable FE/GE SFP transceiver module
LSQM2GP40TS8 FD0	48	<ul style="list-style-type: none"> 8 × 10GBASE-R-SFP+/LC fiber ports 40 × 1000BASE-X-SFP/LC fiber ports 	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable FE/GE SFP transceiver module
LSQM1TGS48RS G0	48	10GBASE-R-SFP+ fiber port	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable GE SFP transceiver module
LSQM2TGS48SG 0	48	10GBASE-R SFP+ fiber port	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable GE SFP transceiver module
LSQM1TGS48RF E0	48	10GBASE-R-SFP+ fiber port	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable GE SFP transceiver module
LSQM1TGS16GP SA0	40	<ul style="list-style-type: none"> 24 × 1000BASE-X-SFP/LC fiber ports 16 × 10GBASE-R-SFP+/LC fiber ports 	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable GE SFP transceiver module
LSQM1TGS24FD 0	24	10GBASE-R-SFP+ fiber port	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable GE SFP transceiver module
LSQ1TGS16SC0	16	10GBASE-R SFP+/LC fiber port	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable GE SFP transceiver module

Model	Port quantity	Port type	Available transceiver modules and network cables
LSQM1TGS16FD0	16	10GBASE-R SFP+/LC fiber port	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable GE SFP transceiver module
LSQM2TGS16SF0	16	10GBASE-R SFP+/LC fiber port	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable GE SFP transceiver module
LSQ1TGS8SC0	8	10GBASE-R SFP+/LC fiber port	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable
LSQ1TGS4SC0	4	10GBASE-R SFP+/LC fiber port	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable
LSQM2GP24TSSA0	28	<ul style="list-style-type: none"> 4 × 10GBASE-R/ SFP+/LC fiber ports 24 × 1000BASE-X-SFP/LC fiber ports 	<ul style="list-style-type: none"> 10-GE SFP+ transceiver module FE/GE SFP transceiver module
LSQM1TGS12EC0	12	10GBASE-R SFP+/LC fiber port	10-GE SFP+ transceiver module
LSQM1XPT12TSFD0	20	<ul style="list-style-type: none"> 12 × 10G EPON OLT/SC fiber ports 8 × 10GBASE-R-SFP+/LC fiber ports 	<ul style="list-style-type: none"> XFP EPON transceiver module 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable
LSQM2XPT12TSFD0	20	<ul style="list-style-type: none"> 12 × 10G EPON OLT/SC fiber ports 8 × 10GBASE-R-SFP+/LC fiber ports 	<ul style="list-style-type: none"> SFP+ EPON transceiver module 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable
LSQM1PT24TSSC0	26	<ul style="list-style-type: none"> 24 × 1000BASE-PX-SFP/SC fiber ports 2 × 10GBASE-R SFP+/LC fiber ports 	<ul style="list-style-type: none"> SFP EPON transceiver module 10-GE SFP+ transceiver module GE SFP transceiver module
LSQM1PT8TSSC0	10	<ul style="list-style-type: none"> 8 × 1000BASE-PX-SFP/SC fiber ports 2 × 10GBASE-X-SFP/LC fiber ports 	<ul style="list-style-type: none"> SFP EPON transceiver module 10-GE SFP+ transceiver module GE SFP transceiver module
LSQ4PT16PSC0	24	<ul style="list-style-type: none"> 16 × 1000BASE-PX-SFP/SC fiber ports 8 × 1000BASE-X-SFP/LC fiber ports 	<ul style="list-style-type: none"> EPON transceiver module FE/GE SFP transceiver module
LSQ1PT16PSC0	24	16 × 1000BASE-PX-SFP/SC fiber ports	<ul style="list-style-type: none"> EPON transceiver module FE/GE SFP transceiver

Model	Port quantity	Port type	Available transceiver modules and network cables
		<ul style="list-style-type: none"> 8 × 1000BASE-X-SFP/LC fiber ports 	module
LSQ4PT16PSC0	24	<ul style="list-style-type: none"> 16 × 1000BASE-PX-SFP/SC fiber ports 8 × 1000BASE-X-SFP/LC fiber ports 	<ul style="list-style-type: none"> EPON transceiver module FE/GE SFP transceiver module
LSQ1PT8PSC0	16	<ul style="list-style-type: none"> 8 × 1000BASE-PX-SFP/SC fiber ports 8 × 1000BASE-X-SFP/LC fiber ports 	<ul style="list-style-type: none"> EPON transceiver module FE/GE SFP transceiver module
LSQ4PT8PSC0	16	<ul style="list-style-type: none"> 8 × 1000BASE-PX-SFP/SC fiber ports 8 × 1000BASE-X-SFP/LC fiber ports 	<ul style="list-style-type: none"> EPON transceiver module FE/GE SFP transceiver module
LSQ1PT4PSC0	12	<ul style="list-style-type: none"> 4 × 1000BASE-PX-SFP/SC fiber ports 8 × 1000BASE-X-SFP/LC fiber ports 	<ul style="list-style-type: none"> EPON transceiver module FE/GE SFP transceiver module
LSQ4PT4PSC0	12	<ul style="list-style-type: none"> 4 × 1000BASE-PX-SFP/SC fiber ports 8 × 1000BASE-X-SFP/LC fiber ports 	<ul style="list-style-type: none"> EPON transceiver module FE/GE SFP transceiver module
LSQ1GV40PSC0	48	<ul style="list-style-type: none"> 8 × 1000BASE-X-SFP/LC fiber ports 40 × 10/100/1000BASE-T-RJ45 copper ports 	<ul style="list-style-type: none"> FE/GE SFP transceiver module Category 5 twisted-pair cable
LSQ1GV24PSC0	24	<ul style="list-style-type: none"> 20 × 10/100/1000BASE-T-RJ45 copper ports 4 × combo interfaces 	<ul style="list-style-type: none"> FE/GE SFP transceiver module Category 5 twisted-pair cable
LSQ1GV24PSA0	24	<ul style="list-style-type: none"> 20 × 10/100/1000BASE-T-RJ45 copper ports 4 × combo interfaces 	<ul style="list-style-type: none"> FE/GE SFP transceiver module Category 5 twisted-pair cable
LSQ1GP24TSA0	24	<ul style="list-style-type: none"> 16 × 1000BASE-X-SFP/LC fiber ports 8 × combo interfaces 	<ul style="list-style-type: none"> FE/GE SFP transceiver module Category 5 twisted-pair cable
LSQ1GP24TSC0	24	<ul style="list-style-type: none"> 16 × 1000BASE-X-SFP/LC fiber ports 8 × combo interfaces 	<ul style="list-style-type: none"> FE/GE SFP transceiver module Category 5 twisted-pair cable
LSQ1GP24TEB0	24	<ul style="list-style-type: none"> 16 × 1000BASE-X-SFP/LC fiber ports 8 × combo interfaces 	<ul style="list-style-type: none"> FE/GE SFP transceiver module Category 5 twisted-pair cable
LSQ1GP24TSD0	24	<ul style="list-style-type: none"> 16 × 1000BASE-X-SFP/LC fiber ports 8 × combo interfaces 	<ul style="list-style-type: none"> FE/GE SFP transceiver module Category 5 twisted-pair cable

Model	Port quantity	Port type	Available transceiver modules and network cables
LSQ1GP48SC0	48	1000BASE-X-SFP/LC fiber port	FE/GE SFP transceiver module
LSQ1GP48SD0	48	1000BASE-X-SFP/LC fiber port	FE/GE SFP transceiver module
LSQ1GP48EB0	48	1000BASE-X-SFP/LC fiber port	FE/GE SFP transceiver module
LSQM2GP48SA0	48	1000BASE-X-SFP/LC fiber port	FE/GE SFP transceiver module
LSQM1GP48FD0	48	1000BASE-X-SFP/LC fiber port	FE/GE SFP transceiver module
LSQ1GP24SC0	24	1000BASE-X-SFP/LC fiber port	FE/GE SFP transceiver module
LSQM2GP24SA0	24	1000BASE-X-SFP/LC fiber port	FE/GE SFP transceiver module
LSQ1GP12SC0	12	1000BASE-X-SFP/LC fiber port	FE/GE SFP transceiver module
LSQ1GP12EA0	12	1000BASE-X-SFP/LC fiber port	GE SFP transceiver module
LSQ1FP48SA0	48	100BASE-FX-SFP/LC fiber port	FE SFP transceiver module
LSQ2FP48SA0	48	100BASE-FX-SFP/LC fiber port	FE SFP transceiver module
LSQM1TGT24FD0	24	10GBASE-T-RJ45 copper port	Category 6A/7 twisted-pair cable
LSQ1GV48SA0	48	10/100/1000BASE-T-RJ45 copper port	Category 5 twisted-pair cable
LSQ1GV48SC0	48	10/100/1000BASE-T-RJ45 copper port	Category 5 twisted-pair cable
LSQM2GT48SA0	48	10/100/1000BASE-T-RJ45 copper port	Category 5 twisted-pair cable
LSQ1GV48SD0	48	10/100/1000BASE-T-RJ45 copper port	Category 5 twisted-pair cable
LSQ3GV48SC0	48	10/100/1000BASE-T-RJ45 copper port	Category 5 twisted-pair cable
LSQM2GT48SC0	48	10/100/1000BASE-T-RJ45 copper port	Category 5 twisted-pair cable
LSQM1GT48FD0	48	10/100/1000BASE-T-RJ45 copper port	Category 5 twisted-pair cable
LSQM4GV48SA0	48	10/100/1000BASE-T-RJ45 copper port	Category 5 twisted-pair cable
LSQM4GV48SC0	48	10/100/1000BASE-T-RJ45 copper port	Category 5 twisted-pair cable
LSQ1GT24SC0	24	10/100/1000BASE-T-RJ45 copper port	Category 5 twisted-pair cable
LSQ2FT48SA0	48	10/100BASE-TX-RJ45 copper port	Category 5 twisted-pair cable
LSQ1FV48SA0	48	10/100BASE-TX-RJ45 copper port	Category 5 twisted-pair cable

