



## **S5300 Series Ethernet Switches**

# **Product Description**

**Issue**      08  
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## **Huawei Technologies Co., Ltd.**

Address: Huawei Industrial Base  
Bantian, Longgang  
Shenzhen 518129  
People's Republic of China

Website: <http://www.huawei.com>

Email: [support@huawei.com](mailto:support@huawei.com)

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# About This Document

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## Intended Audience

This document describes the positioning, characteristics, architecture, link features, service features, application scenarios, operation and maintenance functions, and technical specifications of the switch.

This document helps you understand the characteristics and features of the switch.

This document is intended for:

- Network planning engineers
- Hardware installation engineers
- Commissioning engineers
- Data configuration engineers
- On-site maintenance engineers
- Network monitoring engineers
- System maintenance engineers

## Statement

The device provides the mirroring function for network monitoring and fault management, during which communication data may be collected. Huawei alone is unable to collect or save the content of users' communications. It is suggested that you activate the functions based on the applicable laws and regulations in terms of purpose and scope of usage. You are obligated to take considerable measures to ensure that the content of users' communications is fully protected when the content is being used and saved.






## Declaration

This manual is only a reference for you to configure your devices. The contents in the manual, such as web pages, command line syntax, and command outputs, are based on the device conditions in the lab. The manual provides instructions for general scenarios, but do not cover all usage scenarios of all product models. The contents in the manual may be different from your actual device situations due to the differences in software versions, models, and configuration files. The manual will not list every possible difference. You should configure your devices according to actual situations.

The specifications provided in this manual are tested in lab environment (for example, the tested device has been installed with a certain type of boards or only one protocol is run on the device). Results may differ from the listed specifications when you attempt to obtain the maximum values with multiple functions enabled on the device.

## Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 <b>DANGER</b>	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
 <b>WARNING</b>	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
 <b>CAUTION</b>	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
 <b>NOTICE</b>	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results. NOTICE is used to address practices not related to personal injury.
 <b>NOTE</b>	Calls attention to important information, best practices and tips. NOTE is used to address information not related to personal injury, equipment damage, and environment deterioration.

## Change History

Updates between document issues are cumulative. Therefore, the latest document version contains all updates made to previous versions.

### Changes in Issue 08 (2014-10-25)

The eighth commercial release has the following updates:

The S5320EI product description is added.

### **Changes in Issue 07 (2014-05-25)**

The seventh commercial release has the following updates:

The documentation is modified according to updates in product features.

### **Changes in Issue 06 (2014-04-30)**

The sixth commercial release has the following updates:

The documentation is modified according to updates in product features.

### **Changes in Issue 05 (2014-03-20)**

The fifth commercial release has the following updates:

The documentation is modified according to updates in product features.

### **Changes in Issue 04 (2013-11-06)**

The fourth commercial release has the following updates:

The documentation is modified according to updates in product features.

### **Changes in Issue 03 (2013-09-30)**

The third commercial release has the following updates:

The documentation is modified according to updates in product features.

### **Changes in Issue 02 (2013-07-25)**

The second commercial release has the following updates:

The documentation is modified according to updates in product features.

### **Changes in Issue 01 (2013-05-30)**

Initial commercial release.

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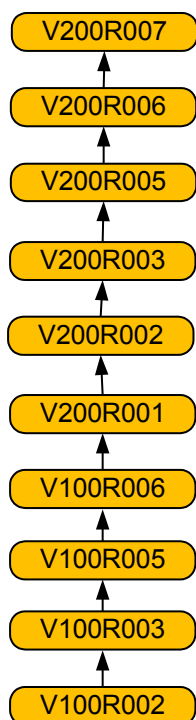
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# 1 Mapping Between the S5300 Series Switches and Software Versions

**Figure 1-1** shows S5300 version evolution.

Each version in **Figure 1-1** supports at least one model of the S5300.

**Figure 1-1** S5300 version evolution



**Table 1-1** lists the mapping between S5306TP-LI-AC switch and software versions.



**Table 1-1** Mapping between the S5306TP-LI-AC chassis and software versions

Model	Available Version
S5306TP-LI-AC	V100R006C00 to V200R005C00 <b>NOTE</b> This chassis model is not supported in V200R001C01 and V200R003C02.

**Table 1-2** lists the mapping between S5300-LI series switches and software versions.

**Table 1-2** Mapping between the S5300-LI chassis and software versions

Series	Model	Available Version
S5300-LI	S5300-28P-LI-AC	V200R001C00 and later versions <b>NOTE</b> This module is not supported in V200R001C01 and V200R003C02.
	S5300-28P-LI-DC	
	S5300-52P-LI-AC	
	S5300-52P-LI-DC	
	S5300-10P-LI-AC	V200R002C00 and later versions <b>NOTE</b> This module is not supported in V200R003C02.
	S5300-28X-LI-AC	V200R003C00 and later versions <b>NOTE</b> This module is not supported in V200R003C02.
	S5300-28X-LI-DC	
	S5300-28X-LI-24S-AC	
	S5300-28X-LI-24S-DC	
	S5300-28P-LI-BAT	V200R003C02 and later versions
	S5300-28P-LI-24S-BAT	
	S5300-52X-LI-48CS-AC	
	S5300-52X-LI-48CS-DC	
	S5300-52X-LI-AC	V200R005C00 and later versions
	S5300-52X-LI-DC	

**Table 1-3** lists the mapping between S5300-SI series switches and software versions.

**Table 1-3** Mapping between the S5300-SI chassis and software versions

Series	Model	Available Version
S5300-SI	S5328C-SI	V100R003 to V200R005C02
	S5352C-SI	<b>NOTE</b> These chassis models are not supported in V200R001C01, V200R003C02, and V200R005C01.
	S5324TP-SI-AC	
	S5324TP-SI-DC	
	S5348TP-SI-AC	
	S5348TP-SI-DC	
	S5324TP-PWR-SI	
	S5348TP-PWR-SI	
	S5328C-PWR-SI	
	S5352C-PWR-SI	

**Table 1-4** lists the mapping between S5300-EI series switches and software versions.

**Table 1-4** Mapping between the S5300-EI chassis and software versions

Series	Model	Available Version
S5300-EI	S5328C-EI	V100R002 to V200R005C02
	S5352C-EI	<b>NOTE</b> These chassis models are not supported in V200R001C01 and V200R003C02.
	S5328C-EI-24S	
	S5328C-PWR-EI	V100R003 to V200R005C02
	S5352C-PWR-EI	<b>NOTE</b> These chassis models are not supported in V200R001C01 and V200R003C02.
	S5300-28C-PWR-EI	V100R006C01
	S5300-52C-PWR-EI	

**Table 1-5** lists the mapping between S5310-EI series switches and software versions.

**Table 1-5** Mapping between the S5310-EI chassis and software versions

Series	Model	Available Version
S5310-EI	S5310-28C-EI	V200R002C00 to V200R005C02

Series	Model	Available Version
	S5310-52C-EI	<b>NOTE</b> These chassis models are not supported in V200R003C02 and V200R005C01.