OAA modules

Table 2-5 OAA module specifications

Model	Description	Ports	Compatible transceiver modules
LSU1WCME0	High-performance access controller module	<ul style="list-style-type: none"> 1 × console port 1 × 100/1000BASE-T out-of-band management Ethernet port 	Category 5 or above twisted pair cable
LSU3WCMD0	High-performance access controller module	<ul style="list-style-type: none"> 1 × console port 1 × CF card slot (supporting 256-MB, 512-MB, and 1-GB CF cards) 2 × USB ports 2 × 10/100/1000BASE-T copper ports 2 × GE combo interfaces 	<ul style="list-style-type: none"> Category 5 twisted pair cable GE SFP transceiver module
LSQ1WCMD0	High-performance access controller module	<ul style="list-style-type: none"> 1 × console port 2 × USB ports 2 × 10/100/1000BASE-T copper ports 	Category 5 twisted pair cable
LSQM1WCMX20	Access controller module	<ul style="list-style-type: none"> 1 × console port 1 × 10/100/1000BASE-T out-of-band management Ethernet port 	Category 5 twisted pair cable
LSQM1WCMX40	Access controller module	<ul style="list-style-type: none"> 1 × console port 1 × 10/100/1000BASE-T out-of-band management Ethernet port 	Category 5 twisted pair cable
LSQM1FWDSC0	Firewall module	<ul style="list-style-type: none"> 1 × console port 1 × USB port (reserved for future use) 1 × GE Ethernet copper port 1 × hard disk slot 	Category 5 twisted pair cable
LSU1FWCEA0	Firewall module	<ul style="list-style-type: none"> 1 × console port 1 × CF card slot (supporting 256-MB, 512-MB, and 1-GB CF cards) 2 × USB ports (reserved) 2 × GE combo interfaces 	<ul style="list-style-type: none"> Category 5 twisted pair cable GE SFP transceiver module
LSU3FWCEA0	Firewall module	<ul style="list-style-type: none"> 1 × console port 1 × CF card slot (supporting 256-MB, 512-MB, and 1-GB CF cards) 2 × USB ports 2 × GE combo interfaces 	<ul style="list-style-type: none"> Category 5 twisted pair cable GE SFP transceiver module
LSUM1FWCEAB0	Firewall module	<ul style="list-style-type: none"> 1 × console port 2 × USB ports 2 × GE combo interfaces 	<ul style="list-style-type: none"> Category 5 twisted pair cable GE SFP transceiver module
LSQ2FWBSC0	Firewall module	<ul style="list-style-type: none"> 1 × console port 1 × CF card slot (supporting 256-MB, 512-MB, and 1-GB CF cards) 2 × USB ports 	<ul style="list-style-type: none"> Category 5 twisted pair cable GE SFP

Model	Description	Ports	Compatible transceiver modules
		<ul style="list-style-type: none"> 2 × 10/100/1000BASE-T copper ports 2 × GE combo interfaces 	transceiver module
LSQ1FWBSC0	Firewall module	<ul style="list-style-type: none"> 1 × console port 1 × CF card slot (supporting 256-MB, 512-MB, and 1-GB CF cards) 2 × USB ports 2 × 10/100/1000BASE-T copper ports 2 × GE combo interfaces 	<ul style="list-style-type: none"> Category 5 twisted pair cable GE SFP transceiver module
LSU1NSCEA0	10-GE high performance NetStream module	<ul style="list-style-type: none"> 1 × console port 2 × USB ports (reserved) 2 × GE combo interfaces 	<ul style="list-style-type: none"> Category 5 or above twisted pair cable GE SFP transceiver module
LSQ1NSMSC0	NetStream module	<ul style="list-style-type: none"> 1 × console port 1 × CF card slot (supporting 256-MB, 512-MB, and 1-GB CF cards) 2 × USB ports 2 × 10/100/1000BASE-T copper ports 2 × GE combo interfaces 	<ul style="list-style-type: none"> Category 5 twisted pair cable GE SFP transceiver module
LSQM1NSDSC0	NetStream module	<ul style="list-style-type: none"> 1 × console port 1 × USB port (reserved for future use) 1 × GE Ethernet copper port 1 × hard disk slot 	Category 5 twisted pair cable
LSU1IPSBEO	Intrusion prevention system module	<ul style="list-style-type: none"> 1 × console port 2 × USB ports 2 × GE combo interfaces 	<ul style="list-style-type: none"> Category 5 twisted pair cable GE SFP transceiver module
LSQ1IPSSC0	Intrusion prevention system module	<ul style="list-style-type: none"> 1 × console port 1 × CF card slot (supporting 256-MB, 512-MB, and 1-GB CF cards) 2 × USB ports 2 × 10/100/1000BASE-T copper ports 2 × GE combo interfaces 	<ul style="list-style-type: none"> Category 5 twisted pair cable GE SFP transceiver module
LSQM1IPSDSC0	Intrusion prevention system module	<ul style="list-style-type: none"> 1 × console port 1 × USB port (only for supplying power to a PFC) 1 × 10/100/1000BASE-T copper port 1 × hard disk slot 	Category 5 twisted pair cable
LSQ1SSLSC0	SSL VPN module	<ul style="list-style-type: none"> 1 × console port 1 × CF card slot (supporting 256-MB, 512-MB, and 1-GB CF cards) 2 × USB ports 	<ul style="list-style-type: none"> Category 5 twisted pair cable GE SFP transceiver

Model	Description	Ports	Compatible transceiver modules
			module
LSQ1ACGASC0	Application control gateway module	<ul style="list-style-type: none"> 1 × console port 1 × CF card slot (supporting 256-MB, 512-MB, and 1-GB CF cards) 2 × USB ports 2 × 10/100/1000BASE-T copper ports 2 × GE combo interfaces 	<ul style="list-style-type: none"> Category 5 twisted pair cable GE SFP transceiver module
LSQM1ACGDS C0	Application control gateway module	<ul style="list-style-type: none"> 1 × console port 1 × USB port (reserved) 1 × 10/100/1000BASE-T copper port 1 × hard disk slot 	Category 5 twisted pair cable
LSU1ADECEA0	Application delivery engine module	<ul style="list-style-type: none"> 1 × console port 2 × USB ports 2 × GE combo interfaces 	<ul style="list-style-type: none"> Category 5 twisted pair cable GE SFP transceiver module
LSQM1ADEDS C0	Application delivery engine module	<ul style="list-style-type: none"> 1 × console port 1 × USB port (only for supplying power to a PFC) 1 × 10/100/1000BASE-T copper port 1 × hard disk slot 	Category 5 twisted pair cable
LSQ1LBSC0	Load balancing module	<ul style="list-style-type: none"> 1 × console port 1 × CF card slot (supporting a 256-MB, 512-MB, or 1-GB CF card) 2 USB ports 2 × 10/100/1000BASE-T copper ports 2 × GE combo interfaces 	<ul style="list-style-type: none"> Category 5 twisted pair cable GE SFP transceiver module
LSQM2FWDSC0	High-performance service module	<ul style="list-style-type: none"> 1 × console port 2 × USB ports 2 × GE combo interfaces 4 × 10GBASE-R fiber ports 1 × hard disk 	<ul style="list-style-type: none"> Category 5 twisted-pair cable GE SFP transceiver module 10-GE SFP+ transceiver module 10-GE SFP+ DAC cable
LSQM1EPSB0	EPS endpoint security module	<ul style="list-style-type: none"> 3 × USB 2.0 ports (used by technical support for debugging only) 1 × VGA connector 1 × 10/100/1000BASE-T management Ethernet port 1 × console port (used by technical support for debugging only) 	Category 5 twisted-pair cable
LSQM1SDNB0	SDN automation module	<ul style="list-style-type: none"> 3 × USB 2.0 ports (used by technical support for debugging only) 	Category 5 twisted-pair cable

Model	Description	Ports	Compatible transceiver modules
		<ul style="list-style-type: none"> 1 × VGA connector 1 × 10/100/1000BASE-T management Ethernet port 1 × console port (used by technical support for debugging only) 	
LSQM1WBCZ7 20X	Multiservice access controller module	<ul style="list-style-type: none"> 3 × USB 2.0 ports (used by technical support for debugging only) 1 × VGA connector 1 × 1000BASE-T management Ethernet port 1 × console port 	Category 5 twisted-pair cable

Power system

Restrictions and guidelines

Before you order a power module, make sure you have read the following restrictions and guidelines:

- A chassis must be configured with a minimum of one power module. To improve power supply availability, you can configure a chassis with two power modules for redundancy.
- The power modules installed on an S7500E switch must be the same type (AC or DC) and model.
- Make sure the maximum output power of a power module is greater than the total power consumption of the switch. As a best practice, reserve 20% of the maximum output power. For more information about the total power consumption, see "[Module power consumption](#)."
- If you want the switch to provide PoE power for PDs, order a power module that can be used for setting up a PoE system. Make sure the maximum PoE power provided by the power module is greater than the PoE power consumption. The requirements for setting up a PoE system vary by switch model. For more information about setting up a PoE system, see *H3C S7500E Switch Series Installation Guide*.

Power modules

CAUTION:

- Do not install a PSR1200-A/PSR1200-D power module on an LSQM1PWRSPA power module adapter.
- Do not install an LSQM1PWRSPA power module adapter on an S7510E switch.

Table 2-6 300 W power module specifications

Item	PSR320-A	PSR320-D
Rated input voltage	100 VAC to 240 VAC @ 50 Hz or 60 Hz	–48 VDC to –60 VDC
Rated output voltage	12 VDC	
Max input current	10 A	11 A
Max output current	25 A	

Item	PSR320-A	PSR320-D
Max system output power	300 W	
Support for PoE	No	
Max PoE output power	N/A	

Table 2-7 650 W power module specifications

Item	PSR650-A	PSR650C-12A	PSR650-D	PSR650C-12D
Rated input voltage	100 VAC to 240 VAC @ 50 Hz or 60 Hz	100 VAC to 240 VAC @ 50 Hz or 60 Hz	–48 VDC to –60 VDC	–48 VDC to –60 VDC
Rated output voltage	12 VDC			
Max input current	10 A	10 A	25 A	25 A
Max output current	54 A	54 A	<ul style="list-style-type: none"> 12 V: 54 A 3.3 V: 4 A 	54 A
Max system output power	650 W			
Support for PoE	No			
Max PoE output power	N/A			

Table 2-8 1200 W power module specifications

Item	PSR1200-A	PSR1200-D
Rated input voltage	100 VAC to 240 VAC @ 50 Hz or 60 Hz	–48 VDC to –60 VDC
Rated output voltage	<ul style="list-style-type: none"> 12 VDC 3.3 VDC 	
Max input current	16 A	42 A
Max output current	<ul style="list-style-type: none"> 12 V: 100 A 3.3 V: 4 A 	
Max system output power	1213 W	
Support for PoE	No	
Max PoE output power	N/A	

Table 2-9 1400 W power module specifications

Item	PSR1400-A	PSR1400-12A1-F	PSR1400-D	PSR1400-12D1
Rated input voltage	100 VAC to 240 VAC @ 50 Hz or 60 Hz	100 VAC to 240 VAC @ 50 Hz or 60 Hz	–48 VDC to –60 VDC	–48 VDC to –60 VDC
Rated output voltage	12 VDC	12 VDC	<ul style="list-style-type: none"> 12 VDC PoE: 48 VDC 	12 VDC
Max input current	16 A	16 A	190 A	50 A

Item	PSR1400-A	PSR1400-12A1-F	PSR1400-D	PSR1400-12D1
Max output current	117 A	117 A	<ul style="list-style-type: none"> 12 V output: 117 A PoE: 140 A 	117 A
Max system output power	1150 W (110 VAC) 1400 W (220 VAC)	1150 W (110 VAC) 1400 W (220 VAC or 270 VDC)	1400 W	1400 W
Support for PoE	No	No	Yes	No
Max PoE output power	N/A	N/A	6720 W	N/A

Table 2-10 2500 W power module specifications

Item	PSR2500-12AHD	PSR2500-12D
Rated input voltage	<ul style="list-style-type: none"> 100 VAC to 240 VAC @ 50 Hz or 60 Hz 240 VDC to 380 VDC 	–48 VDC to –60 VDC
Rated output voltage	12 VDC	
Max input current	16 A	85 A
Max output current	<ul style="list-style-type: none"> 90 VAC to 180 VAC input: 100 A 180 VAC to 290 VAC or 180 VDC to 400 VDC input: 208 A 	208 A
Max system output power	2500 W	
Support for PoE	No	
Max PoE output power	N/A	

Table 2-11 2800 W power module specifications

Item	PSR2800-ACV	PSR2800-A1-F
Rated input voltage	100 VAC to 240 VAC @ 50 Hz or 60 Hz	
Rated output voltage	<ul style="list-style-type: none"> 12 VDC PoE: –50 VDC 	
Max input current	16 A	
Max output current	<ul style="list-style-type: none"> 12 V output: 117 A PoE: 28 A 	
Max system output power	1150 W (110 VAC) 1400 W (220 VAC)	1150 W (110 VAC) 1400 W (220 VAC or 270 VDC)
Support for PoE	Yes	
Max PoE output power	1150 W (110 VAC) 1400 W (220 VAC)	1150 W (110 VAC) 1400 W (220 VAC or 270 VDC)

Table 2-12 6000 W power module specifications

Item	PSR6000-ACV
Rated input voltage	100 VAC to 240 VAC @ 50 Hz or 60 Hz
Rated output voltage	<ul style="list-style-type: none"> 12 VDC PoE: 48 VDC
Max input current	16 A
Max output current	110 V input: <ul style="list-style-type: none"> 12 VDC: 96 A One PoE input: 23 A Two PoE inputs: 46 A Three PoE inputs: 69 A 220 V input: <ul style="list-style-type: none"> 12 VDC: 117 A One PoE input: 34 A Two PoE inputs: 68 A Three PoE inputs: 100 A
Max system output power	1150 W (110 VAC) 1400 W (220 VAC)
Support for PoE	Yes
Max PoE output power	110 V input: <ul style="list-style-type: none"> One PoE input: 1200 W Two PoE inputs: 2400 W Three PoE inputs: 3600 W 220 V input: <ul style="list-style-type: none"> One PoE input: 1800 W Two PoE inputs: 3600 W Three PoE inputs: 5300 W

NOTE:

The maximum PoE output power is 10000 W when the device is fully configured with the PSR1400-D or PSR6000-ACV power modules.

Table 2-13 Power module and chassis compatibility matrix

Power module	Chassis								
	S750 2E	S7503 E-S	S750 3E-M	S750 3E	S750 6E-S	S7506 E/S750 6E-MF	S7506E (non-PoE)/ S7506E-MF (non-PoE)	S7506 E-V	S751 0E
PSR320-A	●	●	●	—	—	—	—	—	—
PSR320-D	●	●	—	—	—	—	—	—	—
PSR650-A	●	●	●	○	○	○	○	○	○
PSR650-D	●	●	●	○	○	○	○	○	○
PSR650C-1 2A	—	—	—	●	—	●	●	●	—

Power module	Chassis								
	S750 2E	S7503 E-S	S750 3E-M	S750 3E	S750 6E-S	S7506 E/S750 6E-MF	S7506E (non-PoE)/ S7506E-MF (non-PoE)	S7506 E-V	S751 0E
PSR650C-1 2D	—	—	—	●	—	●	●	●	—
PSR1200-A	—	—	—	○	—	○	○	○	○
PSR1200-D	—	—	—	○	—	○	○	○	○
PSR1400-A	—	—	—	●	●	●	●	●	●
PSR1400-1 2A1-F	—	—	—	●	●	●	●	●	●
PSR1400-D	—	—	—	●	●	●	●	●	●
PSR1400-1 2D1	—	—	—	●	●	●	●	●	●
PSR2500-1 2AHD	—	—	—	●	—	●	●	●	●
PSR2500-1 2D	—	—	—	●	—	●	●	●	●
PSR2800-A CV	—	—	—	●	●	●	—	●	●
PSR2800-A 1-F	—	—	—	●	●	●	—	●	●
PSR6000-A CV	—	—	—	●	●	●	—	●	●

NOTE:

- "●" indicates that the power module can be directly installed on the chassis.
- "○" indicates that you must first install a power module adapter on the chassis and then install the power module on the power module adapter. For more information about installing a power module and a power module adapter, see *H3C S7500E Switch Series Installation Guide*.
- "—" indicates that the power module cannot be installed on the chassis.

Power cords

DC power cords

A DC power cord connects a DC power module to an external DC power source.

Table 2-14 DC power cords available for DC power modules

DC power cord code	DC power cord length	DC power module
0404A06T	3 m (9.84 ft)	PSR320-D/PSR650-D/PSR650C-12D
0404A01N	5 m (16.40 ft)	
0404A01P	10 m (32.81 ft)	
0404A073	20 m (65.62 ft)	

DC power cord code	DC power cord length	DC power module
0404A0DU	3 m (9.84 ft)	PSR1200-D
0404A07G	3 m (9.84 ft)	PSR1400-D/PSR1400-12D1/PSR2500-12D
0404A08T	10 m (32.81 ft)	
0404A08U	20 m (65.62 ft)	
0404A072	25 m (82.02 ft)	
0404A0RL	3 m (9.84 ft)	PSR2500-12AHD (240 to 380 VDC)

AC power cords

AC power cords are used for connecting the power modules of an S7500E switch to the external AC power supply system. Before you order an AC power cord, make sure you have read the following restrictions and guidelines:

- Select AC power cords according to the power of the power module.
- The connector type varies by country or region. Select a compliant connector type as needed.
- For the PSR320-A, PSR650-A, and PSR650C-12A power modules, select 10A AC power cords.
- For the PSR1200-A, PSR1400-A, PSR1400-12A1-F, PSR2500-12AHD, PSR2800-ACV, PSR2800-A1-F, and PSR6000-ACV power modules, select 16A AC power cords.
- For the PSR2500-12AHD power module, select the 0404A0RP or 0404A0RQ AC power cord. The 0404A0RP and 0404A0RQ AC power cords can only be used for the PSR2500-12AHD power module.
- The type of the connector (connected to the power source) varies by country or region. Select a compliant connector type as needed. For the connector types of different countries or regions and the power cord codes, see *H3C Power Cords & Cables User Guide*.

PoE power system

PoE DC power cords

PoE DC power cords are used to connect the PoE PEM of the switch and the PoE external power frame.

Table 2-15 PoE DC power cord specifications

DC power module	PoE DC power cord	Cable length
PSR2800-ACV/ PSR2800-A1-F/PSR6000-ACV	0404A05U	1 m (3.28 ft)
PSR1400-D	0404A07H	3 m (9.84 ft)

PoE AC power cords

The S7500E switch uses 16 A PoE AC power cords. PoE AC power cords are used to connect the PoE AC PEM held in the PoE external power frame and the external AC power source.