**Table 1-6** lists the mapping between S5320-EI series switches and software versions.

**Table 1-6** Mapping between the S5320-EI chassis and software versions

Series		Model	Available Version
S5320-EI	S5320-C-EI	S5320-36C-EI-AC	V200R007C00 and later versions
		S5320-36C-EI-DC	
		S5320-56C-EI-AC	
		S5320-56C-EI-DC	
		S5320-36C-EI-28S-AC	
		S5320-36C-EI-28S-DC	
		S5320-56C-EI-48S-AC	
		S5320-56C-EI-48S-DC	
		S5320-36C-PWR-EI-AC	
		S5320-36C-PWR-EI-DC	
		S5320-56C-PWR-EI-AC	
		S5320-PC-EI	
	S5320-36PC-EI-DC		
	S5320-56PC-EI-AC		
	S5320-56PC-EI-DC		
	S5320-X-EI	S5320-32X-EI-AC	
		S5320-32X-EI-DC	
		S5320-52X-EI-AC	
		S5320-52X-EI-DC	
		S5320-50X-EI-AC	
		S5320-50X-EI-DC	
		S5320-32X-EI-24S-AC	
		S5320-32X-EI-24S-DC	

Series		Model	Available Version
		S5320-50X-EI-46S-AC	
		S5320-50X-EI-46S-DC	
	S5320-P-EI	S5320-32P-EI-AC	
		S5320-32P-EI-DC	
		S5320-52P-EI-AC	
		S5320-52P-EI-DC	

**Table 1-7** lists the mapping between S5300-HI series switches and software versions.

**Table 1-7** Mapping between the S5300-HI chassis and software versions

Series	Model	Available Version
S5300-HI	S5328C-HI	V100R006C00 to V200R005C02 <b>NOTE</b> These chassis models are not supported in V200R003C02.
	S5328C-HI-24S	V100R006C00 to V200R005C02 <b>NOTE</b> These chassis models are not supported in V200R003C02.

 **NOTE**

Unless otherwise specified, this document describes matching hardware and software performance of the switch in the latest version.

# 2 Product Overview

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## About This Chapter

[2.1 Product Positioning](#)

[2.2 Product Characteristics](#)

## 2.1 Product Positioning

The S5300 Series Ethernet Switches (S5300 for short) provide the access, aggregation, and data transport functions. They are developed by Huawei to meet the requirements for reliable access and high-quality transmission of multiple services on the metropolitan area network (MAN).

Positioned for the access layer or aggregation layer of the multi-service metropolitan area network (MAN), the S5300 provides large capacity, high port density, and cost-effective packet forwarding capabilities. In addition, the S5300 provides multi-service access capabilities, excellent extensibility, quality of service (QoS) guarantee, powerful multicast replication, and carrier-class security, and can be used to build ring or tree topologies of high reliability.

The S5300 is available in a lite (LI) series, a standard (SI) series, an enhanced (EI) series, and a hyper (HI) series. [Table 2-1](#) describes the differences among the four series.

**Table 2-1** Differences among the four series

Features	LI	SI	EI	HI
IPv4 Routing Protocol	Static route	Static route/RIP	Static route/ RIP/OSPF/ BGP/ISIS	Static route/ RIP/OSPF/ BGP/ISIS
IPv6 Routing Protocol	Static route	Static route/ RIPng	Static route/ RIPng/OSPFv3/ BGP4+/ISIS for IPv6	Static route/ RIPng/OSPFv3/ BGP4+/ISIS for IPv6
Multicast	IGMP snooping/MLD snooping	IGMP Snooping/MLD Snooping	IGMP Snooping/MLD Snooping/ IGMP/MLD/ MSDP/PIM (IPv4)/PIM (IPv6)	IGMP Snooping/MLD Snooping/ IGMP/MLD/ MSDP/PIM (IPv4)/PIM (IPv6)
MPLS	Not supported	Not supported	MPLS LDP/ MPLS TE/ MPLS VPN  <b>NOTE</b> Only the S5310- EI supports these functions.	MPLS LDP/ MPLS TE/ MPLS VPN
OAM/BFD	Software level	Software level	Software level	Hardware level
Traffic analysis	sFlow	Not supported	sFlow	sFlow

Features	LI	SI	EI	HI
iStack	Stacking through service ports <b>NOTE</b> The S5300-10P-LI-AC, S5306TP-LI-AC, S5300-28P-LI-BAT, and S5300-28P-LI-24S-BAT do not support stacking.	Stacking through stack cards	S5300EI/ S5320EI: stacking through stack cards S5310EI: stacking through service ports	Stacking through service ports

## 2.2 Product Characteristics

### Carrier-Class Maintainability

- The carrier-class design of the S5300 is as follows:
  - The fan modules and power supplies are field-replaceable, which facilitates maintenance.
  - The S5300 chassis are light and easy to install. The 220 mm deep models can be installed in 300 mm deep cabinets and the other models can be installed in the 600 mm deep cabinets.
- The S5300 provides in-service patching and upgrading of the system software.
- The S5300 supports the Rapid Ring Protection Protocol (RRPP), a fast protective switchover mechanism, to implement fast switchover of services at the link level and service level. This ensures carrier-class reliability.

### Powerful Multi-service Access Capabilities

The S5300 is usually deployed on the access layer of the MAN to aggregate service traffic from downstream devices such as the access media gateway (AMG), digital subscriber line access multiplexer (DSLAM), and LAN switch (LSW) to upstream devices. It supports the following services:

- Voice services of the next generation network (NGN)
- IPTV and video-on-demand (VoD) services
- Broadband access services

The S5300 adopts the mature and economical IP core technology and the high-performance Application Specific Integrated Circuit (ASIC) chip to provide a large switching capacity, thus satisfying the requirements for low delay and high reliability of traditional telecommunications services. In addition, the S5300 guarantees high bandwidth and supports multi-service access by:

- Adopting the Ethernet networking
- Supporting multicast services
- Providing QoS guarantee mechanisms and various protective switchover technologies

## Flexible Networking Capability

The S5300 provides 10/100/1000Base-T Ethernet electrical interfaces, 100/1000Base-X Ethernet optical interfaces, and 10GE optical interfaces. It supports multiple interface types such as access, trunk, and hybrid.

The S5300 provides swappable Small Form-Factor Pluggable (SFP) optical modules for optical fiber connections. For the 10GE optical fiber connections, the S5300 provides 10 Gigabit Small Form Factor Pluggable (XFP) and Small Form-Factor Pluggable Plus (SFP+) optical modules. The length of optical fibers can be selected according to the transmission distance.

The S5300 can be used to construct a tree, star, or ring Ethernet network. In the tree topology, the S5300 can use Smart Link to implement dual-homing uplink redundancy, improving network reliability. For the ring Ethernet, the S5300 supports the Spanning Tree Protocol (STP), SEP, ERPS and RRPP to prevent loops and provide rapid switchover.

## Network-Level QoS Guarantee

The S5300 provides comprehensive QoS mechanisms. It can intelligently identify services and classify traffic according to Layer 2 to Layer 4 information in the Open System Interconnection (OSI) model. Then, it provides various policies such as access traffic filter, traffic policing, and queue scheduling to provide differentiated services.

## High Extensibility

Based on the Huawei proprietary Versatile Routing Platform (VRP), the S5300 provides high-speed switching and various service features by integrating network management technologies.

The S5300 provides a versatile slot that supports various extended cards to meet the requirements for service expansion.

## Comprehensive Security Measures

The S5300 guarantees security of network devices and data transmission. It provides the following security measures to protect a network against attacks initiated by malicious users:

- Comprehensive mechanisms to defend against MAC-based attacks
- Various ACL policies
- Many anti-attack functions such as MAC forced forwarding, IP source guard, ARP security, and CPU defense
- Mechanism of forwarding table search based on VLAN IDs and MAC addresses
- Traffic suppression

In addition, the S5300 provides the following functions to ensure secure login of users:

- Provides login passwords and password encryption for login users.
- Protects commands through users levels and command levels.