Fan trays

The fans trays are shipped with the S7500E switches, and have been installed in the S7500E switches. If the fan tray of a switch fails, order a compatible fan tray to replace the faulty one.

Table 2-16 shows the available fan trays for different models of S7500E switches.

Table 2-16 Fan tray specifications

Fan tray	Number of fan trays	Number of fans	Fan diameter	Maximum air flow rate
S7502E fan tray	1	3	92 mm (3.62 in)	165 CFM (4.67 m ³ /min)
S7503E-S fan tray	1	3	92 mm (3.62 in)	165 CFM (4.67 m ³ /min)
S7503E-M fan tray	1	3	92 mm (3.62 in)	165 CFM (4.67 m ³ /min)
S7503E fan tray	1	6	92 mm (3.62 in)	330 CFM (9.34 m ³ /min)
S7506E-S fan tray	1	9	92 mm (3.62 in)	495 CFM (14.02 m ³ /min)
S7506E fan tray	1	9	92 mm (3.62 in)	495 CFM (14.02 m ³ /min)
S7506E (non-PoE) fan tray	1	9	92 mm (3.62 in)	495 CFM (14.02 m ³ /min)
S7506E-MF fan tray	3	1 small fan + 2 large fans	<ul style="list-style-type: none"> Small fan: 80 mm (3.15 in) Large fan: 92 mm (3.62 in) 	150 CFM (4.25 m ³ /min)
S7506E-MF (non-PoE) fan tray	3	1 small fan + 2 large fans	<ul style="list-style-type: none"> Small fan: 80 mm (3.15 in) Large fan: 92 mm (3.62 in) 	150 CFM (4.25 m ³ /min)
S7506E-V fan tray	1	6	120 mm (4.72 in)	546 CFM (15.46 m ³ /min)
S7510E fan tray	1	6	92 mm (3.62 in)	662 CFM (18.75 m ³ /min)
		4	120 mm (4.72 in)	662 CFM (18.75 m ³ /min)

3 LEDs

The MPUs, service modules, and power modules available for the switch use multiple LEDs to indicate their operating status. The LED type and quantity vary by module model.

Table 3-1 lists the LEDs on the MPUs, service modules, and power modules.

NOTE:

Unless otherwise specified, the flashing frequency of the LEDs in this section is 0.5 Hz.

Table 3-1 LEDs at a glance

LEDs
<div>MPU LEDs</div> <ul style="list-style-type: none">• Management Ethernet port LEDs• Power module status LEDs• Fan tray status LEDs• Card status LEDs• MPU active/standby status LED• CF card status LED• RJ-45 Ethernet port LEDs• Combo interface LEDs• SFP port LEDs• SFP+ port LEDs• QSFP+ port LEDs• QSFP28 port LEDs• XFP port LEDs
<div>Service module LEDs</div> <ul style="list-style-type: none">• RJ-45 Ethernet port LEDs• Combo interface LEDs• SFP port LEDs• SFP+ port LEDs• XFP port LEDs• QSFP+ port LEDs• QSFP28 port LEDs• CFP port LEDs• EPON port LEDs
<div>Power module LEDs</div> <ul style="list-style-type: none">• PSR320-A/PSR320-D• PSR650-A/PSR650-D/PSR1200-A/PSR1200-D• PSR650C-12A/PSR650C-12D/PSR1400-A/PSR1400-12A1-F/PSR2500-12AHD/PSR2500-12D• PSR1400-D• PSR1400-12D1• PSR2800-ACV/PSR2800-A1-F• PSR6000-ACV
<div>Fan tray LEDs</div>

MPU LEDs

Multiple MPU models are available for the switch. The LED type and quality vary by MPU model. The LSQM3MPUA0 MPU and LSQM2MPUC0 MPU are used in [Figure 3-1](#) and [Figure 3-2](#), respectively, for illustration.

Figure 3-1 LEDs on the LSQM3MPUA0 MPU

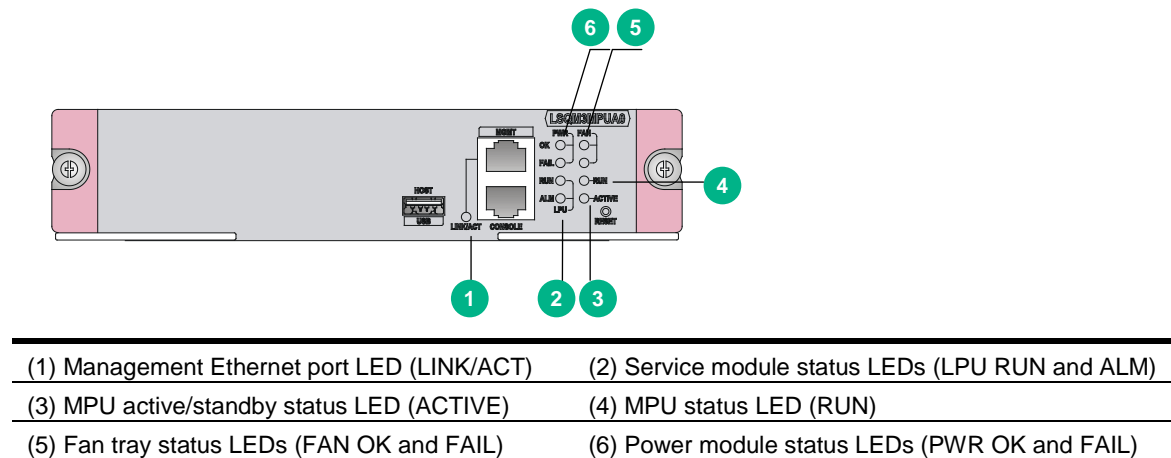
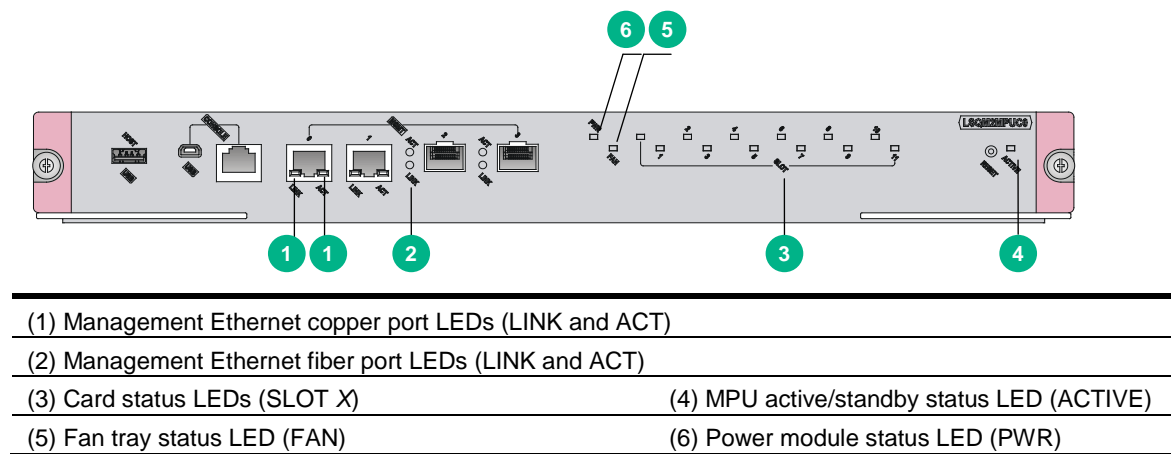


Figure 3-2 LEDs on the LSQM2MPUC0 MPU



Management Ethernet port LEDs

For a management Ethernet port that uses a LINK/ACT LED to indicate its link status and data forwarding status, see [Table 3-2](#) for the LED description.

For a management Ethernet port that uses two LEDs LINK and ACT to indicate its link status and data forwarding status, see [Table 3-3](#) for the LED description.

Table 3-2 Management Ethernet port LED description (1)

LINK/ACT LED status	Description
Flashing green	A link is present, and the port is receiving or sending data.
Steady green	A link is present.
Off	No link is present.

Table 3-3 Management Ethernet port LED description (2)

LINK LED status	ACT LED status	Description
On	Flashing	A link is present, and the port is receiving or sending data.
On	Off	A link is present.
Off	Off	No link is present.

Power module status LEDs

Power module status LED varies by MPU model.

- If the MPU provides one set of LEDs (OK and FAIL) to indicate the status of the power modules, see [Table 3-4](#) for the LED description.
- If the MPU provides multiple LEDs with numbers (for example, PWR1 and PWR2), each LED corresponds to a pluggable power module with the same number (the power module number is marked on the chassis). See [Table 3-5](#) for the LED description.
- If the MPU provides only one power status LED (PWR), see [Table 3-6](#) for the LED description.

Table 3-4 Power module status LED description (1)

OK LED status	FAIL LED status	Description
On	Off	All power modules are operating correctly.
Off	On	A power module is not outputting power because one of the following conditions exists: <ul style="list-style-type: none"> • The power module is faulty or switched off. • The power cord is disconnected. • The external power supply system is not available.
Off	Off	<ul style="list-style-type: none"> • No power module is installed. • No power module is outputting power because one of the following conditions exists: <ul style="list-style-type: none"> ○ The power modules are faulty or switched off. ○ The power cords are disconnected. ○ The external power supply system is not available.

Table 3-5 Power module status LED description (2)

LEDs		Description
OK	FAIL	
On	Off	The corresponding power module is operating correctly.
Off	On	The corresponding power module is not outputting power because one of the following conditions exists: <ul style="list-style-type: none"> • The power module is faulty or switched off. • The power cord is disconnected. • The external power supply system is not available.
Off	Off	No power module is installed in the corresponding slot.

Table 3-6 Power module status LED description (3)

OK/FAIL LED status	Description
Steady green	All power modules are operating correctly.
Steady red	A power module is not outputting power because one of the following conditions exists: <ul style="list-style-type: none"> • The power module is faulty or switched off. • The power cord is disconnected. • The external power supply system is not available.
Off	<ul style="list-style-type: none"> • No power module is installed. • No power module is outputting power because one of the following conditions exists: <ul style="list-style-type: none"> ◦ The power modules are faulty or switched off. ◦ The power cords are disconnected. ◦ The external power supply system is not available.

Fan tray status LEDs

Fan tray status LED varies by MPU model.

- If the MPU provides one set of LEDs (OK and FAIL) to indicate the status of the fan tray, see [Table 3-7](#) for the LED description.
- If the MPU provides one OK/FAIL LED to indicate the status of the fan tray, see [Table 3-8](#) for the LED description.

Table 3-7 Fan tray status LED description (1)

OK LED status	FAIL LED status	Description
On	Off	The fan tray is operating correctly.
Off	On	A fan problem has occurred or the fan tray is not in position.
Off	Off	The switch is not powered on.

Table 3-8 Fan tray status LED description (2)

OK/FAIL LED status	Description
Steady green	The fan tray is operating correctly.
Steady red	A fan problem has occurred or the fan tray is not in position.
Off	The switch is not powered on.

Card status LEDs

LSQM3MPUA0

Table 3-9 MPU status LED description

RUN LED status	Description
Flashing	The card is operating correctly.

RUN LED status	Description
Off	The card is starting up or faulty.

Table 3-10 Service module status LED description

RUN LED status	ALM LED status	Description
Flashing	Off	The cards are operating correctly.
Fast flashing (4 Hz)	On	The cards are loading software. If the LED flashes continuously, the software versions of the switch and the card do not match.
On	On	The cards are starting up or faulty.
Off	Off	No card is present.

LSQM2MPUC0/LSQM2MPUD0/LSQM2MPUDS0/LSQM1SRP8X2QE0

Table 3-11 Card status LED description

RUN/ALM LED status	Description
Flashing green	The card is operating correctly.
Fast flashing green (4 Hz)	The card is loading software. If the LED flashes continuously, the software versions of the switch and the card do not match.
Steady red	The card is starting up or faulty.
Flashing red	The temperature of the card exceeds the upper limit or drops below the lower limit.
Off	No card is present.

MPUs other than the LSQM3MPUA0, LSQM2MPUC0, LSQM2MPUD0, LSQM2MPUDS0, and LSQM1SRP8X2QE0

Table 3-12 Card status LED description

RUN LED status	ALM LED status	Description
Flashing (0.5 Hz)	Off	The card is operating correctly.
Fast flashing (4 Hz)	On	The card is loading software. If the LED flashes continuously, the software versions of the switch and the card do not match.
Flashing (0.5 Hz)	Slow flashing (0.25 Hz)	The temperature of the card exceeds the upper limit or drops below the lower limit.
On	On	The card is starting up or faulty.
Off	Off	No card is present.

NOTE:

- Before the active MPU starts up, all card LEDs are off. The tables describe the card LED status after the active MPU starts up.
 - The ALM LED lights for a period of time at the initial phase of the system startup.
-

MPU active/standby status LED

The MPUs provide an ACTIVE LED to indicate the active or standby operating mode of the MPU.

Table 3-13 MPU active/standby status LED description

ACTIVE LED status	Description
On	The MPU is operating in active mode.
Off	<ul style="list-style-type: none">• The MPU is operating in standby mode.• The MPU is faulty. Examine also the card status LEDs to determine the fault existence.

CF card status LED

The MPUs provide a CF card status LED (CFS) to indicate the status of the CF card.

Table 3-14 CF card status LED description

LED	LED status	Description
CFS	On	The CF card is in position.
	Off	The CF card is not in position or is damaged.

RJ-45 Ethernet port LEDs

The MPUs provide a LED for each RJ-45 Ethernet port to indicate their link status and data receiving/forwarding status.

Table 3-15 RJ-45 Ethernet interface LED description

LED	LED status	Description
RJ-45 Ethernet interface status LED	Flashing	The Ethernet port is receiving or sending data.
	On	A link is present.
	Off	No link is present.

Combo interface LEDs

The MPUs provide a LED for each combo interface to indicate their link status and data receiving/forwarding status.

Table 3-16 Combo interface status LED description

LED	LED status	Description
Combo interface status LED	Flashing	The combo interface is receiving or sending data.
	On	A link is present.
	Off	No link is present.

NOTE:

- A combo interface contains an SFP port and an RJ-45 Ethernet port. Only one port can be active at a time. The other one is inactive. By default, the port with smaller number becomes active.
- To use the inactive port of a combo interface, execute the **undo shutdown** command to activate the port. The other port of the combo port is then automatically shut down and becomes inactive.

SFP port LEDs

The MPU provides a LED for each SFP port to indicate their link status and data receiving/forwarding status.

Table 3-17 SFP port LED description

LED	LED status	Description
SFP port status LED	Flashing	The SFP port is receiving or sending data.
	Steady on	A link is present.
	Off	No link is present.

SFP+ port LEDs

The LSQM1SRP8X2QE0 MPU provides a LED for each SFP+ port to indicate their link status and data forwarding status.

Table 3-18 SFP+ port LED description

LED status	Description
Flashing	The port is receiving or sending data.
On	A link is present.
Off	No link is present.

NOTE:

The SFP+ port LED on the LSQM1SRP8X2QE0 MPU is always green no matter the SFP+ port is receiving or sending data at 10 Gbps or 1000 Mbps.

QSFP+ port LEDs

A LED is provided for each QSFP+ port to indicate the port link status and data forwarding status.

Table 3-19 QSFP+ port LED description

LED status	Description
Flashing	The port is receiving or sending data.
On	A link is present.
Off	No link is present.

QSFP28 port LEDs

A LED is provided for each QSFP28 port to indicate the port link status and data forwarding status.

Table 3-20 QSFP+ port LED description

LED status	Description
Flashing	The port is receiving or sending data.
On	A link is present.
Off	No link is present.

XFP port LEDs

A LED is provided for each XFP port to indicate their link status and data forwarding status.

Table 3-21 XFP port LED description

LEDs		Description
LINK	ACT	
On	Flashing	A link is present, and the XFP port is receiving or sending data.
On	Off	A link is present, but no data is being received or sent.
Off	Off	No link is present.

Service module LEDs

RJ-45 Ethernet port LEDs

The service modules provide a LED for each RJ-45 Ethernet port to indicate their link status and data receiving/forwarding status.

Table 3-22 RJ-45 Ethernet port LED description

LED status	Description
Flashing	The port is receiving or sending data.
On	A link is present.
Off	No link is present.

Combo interface LEDs

A combo interface contains an SFP port and an RJ-45 Ethernet port. Only one port of a combo interface can work at a time. The service modules each provide a combo interface LED to indicate the link status and data receiving/forwarding status of the corresponding combo interface.

Table 3-23 Combo interface LED description

LED status	Description
Flashing	The port is receiving or sending data.
On	A link is present.
Off	No link is present.

NOTE:

- For the SFP port and the RJ-45 Ethernet port of a combo interface, only one port can be active at a time. The other one is inactive. By default, the port with the smaller number becomes active.
- To use the inactive port of a combo interface, execute the **undo shutdown** command to activate the port. The other port of the combo interface is then automatically shut down and becomes inactive.

SFP port LEDs

The service modules provide a LED for each SFP port to indicate their link status and data receiving/forwarding status.

Table 3-24 SFP port LED description

LED status	Description
Flashing	The port is receiving or sending data.
On	A link is present.
Off	No link is present.

SFP+ port LEDs

The service modules provide a LED for each SFP+ port to indicate their link status and data receiving/forwarding status.

Table 3-25 SFP+ port LED description for the LSQ1TGS8SC0 service module

LINK LED status	ACT LED status	Description
On	Flashing	A link is present, and the port is receiving or sending data.
On	Off	A link is present, but no data is being received or sent.
Off	Off	No link is present.

Table 3-26 SFP+ port LED description for other service modules

Status	Description
Flashing green	The port is receiving or sending data at 10 Gbps.
Flashing yellow	The port is receiving or sending data at 1000 Mbps.
On	A link is present.
Off	No link is present.

XFP port LEDs

The service modules provide a LED for each XFP port to indicate their link status and data receiving/forwarding status.

Table 3-27 XFP port LED description

LINK status LED	ACT status LED	Description
On	Flashing	A link is present, and the port is receiving or sending data.
On	Off	A link is present, but no data is being received or sent.
Off	Off	No link is present.

QSFP+ port LEDs

The service modules provide a LED for each QSFP+ port to indicate their link status and data receiving/forwarding status.

Table 3-28 QSFP+ port LED description

LED status	Description
Flashing	The port is receiving or sending data.
On	A link is present.
Off	No link is present.

NOTE:

The color of the QSFP+ port LED indicates support of the port for 100-GE/40-GE switchover.

- **Yellow**—The port supports 100-GE/40-GE switchover.
- **Green**—The port does not support 100-GE/40-GE switchover.

QSFP28 port LEDs

The service modules provide a LED for each QSFP28 port to indicate their link status and data receiving/forwarding status.

Table 3-29 QSFP28 port LED description

LED status	Description
Flashing	The port is receiving or sending data.
On	A link is present.
Off	No link is present.