- Locks the configuration terminal through a certain command to prevent illegal use of the device.
- Displays confirm messages for important commands that affect system performance.

The S5300 provides the Automatic Laser Shutdown (ALS) function, which enables the S5300 to stop transmitting laser when a fiber is broken. This function protects users against the laser.

## Convenient Operation and Maintenance

In addition to collecting traffic statistics based on interfaces, the S5300 provides fault detection and location tools such as ping and traceroute on an IP network. It can also work with the Huawei U2000 network management system (NMS) to implement performance monitoring, alarm report, and fast fault location.

Through the U2000, you can configure and manage the S5300, for example, manage interfaces, VLANs, multicast services, software upgrading, and configuration files. The U2000 supports various personalized configuration modes such as end-to-end configuration, batch configuration, and configuration wizard. In addition, it provides default configuration templates for management functions.

## Energy-Saving Design

The S5300 adopts the following measures to save energy:

- Low noise fans that can adjust the speed automatically are used, thus reducing noises in the system and power consumption of fans
- The chip switches to the power saving mode when no connected device is detected on a service interface, that is, the interface is idle.
- It uses highly-integrated and energy-saving chips produced through advanced processing techniques. With the help of the intelligent device management system, the chips not only improve system performance but also greatly reduce power consumption of the entire system.

## Advanced Lightning Protection Technologies

The S5300 adopts the Huawei patented surge protection technologies to protect the equipment. The surge protection technologies reduce the probability of damages caused by lightning, thus greatly improving the device reliability.

## Intelligent PoE Power Supply

The S5300 PoE switches has the PoE function. It provides centralized power supply for the attached IP phone, wireless access point (AP), portable device charger, POS machine, camera, and data collector through twisted pairs.

The PoE function of the S5300 PoE switches complies with IEEE 802.3af and IEEE 802.3at. The S5300 can provide power for the devices of different vendors remotely. In IEEE 802.3at, the maximum power supply capability is 30 W. This capability ensures adequate power for IP video phone, dualband WiFi AP, IP camera, multi-function STB11, and RFID and simplifies the network.

The S5300 PoE switches has the ability to control power supply based on time range, thus effectively managing network devices, reducing power consumption, and lowering the OPEX.

# 3 Application Scenarios

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## About This Chapter

[3.1 Application on a MAN](#)

[3.2 Multi-Topology Ring Network](#)

[3.3 VLAN Mapping](#)

[3.4 Application of Selective QinQ](#)

This section describes how selective QinQ functions on a network.

[3.5 Application in IPTV Services](#)

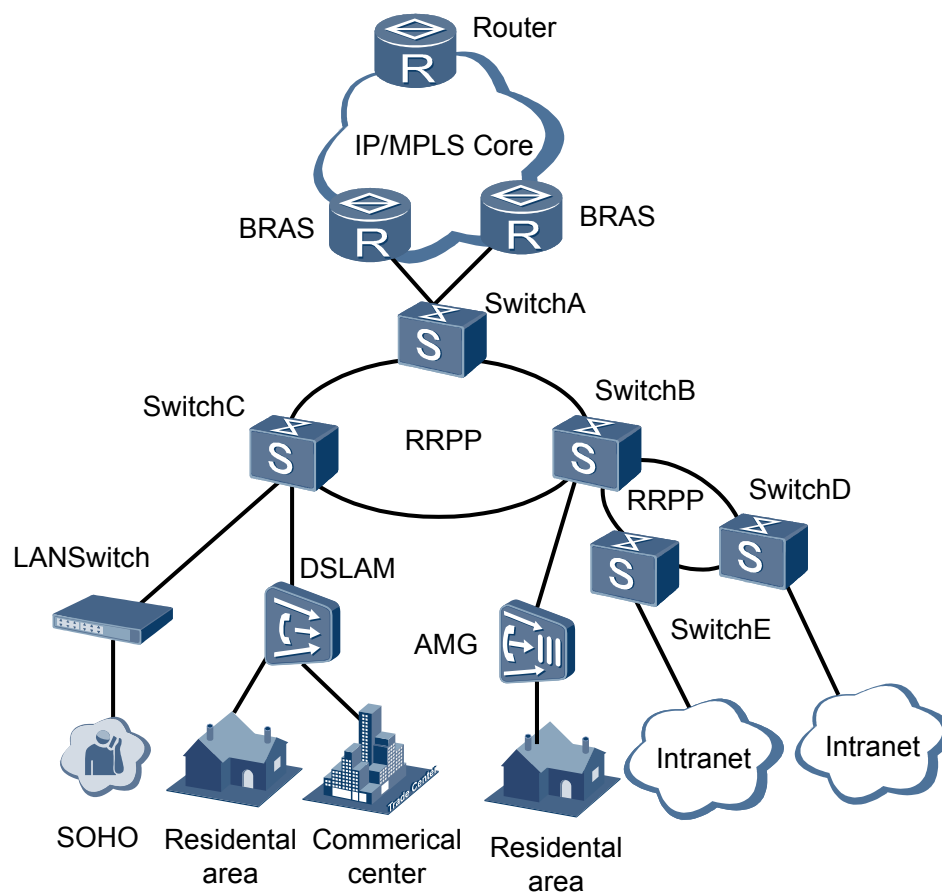
[3.6 Partitioned STP at Access and Aggregation Layers](#)

[3.7 End-to-End QoS](#)

## 3.1 Application on a MAN

The S5300 is mainly deployed at the access layer of a MAN. [Figure 3-1](#) shows the networking diagram.

**Figure 3-1** Application of the S5300 on a MAN



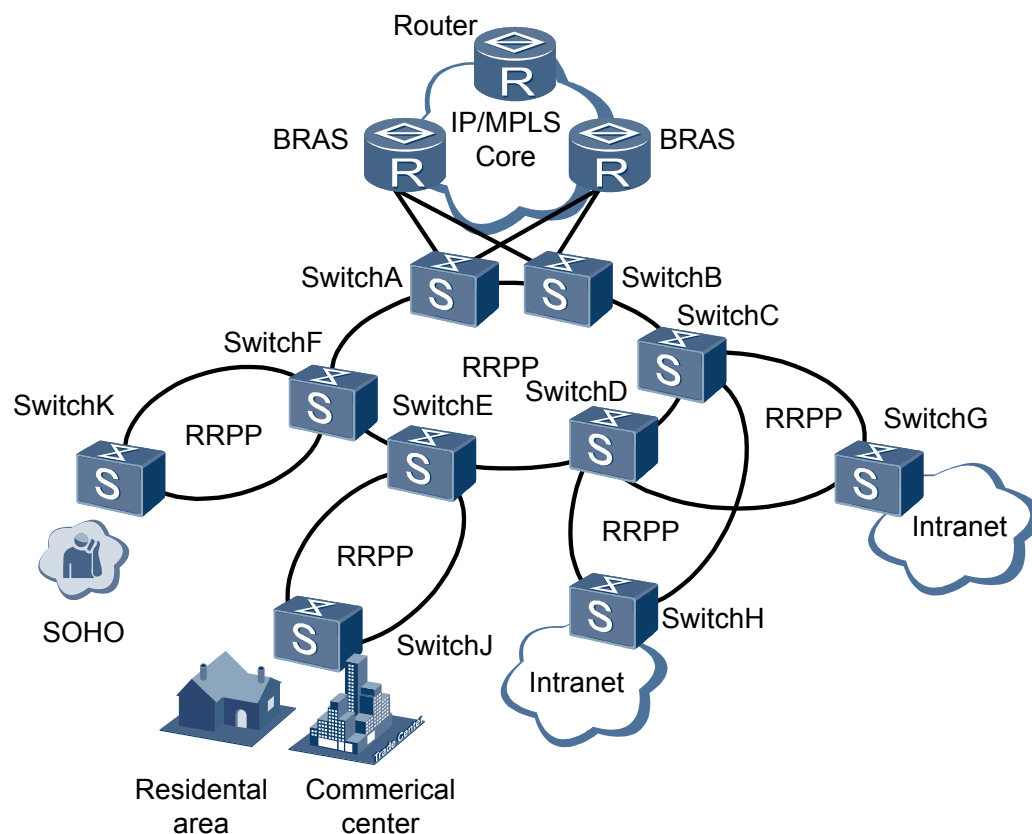
In the MAN, the S5300 switches provide the following functions:

- SwitchD and switchE are directly connected to the user hosts and aggregate the user services to switchB.
- SwitchC is connected to a LAN switch or Digital Subscriber Line Access Multiplexer (DSLAM) and aggregates service traffic to the core layer of the network.
- SwitchB is connected to an Access Media Gateway (AMG) and aggregates the access services from the AMG to the core layer.
- SwitchA, SwitchB, and SwitchC form an RRPP ring and SwitchB, SwitchD, and SwitchE form an RRPP ring. The RRPP rings improve service reliability through the rapid switchover mechanism, and improve the fault management and link maintenance capabilities through the Ethernet OAM function.

## 3.2 Multi-Topology Ring Network

The S5300 can be used in a layered RRPP ring. [Figure 3-2](#) shows the networking diagram.

**Figure 3-2** Application of the S5300 in a layered RRPP ring



SwitchH, switchG, switchJ, and switchK function as the UPEs, and switchA and switchB function as the PE-AGGs. The switches form an RRPP Ethernet ring.

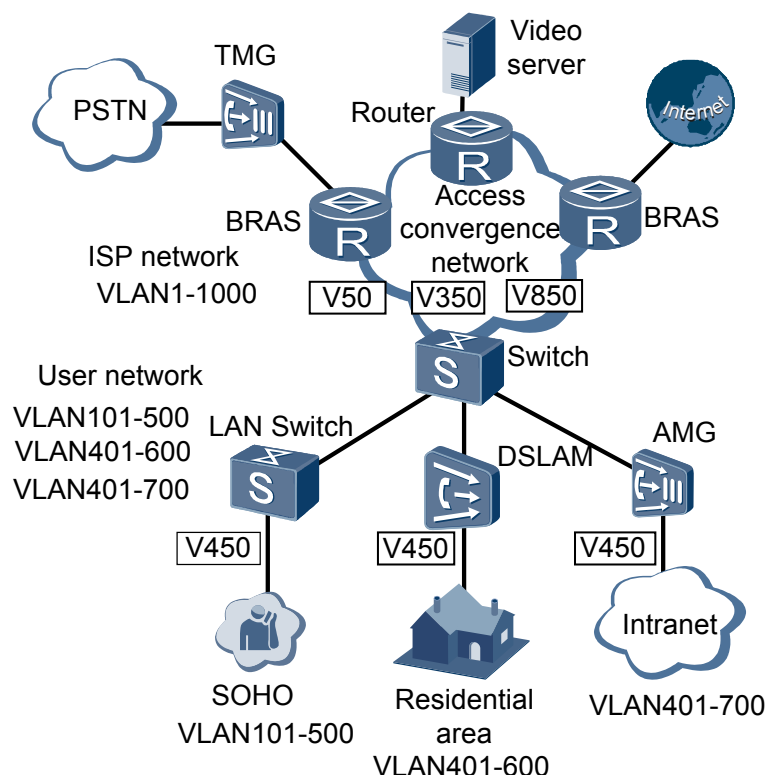
A metro Ethernet set up by the S5300 switches supports multiple RRPP domains. Each RRPP domain supports a primary ring and multiple subrings, forming a two-layer RRPP ring network. One layer is the aggregation layer and the other is the access layer. The two layers can be either tangent or intersecting.

The RRPP ring carries the leased line service of enterprises and broadband access services. The links on the RRPP ring can be bound through GE interfaces to meet the demand for high bandwidth. The RRPP ring also provides rapid protective switchover of services.

## 3.3 VLAN Mapping

The S5300 provides the VLAN mapping function. [Figure 3-3](#) shows the networking of VLAN mapping.

**Figure 3-3** VLAN mapping networking



After VLAN mapping is configured, ISPs need to manage only VLAN tags on the MAN, and different user networks can use same VLAN tags. The S5300 aggregates traffic from user networks to the ISP network and implements VLAN mapping between user networks and the ISP network. VLAN mapping implements communication between VLANs and facilitates service deployment.

When the S5300 receives service packets sent from a user network to the ISP network, it replaces the C-VLAN tag of the packets with the S-VLAN tag specified by the ISP. For example:

- Replaces C-VLAN 450 of Small Office/Home Office (SOHO) with S-VLAN 850.
- Replaces C-VLAN 450 of the residential community with S-VLAN 50.
- Replaces C-VLAN 450 of an enterprise intranet with S-VLAN 350.

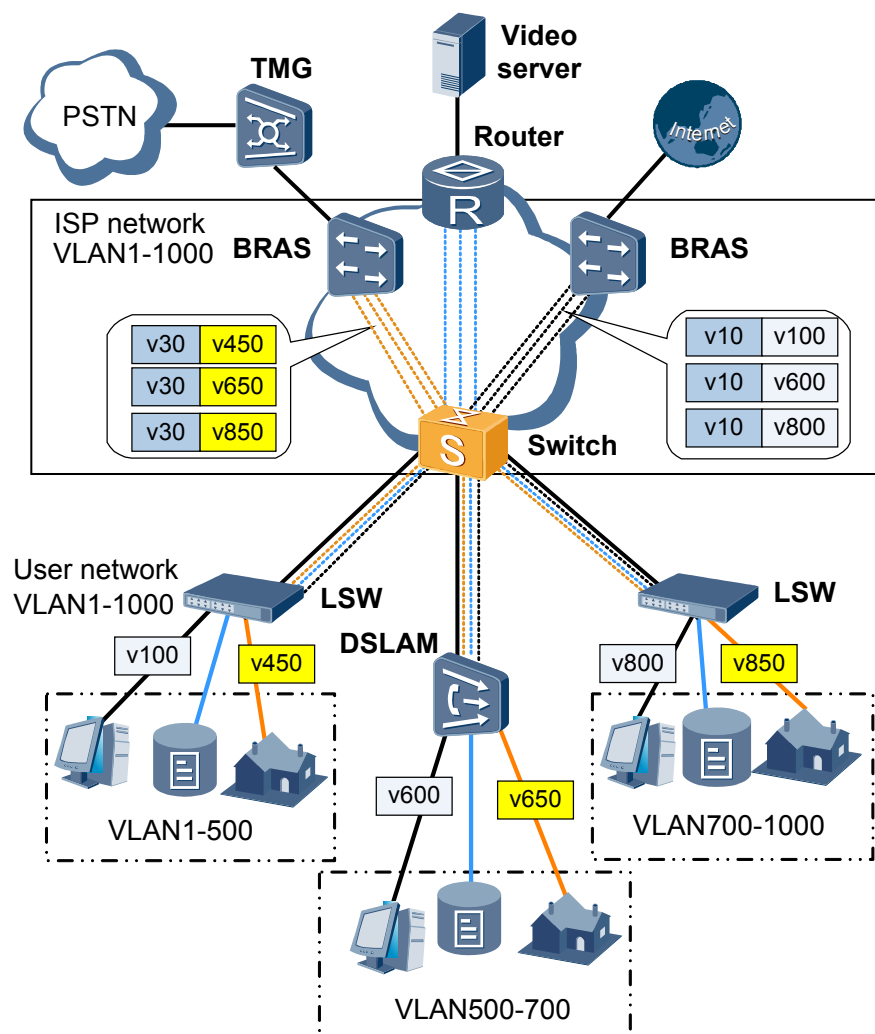
When receiving service packets sent from the ISP network to an enterprise intranet, the S5300 replaces the S-VLAN tag with the C-VLAN tag of the enterprise intranet.