NOTE:

The color of the QSFP28 port LED indicates the port speed as follows:

- **Green**—100 Gbps.
- **Yellow**—Less than 100 Gbps.

CFP port LEDs

The service modules provide a LED for each CFP port to indicate their link status and data receiving/forwarding status.

Table 3-30 CFP port LED description

LED status	Description
Flashing	The port is receiving or sending data.
On	A link is present.
Off	No link is present.

EPON port LEDs

The service modules provide a LED for each EPON port to indicate their link status and data receiving/forwarding status.

Table 3-31 EPON port LED description

LED status	Description
On	The connected ONU has been successfully registered.
Off	The connected ONU is not registered, or no ONU is connected.

Power module LEDs

The S7500E switches support various power module models. Each power module provides LEDs to indicate its operating status. The power modules vary in LEDs.

PSR320-A/PSR320-D

The PSR320-A and PSR320-D power modules each provide a status LED to indicate their operating status.

Table 3-32 PSR320-A/PSR320-D power module LED description

LED	Status	Description
Status LED	Green	Normal operation
	Red	Abnormal operation. Possible reasons include: <ul style="list-style-type: none"> A power module alarm (such as input undervoltage, output short-circuit, output overcurrent, output overvoltage, or overtemperature) has occurred and the power module has entered protection state. A power module fan failure has occurred.
	Off	Abnormal power input. Possible reasons include: <ul style="list-style-type: none"> The power module is faulty. The power cord is disconnected. The external power supply system is not available. The power module is switched off.

PSR650-A/PSR650-D/PSR1200-A/PSR1200-D

The PSR650-A, PSR650-D, PSR1200-A, and PSR1200-D power modules each provide a status LED to indicate their operating status.

Table 3-33 PSR650-A/PSR650-D/PSR1200-A/PSR1200-D power module LED description

LED	Status	Description
Status LED	Green	Normal operation
	Red	Abnormal operation. Possible reasons include: <ul style="list-style-type: none"> A power module alarm (such as input undervoltage, output short-circuit, output overcurrent, output overvoltage, or overtemperature) has occurred and the power module has entered protection state. A power module fan failure has occurred.
	Off	Abnormal power input. Possible reasons include: <ul style="list-style-type: none"> The power module is faulty. The power cord is disconnected. The external power supply system is not available. The power module is switched off.

PSR650C-12A/PSR650C-12D/PSR1400-A/PSR1400-12A1-F/PSR2500-12AHD/PSR2500-12D

The PSR650C-12A, PSR650C-12D, PSR1400-A, PSR1400-12A1-F, PSR2500-12AHD, and PSR2500-12D power modules each provide three LEDs INPUT, OUTPUT, and FAN to indicate their operating status.

Table 3-34 PSR650C-12A/PSR650C-12D/PSR1400-A/PSR1400-12A1-F/PSR2500-12AHD/PSR2500-12D power module LED description

LED	Status	Description
INPUT	Green	Normal power input
	Red	Abnormal power input. The input voltage is out of the rated voltage range (input undervoltage or overvoltage).
	Off	<ul style="list-style-type: none"> The power module is faulty. No power input. Possible reasons include: <ul style="list-style-type: none"> The power cord is disconnected. The external power supply system is not available.
OUTPUT	Green	Normal power output
	Red	Abnormal power output. Possible reasons include: <ul style="list-style-type: none"> A power module alarm (such as input undervoltage, output short-circuit, output overcurrent, output overvoltage, overtemperature, or fan failure) has occurred and the power module has entered protection state. The power module is switched off.
	Off	<ul style="list-style-type: none"> The power module is faulty. No power input. Possible reasons include: <ul style="list-style-type: none"> The power cord is disconnected. The external power supply system is not available.
FAN	Green	Normal fan operation
	Red	Abnormal fan operation. Possible reasons include: <ul style="list-style-type: none"> A power module fan failure has occurred. The power module is switched off.
	Off	<ul style="list-style-type: none"> The power module is faulty. The power module does not have power input. Possible reasons include: <ul style="list-style-type: none"> The power cord is disconnected. The external power supply system is not available.

PSR1400-D

A PSR1400-D power module provides four LEDs INPUT, OUTPUT, FAN, and PoE to indicate its operating status.

Table 3-35 PSR1400-D power module LED description

LED	Status	Description
INPUT	Green	The power is being input correctly, and the system power output switch is turned on.
	Red	A power input problem has occurred because the input voltage is out of the rated voltage range.
	Off	One of the following conditions might exist: <ul style="list-style-type: none"> The power module is faulty. The power cord is disconnected. The power source is not supplying power. The system power output switch is turned off.

LED	Status	Description
OUTPUT	Green	The power is being output correctly.
	Red	A power output problem has occurred because the power module generates an alarm and enters the protection state due to output short-circuit, output overcurrent, output overvoltage, or overtemperature.
	Off	One of the following conditions might exist: <ul style="list-style-type: none"> The power module is faulty. The power cord is disconnected. The power source is not supplying power. The system power output switch is turned off.
FAN	Green	The fans are operating correctly.
	Red	The fans are operating incorrectly because a fan failure has occurred.
	Off	One of the following conditions might exist: <ul style="list-style-type: none"> The power module is faulty. The power cord is disconnected. The power source is not supplying power. The system power output switch is turned off.
PoE	Green	The PoE power is being output correctly.
	Red	A PoE power output problem has occurred because the PoE output voltage is out of the rated voltage range.
	Off	No PoE power is being output because one of the following conditions might exist: <ul style="list-style-type: none"> The power module is faulty. The power cord is disconnected. The power source is not supplying power. The PoE power output switch is turned off.

PSR1400-12D1

A PSR1400-12D1 power module provides three LEDs INPUT, OUTPUT, and FAN to indicate its operating status.

Table 3-36 PSR1400-12D1 power module LED description

LED	Status	Description
INPUT	Green	Normal power input.
	Red	Abnormal power input. The input voltage is out of the rated voltage range.
	Off	<ul style="list-style-type: none"> The power module is faulty. No power input. Possible reasons include: <ul style="list-style-type: none"> The power cord is disconnected. The external power supply system is not available. The system power output switch is turned off.
OUTPUT	Green	Normal power output
	Red	Abnormal power output. A power module alarm (such as output short-circuit, output overcurrent, output overvoltage, or overtemperature) has occurred and the power module has entered protection state.
	Off	<ul style="list-style-type: none"> The power module is faulty.

LED	Status	Description
		<ul style="list-style-type: none"> No power input. Possible reasons include: <ul style="list-style-type: none"> The power cord is disconnected. The external power supply system is not available. The system power output switch is turned off.
FAN	Green	Normal fan operation
	Red	Abnormal fan operation. A power module fan failure has occurred.
	Off	<ul style="list-style-type: none"> The power module is faulty. The power module does have power input. Possible reasons include: <ul style="list-style-type: none"> The power cord is disconnected. The external power supply system is not available. The system power output switch is turned off.

PSR2800-ACV/PSR2800-A1-F

The PSR2800-ACV and PSR2800-A1-F power modules each provide five LEDs INPUT, OUTPUT, FAN, PoE INPUT, and PoE OUTPUT to indicate the operating status.

Table 3-37 PSR2800-ACV/PSR2800-A1-F power module LED description

LED	Status	Description
INPUT	Green	Normal power input.
	Red	Abnormal power input. The input voltage is out of the rated voltage range.
	Off	<ul style="list-style-type: none"> The power module is faulty. No power input. Possible reasons include: <ul style="list-style-type: none"> The system input power cord is disconnected. The external power supply system is not available.
OUTPUT	Green	Normal power output
	Red	Abnormal power output. Possible reasons include: <ul style="list-style-type: none"> A power module alarm (such as input undervoltage, output short-circuit, output overcurrent, output overvoltage, or overtemperature) has occurred and the power module has entered protection state. The system power switch is turned off.
	Off	<ul style="list-style-type: none"> The power module is faulty. No power input. Possible reasons include: <ul style="list-style-type: none"> The system input power cord is disconnected. The external power supply system is not available.
FAN	Green	Normal fan operation
	Red	Abnormal fan operation. Possible reasons include: <ul style="list-style-type: none"> A power module fan failure has occurred. The system power switch is turned off.
	Off	<ul style="list-style-type: none"> The power module is faulty. The power module does have power input. Possible reasons include: <ul style="list-style-type: none"> The system input power cord is disconnected. The external power supply system is not available.

LED	Status	Description
PoE INPUT	Green	Normal PoE power input
	Red	Abnormal PoE power input. The PoE input voltage is out of the rated voltage range.
	Off	No PoE power input. Possible reasons include: <ul style="list-style-type: none"> The power module is faulty. The PoE input power cord is disconnected. The external power supply system is not available.
PoE OUTPUT	Green	Normal PoE power output
	Red	Abnormal PoE power output. Possible reasons include: <ul style="list-style-type: none"> The PoE output voltage is out of the rated voltage range. The PoE power switch is turned off.
	Off	No PoE power output. Possible reasons include: <ul style="list-style-type: none"> The power module is faulty. The PoE input power cord is disconnected. The external power supply system is not available.

PSR6000-ACV

The PSR6000-ACV power module provides eight LEDs SYS IN, SYS OUT, SYS FAN, PoE IN1, PoE IN2, PoE IN3, PoE OUT, and PoE FAN to indicate its operating status.