## 3.4 Application of Selective QinQ

This section describes how selective QinQ functions on a network.

Selective QinQ networking is demonstrated in [Figure 3-4](#), where "Switch" represents the S5300.

Figure 3-4 Selective QinQ



The three enterprise networks shown in **Figure 3-4**, all need to transmit data, voice, and video services. The Switch can append an outer ISP VLAN tag to packets belonging to each kind of access service. For example:

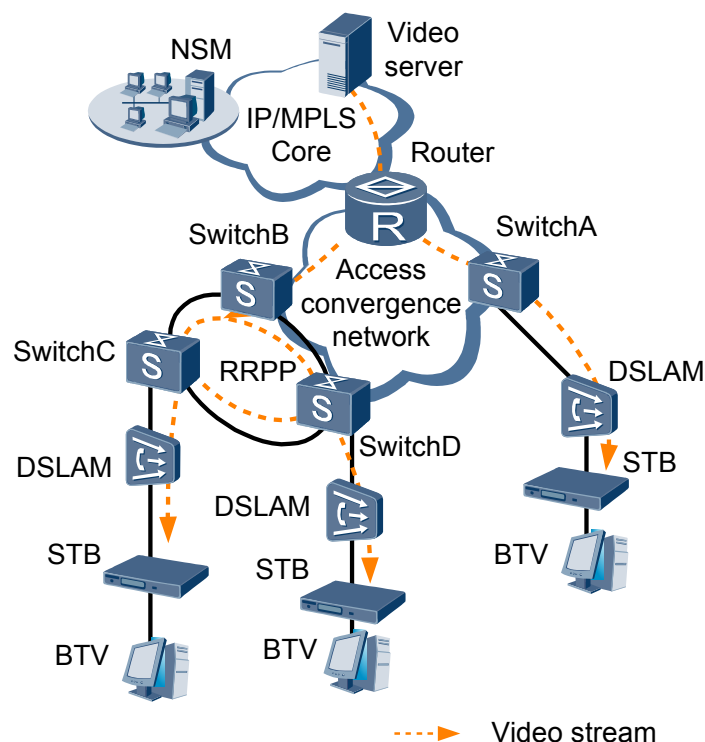
- Add an outer ISP VLAN tag VLAN 10 for data services belonging to VLAN 100, VLAN 600, and VLAN800 from the customer networks.
- Add an outer ISP VLAN tag VLAN 30 for video services belonging to VLAN 450, VLAN 650, and VLAN850 from the customer networks.

Using selective QinQ, the S5300 can converge services and choose different paths for various services to more effectively facilitate network deployment.

## 3.5 Application in IPTV Services

**Figure 3-5** shows the application of the S5300 in IPTV services.

**Figure 3-5** Application of the S5300 in IPTV services



SwitchC and SwitchD function as UPEs and provide the IGMP snooping function. They can serve as the replication and control point for multicast services at the access layer of the MAN to meet the demand for large-capacity multicast services. The DSLAM provides the IGMP proxy function to control user access to multicast services based on the user authority configured on the NSM.

SwitchB, SwitchC, and SwitchD form an RRPP Ethernet ring to ensure high quality of the Broadband Television (BTV) service. The RRPP ring has the following advantages:

- The RRPP ring improves availability of the BTV service through the rapid protective switchover mechanism.
- Only one copy of multicast packets needs to be transmitted on the RRPP ring, which saves bandwidth.

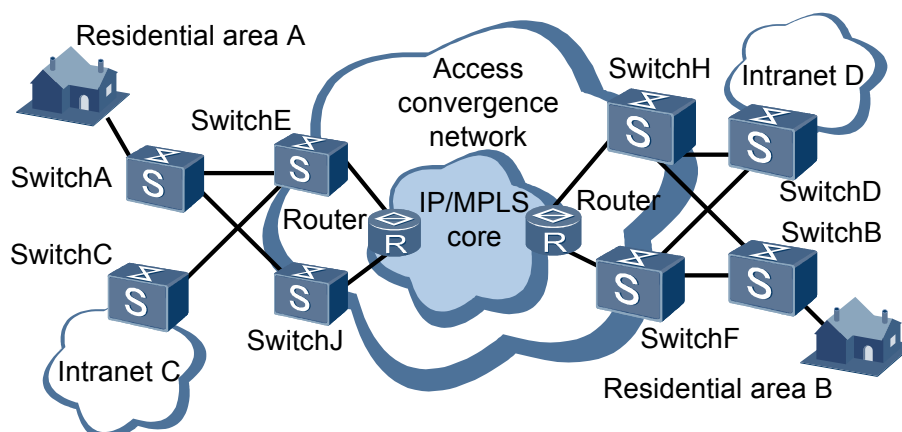
In addition, SwitchA, SwitchB, SwitchC, and SwitchD allow interfaces to join or leave multicast groups quickly, which implements fast switching of services.

## 3.6 Partitioned STP at Access and Aggregation Layers

**Figure 3-6** shows the networking of partitioned STP supported by the S5300.



**Figure 3-6** Partitioned STP supported by the S5300



As shown in the figure, enterprise intranets C and D, and residential communities A and B are all connected to a MAN. SwitchA, SwitchB, SwitchC, and SwitchD function as UPEs and connect to the enterprise intranets and residential communities directly. The UPEs are dual-homed to SwitchE, SwitchF, SwitchH, and SwitchJ to improve link reliability.

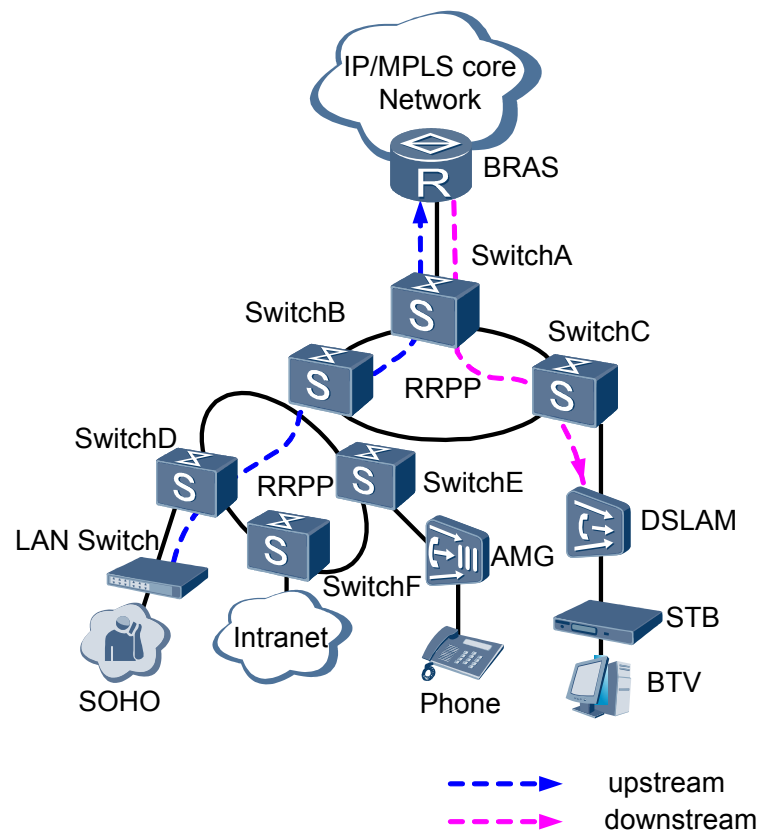
- Each UPE is dual-homed to the MAN and forms a partitioned STP network with two PE-AGGs. For example, SwitchA, SwitchE, and SwitchJ form a partitioned STP network.
- SwitchC and SwitchD at the egress of the intranets are on the same VLAN with SwitchE, SwitchF, SwitchH, and SwitchJ. BPDUs of intranet C and intranet D are transmitted transparently on this VLAN.
- SwitchA and SwitchB at the ingress of the residential communities are on the same VLAN with SwitchE, SwitchF, SwitchH, and SwitchJ. BPDUs of community A and community B are transmitted transparently on this VLAN.
- SwitchE, SwitchF, SwitchH, and SwitchJ on the MAN support BPDU tunneling and MSTP snooping.

The partitioned STP technology enables BPDUs of a user network to be transmitted transparently on the ISP network so that the user network can calculate a uniform spanning tree. In this way, users on the same network can communicate with each other even though they are in different geographical locations. In addition, the user network and ISP network use independent spanning trees.

## 3.7 End-to-End QoS

The S5300 provides the end-to-end QoS function. [Figure 3-7](#) shows the networking where the end-to-end QoS is configured.

**Figure 3-7** End-to-end QoS provided by the S5300



SwitchC, switchD, switchE, and switchF function as the UPEs, and switchA and switchB function as UPEs or PE-AGGs. The UPE or PE-AGG provides end-to-end QoS guarantee for the services on the LAN switch and DSLAM.

- At the ingress of the access and aggregation layer, the S5300 classifies data, voice, and video services. The S5300 then polices traffic and re-marks the precedence of packets.
- The RRPP nodes, including the across-ring nodes, schedule the queues. At the copy node, the S5300 restores the RRPP level to the 802.1p priority.
- At the egress of the access and aggregation layer, the S5300 performs queue scheduling and rate limit.

By mapping 802.1p priorities to different packets, the S5300 provides end-to QoS guarantee for the entire network.

# 4 Hardware Architecture

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## About This Chapter

[4.1 Appearance and Structure](#)

[4.2 Hardware Modules](#)

## 4.1 Appearance and Structure

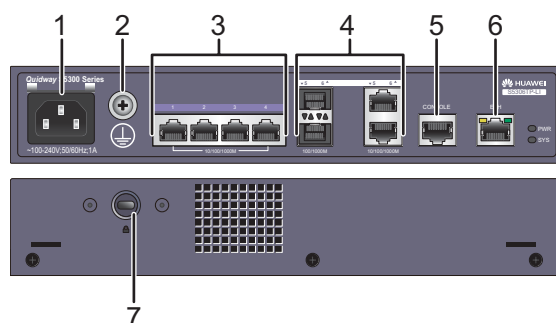
### NOTE

The S5300-28P-LI-BAT and S5300-28P-LI-24S-BAT support internal batteries. For details about the two models, see the S5300-LI-BAT Hardware Installation and Maintenance Guide. The S5300-LI series switches mentioned in this section do not include the two models.

### 4.1.1 S5306TP-LI-AC

#### S5306TP-LI-AC

Figure 4-1 Appearance of the S5306TP-LI-AC

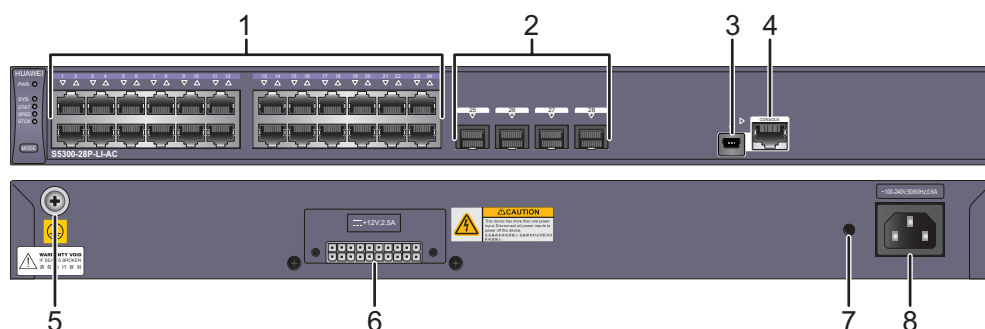


1	AC socket <b>NOTE</b> It is used with an AC power cable.	2	Ground screw <b>NOTE</b> It is used with a ground cable.
3	Four 10/100/1000BASE-T Ethernet electrical ports	4	Two combo ports (10/100/1000BASE-T + 100/1000BASE-X)  Optical modules applicable to combo optical ports: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> </ul>
5	One console port	6	One ETH management port
7	Security lock	-	-

### 4.1.2 S5300-LI

## S5300-28P-LI-AC

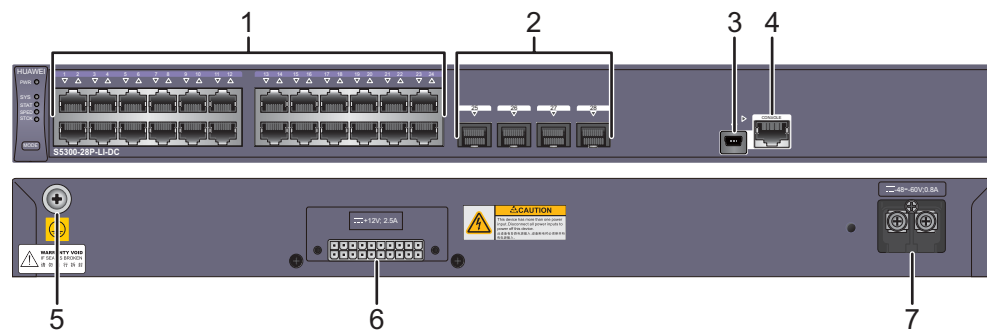
Figure 4-2 Appearance of the S5300-28P-LI-AC



1	Twenty-four 10/100/1000BASE-T Ethernet electrical ports	2	Four 1000BASE-X Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module (applicable in V200R002C00 and later versions)</li> <li>● Stack optical module (applicable in V200R007C00 and later versions)</li> <li>● 1 m, 10 m SFP+ copper cables</li> <li>● 3 m, 10 m AOC cables (applicable in V200R003C00 and later versions)</li> </ul>
3	One Mini USB port	4	One console port
5	Ground screw <b>NOTE</b> It is used with a ground cable.	6	RPS socket <b>NOTE</b> It is used with an RPS cable which is not hot swappable.
7	Jack for AC terminal locking latch <b>NOTE</b> The AC terminal locking latch is not delivered with the switch.	8	AC socket <b>NOTE</b> It is used with an AC power cable.