Table 3-38 PSR6000-ACV power module LED description

LED	Status	Description
SYS IN	Green	Normal system power input
	Red	Abnormal system power input. The system power input voltage is out of the rated voltage range.
	Off	<ul style="list-style-type: none"> The power module is faulty. No system power input. Possible reasons include: <ul style="list-style-type: none"> The system input power cord is disconnected. The external power supply system is not available.
SYS OUT	Green	Normal system power output
	Red	Abnormal system power output. Possible reasons include: <ul style="list-style-type: none"> A power module alarm (such as output short-circuit, output overcurrent, output overvoltage, or overtemperature) has occurred and the power module has entered protection state. The SYS power switch is turned off.
	Off	<ul style="list-style-type: none"> The power module is faulty. No system power input. Possible reasons include: <ul style="list-style-type: none"> The system input power cord is disconnected. The external power supply system is not available.

LED	Status	Description
SYS FAN	Green	Normal system fan operation.
	Red	Abnormal system fan operation. Possible reasons include: <ul style="list-style-type: none"> • A system fan failure has occurred. • The SYS power switch is turned off.
	Off	<ul style="list-style-type: none"> • The power module is faulty. • No system power input. Possible reasons include: <ul style="list-style-type: none"> ◦ The system input power cord is disconnected. ◦ The external power supply system is not available.
PoE IN1	Green	Normal PoE1 power input.
	Red	Abnormal PoE1 power input. The PoE1 power input voltage is out of the rated voltage range.
	Off	No PoE1 power input. Possible reasons include: <ul style="list-style-type: none"> • The power module is faulty. • The PoE1 input power cord is disconnected. • The external power supply system is not available.
PoE IN2	Green	Normal PoE2 power input.
	Red	Abnormal PoE2 power input. The PoE2 power input voltage is out of the rated voltage range.
	Off	No PoE2 power input. Possible reasons include: <ul style="list-style-type: none"> • The power module is faulty. • The PoE2 input power cord is disconnected. • The external power supply system is not available.
PoE IN3	Green	Normal PoE3 power input.
	Red	Abnormal PoE3 power input. The PoE3 power input voltage is out of the rated voltage range.
	Off	No PoE3 power input. Possible reasons include: <ul style="list-style-type: none"> • The power module is faulty. • The PoE3 input power cord is disconnected. • The external power supply system is not available.
PoE OUT	Green	Normal PoE power output
	Red	Abnormal PoE power output. Possible reasons include: <ul style="list-style-type: none"> • A power module alarm (such as output short-circuit, output overcurrent, output overvoltage, or overtemperature) has occurred and the power module has entered protection state. • The PoE power switch is turned off.
	Off	No PoE power output. Possible reasons include: <ul style="list-style-type: none"> • The power module is faulty. • The PoE 1, PoE 2, and PoE 3 input power cords are all disconnected. • The external power supply system is not available.

LED	Status	Description
PoE FAN	Green	Normal PoE fan operation
	Red	Abnormal PoE fan operation. Possible reasons include: <ul style="list-style-type: none"> • A PoE fan failure has occurred. • The PoE power switch is turned off.
	Off	No PoE power input. Possible reasons include: <ul style="list-style-type: none"> • The power module is faulty. • The PoE 1, PoE 2, and PoE 3 input power cords are all disconnected. • The external power supply system is not available.

Fan tray LEDs

The S7506E-MF and S7506E-MF (non-PoE) fan trays each use a fan tray LED RUN/ALM to indicate their operating status.

Table 3-39 Fan tray LED description

RUN/ALM LED status	Description
Green	The fan tray is operating correctly.
Red	The fan tray is faulty.
Off	No fan tray is present or the switch is not powered on.

4 Cables

This chapter describes the cables used for connecting network ports.

Table 4-1 Cable description

Cable	Port type	Application
Console cable	Console port at one end and 9-pin serial port at the other end	Enables users to perform debugging, configuration, maintenance, management, and software loading on the device.
USB console cable	USB console port at one end and USB port at the other end	
Ethernet twisted pair cable	RJ-45 Ethernet ports	Connects RJ-45 Ethernet ports to transmit data
Optical fiber	XFP/SFP+/SFP/CFP/QSFP+/EPON ports	Connects the fiber ports to transmit data
SFP+ DAC cable	SFP+ ports	Connects SFP+ ports to transmit data
QSFP+ DAC/QSFP28 DAC cable	QSFP+ ports	Connects QSFP+ ports to transmit data
QSFP+ DAC/QSFP28 DAC cable	QSFP28 ports	Connects QSFP28 ports to transmit data
QSFP+ to SFP+ DAC cable	QSFP+ port at one end, and SFP+ port at the other end	Connects a QSFP+ port to an SFP+ port

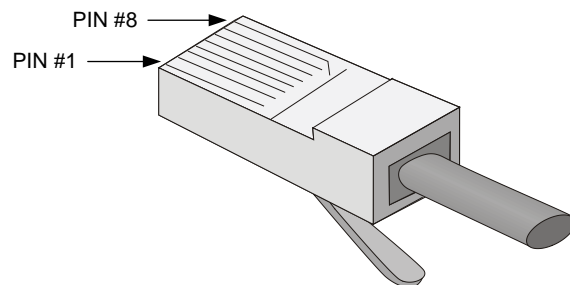
Ethernet twisted pair cable

An Ethernet twisted pair cable consists of four pairs of insulated wires twisted together. It mainly transmits analog signals and is advantageous in transmitting data over shorter distances. The maximum transmission distance is 100 m (328.08 ft).

RJ-45 connector

An Ethernet twisted pair cable connects network devices through the RJ-45 connectors at the two ends. [Figure 4-1](#) shows the pinouts of an RJ-45 connector.

Figure 4-1 RJ-45 connector pinout diagram



Cable pinouts

EIA/TIA cabling specifications define two standards: 568A and 568B for cable pinouts.

- **Standard 568A**—Pin 1: white/green stripe, pin 2: green solid, pin 3: white/orange stripe, pin 4: blue solid, pin 5: white/blue stripe, pin 6: orange solid, pin 7: white/brown stripe, pin 8: brown solid.
- **Standard 568B**—Pin 1: white/orange stripe, pin 2: orange solid, pin 3: white/green stripe, pin 4: blue solid, pin 5: white/blue stripe, pin 6: green solid, pin 7: white/brown stripe, pin 8: brown solid.

Cable type

Based on performance

Ethernet cables can be classified into category 3, category 4, category 5, category 5e, category 6, and category 7 cable based on performance. In LANs, category 5, category 5e, and category 6 are commonly used.

Table 4-2 Ethernet cable description

Type	Description
Category 5	Transmits data at a maximum speed of 100 Mbps, with a bandwidth of 100 MHz.
Category 5e	Transmits data at a maximum speed of 1000 Mbps, with a bandwidth of 100 MHz.
Category 6	Transmits data at a maximum speed of 10 Gbps, with a bandwidth of 250 MHz.

NOTE:

The RJ-45 Ethernet ports use category 5 or higher Ethernet twisted pair cables for connection.

Based on pinouts

Ethernet twisted pair cables can be classified into straight through and crossover cables based on their pinouts.

- **Straight-through**—The pinouts at both ends comply with standard 568B, as shown in [Figure 4-2](#).
- **Crossover**—The pinouts at one end comply with standard 568B, and those at the other end comply with standard 568A, as shown in [Figure 4-3](#).

Figure 4-2 Straight-through cable

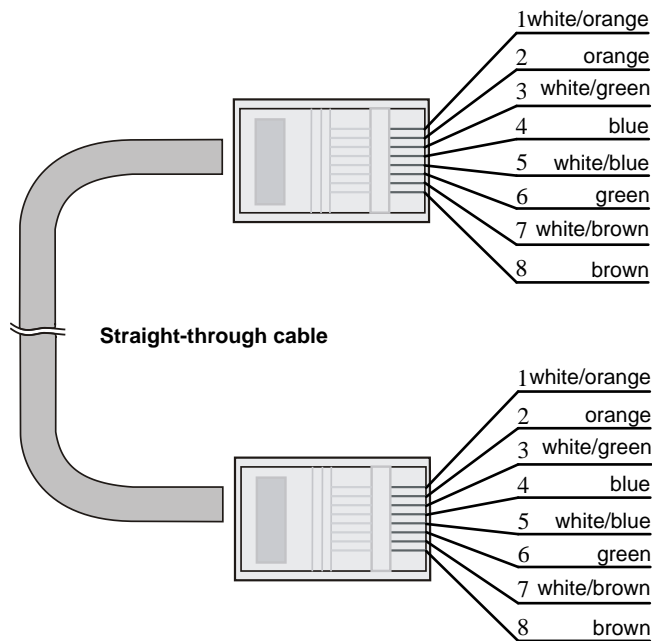
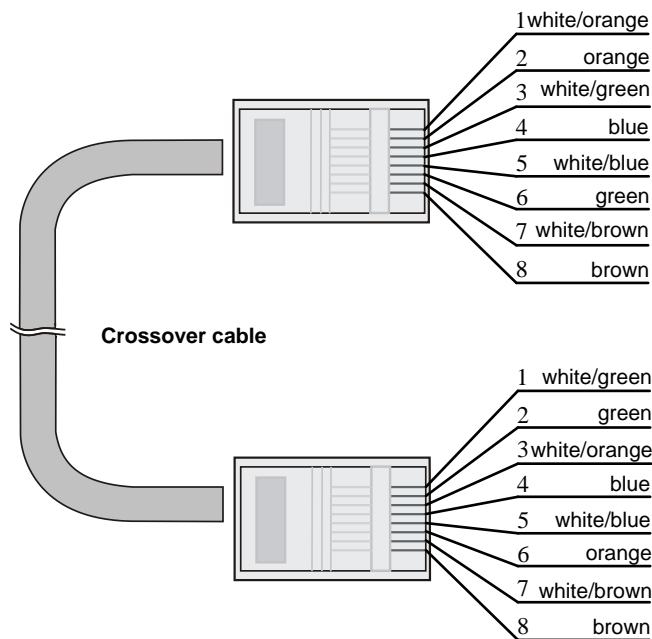


Figure 4-3 Crossover cable



Pin assignments

Select an Ethernet twisted pair cable according to the RJ-45 Ethernet port type on your device. An RJ-45 Ethernet port can be MDI (for routers and PCs) or MDIX (for switches). For the pinouts of RJ-45 Ethernet ports, see [Table 4-3](#) and [Table 4-4](#).