## S5300-28P-LI-DC

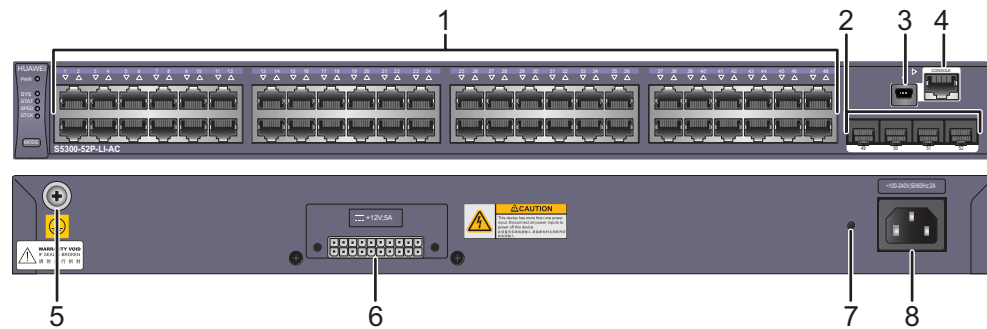
Figure 4-3 Appearance of the S5300-28P-LI-DC



1	Twenty-four 10/100/1000BASE-T Ethernet electrical ports	2	Four 1000BASE-X Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module (applicable in V200R002C00 and later versions)</li> <li>● Stack optical module (applicable in V200R007C00 and later versions)</li> <li>● 1 m, 10 m SFP+ copper cables</li> <li>● 3 m, 10 m AOC cables (applicable in V200R003C00 and later versions)</li> </ul>
3	One Mini USB port	4	One console port
5	Ground screw <b>NOTE</b> It is used with a ground cable.	6	RPS socket <b>NOTE</b> It is used with an RPS cable which is not hot swappable.
7	DC power terminal <b>NOTE</b> It is used with a DC power cable.	-	-

## S5300-52P-LI-AC

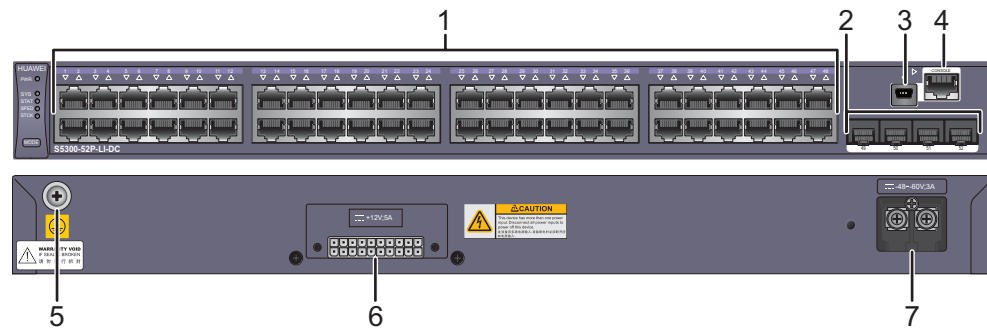
Figure 4-4 Appearance of the S5300-52P-LI-AC



1	Forty-eight 10/100/1000BASE-T Ethernet electrical ports	2	Four 1000BASE-X Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module (applicable in V200R002C00 and later versions)</li> <li>● Stack optical module (applicable in V200R007C00 and later versions)</li> <li>● 1 m, 10 m SFP+ copper cables</li> <li>● 3 m, 10 m AOC cables (applicable in V200R003C00 and later versions)</li> </ul>
3	One Mini USB port	4	One console port
5	Ground screw <b>NOTE</b> It is used with a ground cable.	6	RPS socket <b>NOTE</b> It is used with an RPS cable which is not hot swappable.
7	Jack for AC terminal locking latch <b>NOTE</b> The AC terminal locking latch is not delivered with the switch.	8	AC socket <b>NOTE</b> It is used with an AC power cable.

## S5300-52P-LI-DC

Figure 4-5 Appearance of the S5300-52P-LI-DC

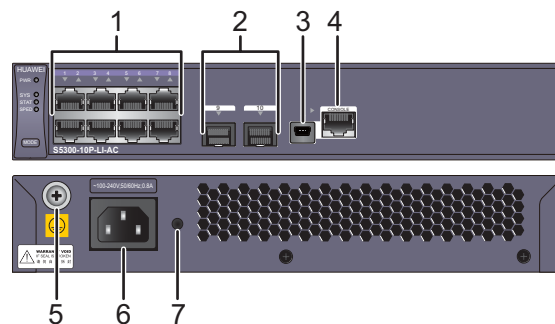


1	Forty-eight 10/100/1000BASE-T Ethernet electrical ports	2	Four 1000BASE-X Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module (applicable in V200R002C00 and later versions)</li> <li>● Stack optical module (applicable in V200R007C00 and later versions)</li> <li>● 1 m, 10 m SFP+ copper cables</li> <li>● 3 m, 10 m AOC cables (applicable in V200R003C00 and later versions)</li> </ul>
3	One Mini USB port	4	One console port
5	Ground screw <b>NOTE</b> It is used with a ground cable.	6	RPS socket <b>NOTE</b> It is used with an RPS cable which is not hot swappable.
7	DC power terminal <b>NOTE</b> It is used with a DC power cable.	-	-



## S5300-10P-LI-AC

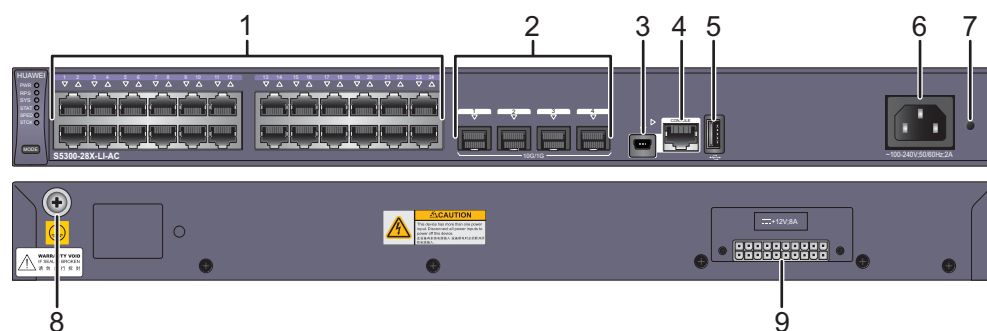
**Figure 4-6** Appearance of the S5300-10P-LI-AC



1	Eight 10/100/1000BASE-T Ethernet electrical ports	2	Two 1000BASE-X Ethernet optical ports  Applicable modules: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module (applicable in V200R002C00 and later versions)</li> </ul>
3	One Mini USB port	4	One console port
5	Ground screw <b>NOTE</b> It is used with a ground cable.	6	AC socket <b>NOTE</b> It is used with an AC power cable.
7	Jack for AC terminal locking latch <b>NOTE</b> The AC terminal locking latch is not delivered with the switch.	-	-