Table 4-3 RJ-45 MDI port pinouts

Pin	10BASE-T/100BASE-TX		1000BASE-T	
	Signal	Function	Signal	Function
1	Tx+	Send data	BIDA+	Bi-directional data cable A+
2	Tx-	Send data	BIDA-	Bi-directional data cable A-
3	Rx+	Receive data	BIDB+	Bi-directional data cable B+
4	Reserved	—	BIDC+	Bi-directional data cable C+
5	Reserved	—	BIDC-	Bi-directional data cable C-
6	Rx-	Receive data	BIDB-	Bi-directional data cable B-
7	Reserved	—	BIDD+	Bi-directional data cable D+
8	Reserved	—	BIDD-	Bi-directional data cable D-

Table 4-4 RJ-45 MDI-X port pinouts

Pin	10BASE-T/100BASE-TX		1000BASE-T	
	Signal	Function	Signal	Function
1	Rx+	Receive data	BIDB+	Bi-directional data cable B+
2	Rx-	Receive data	BIDB-	Bi-directional data cable B-
3	Tx+	Send data	BIDA+	Bi-directional data cable A+
4	Reserved	—	BIDD+	Bi-directional data cable D+
5	Reserved	—	BIDD-	Bi-directional data cable D-
6	Tx-	Send data	BIDA-	Bi-directional data cable A-
7	Reserved	—	BIDC+	Bi-directional data cable C+
8	Reserved	—	BIDC-	Bi-directional data cable C-

To ensure normal communication, the pins for sending data on one port should correspond to the pins for receiving data on the peer port. When both of the ports on the two devices are MDI or MDIX, a crossover Ethernet cable is needed. A cross-over cable connects devices of the same type. When one port is MDI and the other is MDIX, a straight-through Ethernet cable is needed. A straight-through cable connects devices of different types.

If an RJ-45 Ethernet port with MDI/MDIX autosensing enabled can automatically negotiate pin roles. The S7500E RJ-45 Ethernet ports support MDI/MDIX. By default, MDI/MDIX is enabled on a port.

Making an Ethernet twisted pair cable

1. Cut the cable to length with the crimping pliers.
2. Strip off an appropriate length of the cable sheath. The length is typically that of the RJ-45 connector.
3. Untwist the pairs so that they can lie flat, and arrange the colored wires based on the wiring specifications.
4. Cut the top of the wires even with one another. Insert the wires into the RJ-45 end and make sure the wires extend to the front of the RJ-45 end and make good contact with the metal contacts in the RJ-45 end and in the correct order.

5. Crimp the RJ-45 connector with the crimping plier until you hear a click.
6. Repeat the above steps with the other end of the cable.
7. Use a cable tester to verify the connectivity of the cable.

Optical fiber

CAUTION:

Use the same types of transceiver modules, pigtail cords, patch cords, and fiber cables. If you use single-mode optical fibers, the transceiver modules, pigtail cords, patch cords, and fiber cables must be single-mode.

Optical fiber

Optical fibers are widely used in fiber-optic communications, which are advantageous for long-distance communications.

Optical fibers can be classified into the following types:

- **Single mode fiber**—It has a core size of 10 μm , and has a lower modal dispersion. It carries only a single ray of light. It is mostly used for communication over longer distances.
- **Multi-mode fiber**—It has a core size of 50 μm or 62.5 μm or higher, and has a higher modal dispersion than single-mode optical fiber. It is mostly used for communication over shorter distances.

Table 4-5 Allowed maximum tensile force and crush load

Period of force	Tensile load (N)	Crush load (N/mm)
Short period	150	500
Long term	80	100

Optical fiber cable

An optical fiber cable is a cable containing one or more optical fibers. The optical fiber elements are typically individually coated with plastic layers and contained in a protective tube. Optical fiber cables fall into single-mode and multi-mode.

Patch cord

A fiber that has connectors at both ends is called a patch cord. A patch cord connects one optical device to another for signal routing. Patch cords fall into single-mode and multi-mode patch cords.

- **Single-mode patch cord**—The jacket is yellow. It permits transmission over longer distances.
- **Multi-mode patch cord**—The jacket is orange. It permits transmission over shorter distances.

Patch cords are classified into SC, LC, and FC patch cords based on interface type. The length of a patch cord can be 0.5 m (1.64 ft), 1 m (3.28 ft), 2 m (6.56 ft), 3 m (9.84 ft), 5 m (16.40 ft), and 10 m (32.81 ft).

Pigtail cord

A pigtail cord is an optical fiber that has an optical connector on one end and a length of exposed fiber on the other. The end of the pigtail is fusion spliced to a fiber, connecting the fiber cable and transceiver.

Pigtail cords fall into single-mode (yellow) and multi-mode (orange), and can also be classified into SC, LC, and FC pigtail cords based on interface type.

Fiber connector

Fiber connectors are indispensable passive components in an optical fiber communication system. They allow the removable connection between optical channels, which makes the optical system debugging and maintenance more convenient and the transit dispatching of the system more flexible.

Figure 4-4 SC connector

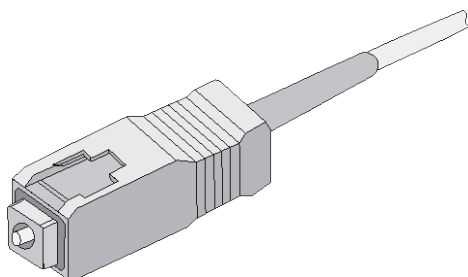
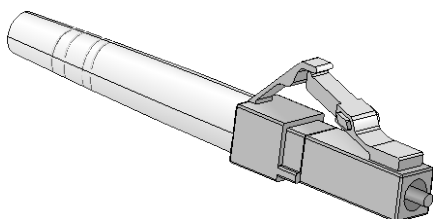


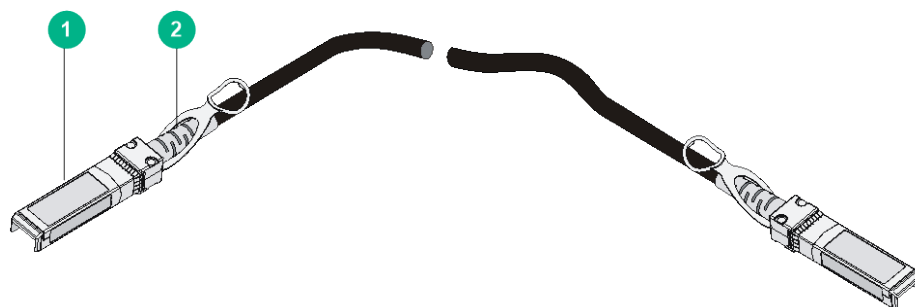
Figure 4-5 LC connector



SFP+ DAC cable

You can use SFP+ DAC cables to connect the SFP+ ports. SFP+ DAC cables support the SFP+ standard and use 10-GE SFP+ Cu standard cables.

Figure 4-6 SFP+ DAC cable



(1) Connector

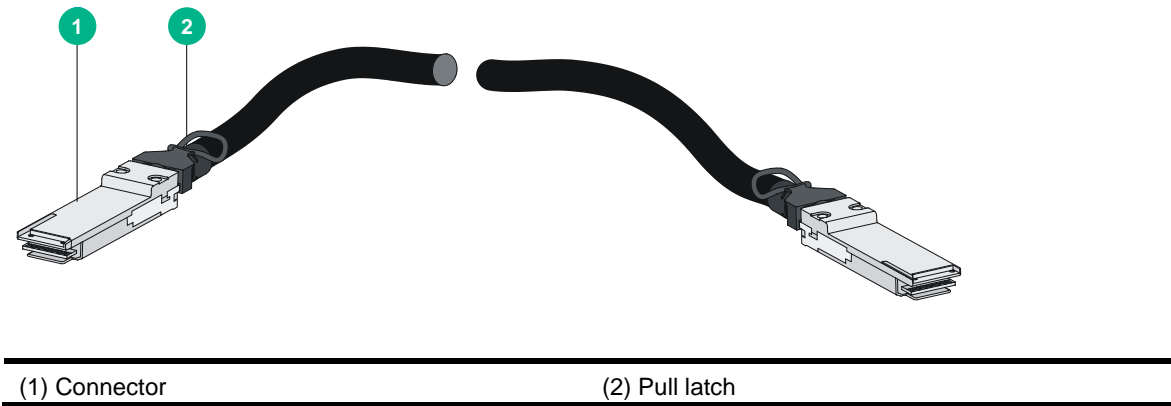
(2) Pull latch

QSFP+ DAC/QSFP28 DAC cable

You can use QSFP+ DAC cables to connect QSFP+ ports.

You can use QSFP28 DAC cables to connect QSFP28 ports. The QSFP28 DAC cables are similar to QSFP+ DAC cables in appearance.

Figure 4-7 QSFP+ DAC cable



QSFP+ to SFP+ DAC cable

A QSFP+ to SFP+ DAC cable provides one QSFP+ connector at one end and four SFP+ connectors at the other end.

Figure 4-8 QSFP+ to SFP+ DAC cable