## S5300-28X-LI-AC

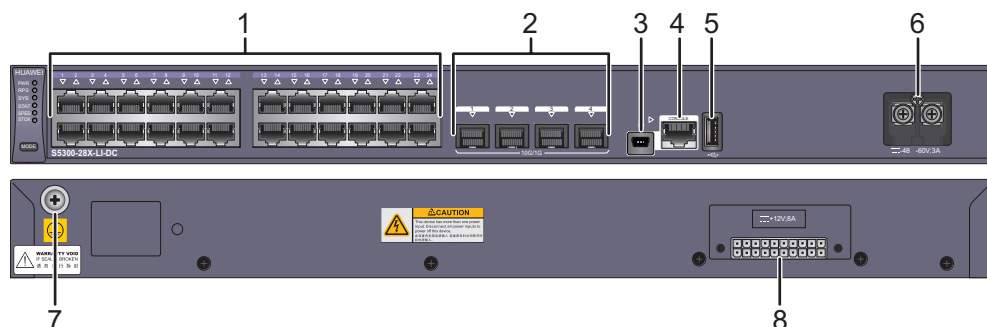
**Figure 4-7** Appearance of the S5300-28X-LI-AC



1	Twenty-four 10/100/1000BASE-T Ethernet electrical ports	2	Four 10GE SFP+ Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module</li> <li>● 10GE SFP+ optical module</li> <li>● 10GE-CWDM optical module (applicable in V200R005C00 and later versions)</li> <li>● 1 m, 3 m, 10 m SFP+ copper cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
3	One Mini USB port	4	One console port
5	One USB port	6	AC socket <b>NOTE</b> It is used with an AC power cable.
7	Jack for AC terminal locking latch <b>NOTE</b> The AC terminal locking latch is not delivered with the switch.	8	Ground screw <b>NOTE</b> It is used with a ground cable.
9	RPS socket <b>NOTE</b> It is used with an RPS cable which is not hot swappable.	-	-

### S5300-28X-LI-DC

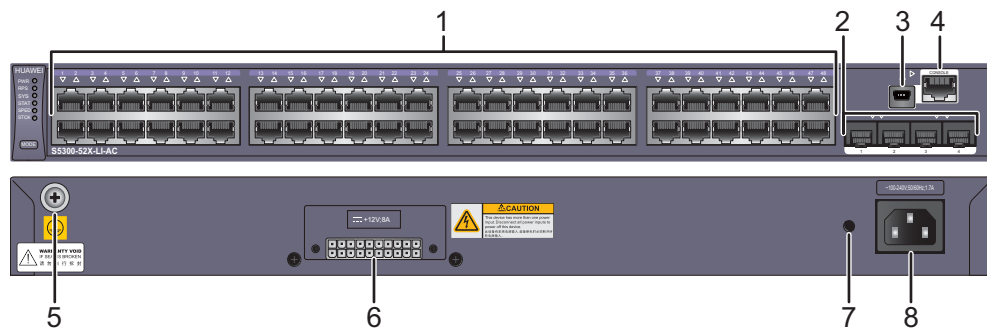
Figure 4-8 Appearance of the S5300-28X-LI-DC



1	Twenty-four 10/100/1000BASE-T Ethernet electrical ports	2	Four 10GE SFP+ Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module</li> <li>● 10GE SFP+ optical module</li> <li>● 10GE-CWDM optical module (applicable in V200R005C00 and later versions)</li> <li>● 1 m, 3 m, 10 m SFP+ copper cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
3	One Mini USB port	4	One console port
5	One USB port	6	DC power terminal <b>NOTE</b> It is used with a DC power cable.
7	Ground screw <b>NOTE</b> It is used with a ground cable.	8	RPS socket <b>NOTE</b> It is used with an RPS cable which is not hot swappable.

### S5300-52X-LI-AC

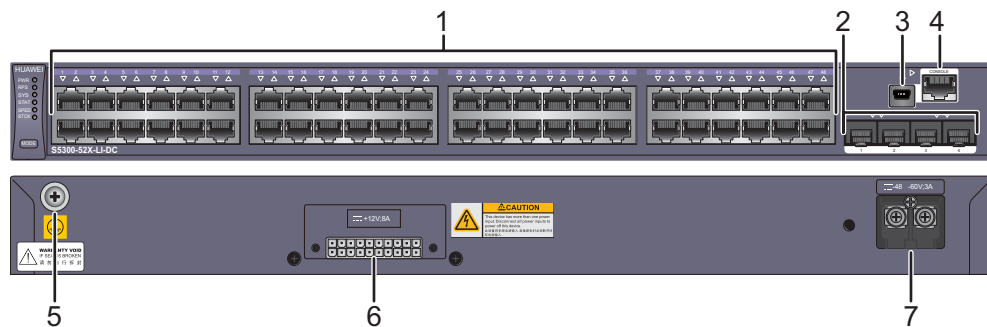
Figure 4-9 Appearance of the S5300-52X-LI-AC



1	Forty-eight 10/100/1000BASE-T Ethernet electrical ports	2	Four 10GE SFP+ Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module</li> <li>● 10GE SFP+ optical module</li> <li>● 10GE-CWDM optical module (applicable in V200R005C00 and later versions)</li> <li>● 1 m, 3 m, 10 m SFP+ copper cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
3	One Mini USB port	4	One console port
5	Ground screw <b>NOTE</b> It is used with a ground cable.	6	RPS socket <b>NOTE</b> It is used with an RPS cable which is not hot swappable.
7	Jack for AC terminal locking latch <b>NOTE</b> The AC terminal locking latch is not delivered with the switch.	8	AC socket <b>NOTE</b> It is used with an AC power cable.

### S5300-52X-LI-DC

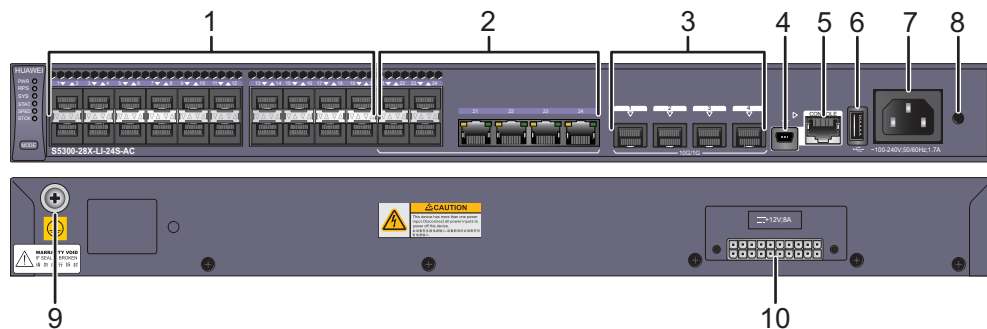
Figure 4-10 Appearance of the S5300-52X-LI-DC



1	Forty-eight 10/100/1000BASE-T Ethernet electrical ports	2	Four 10GE SFP+ Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module</li> <li>● 10GE SFP+ optical module</li> <li>● 10GE-CWDM optical module (applicable in V200R005C00 and later versions)</li> <li>● 1 m, 3 m, 10 m SFP+ copper cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
3	One Mini USB port	4	One console port
5	Ground screw <b>NOTE</b> It is used with a ground cable.	6	RPS socket <b>NOTE</b> It is used with an RPS cable which is not hot swappable.
7	DC power terminal <b>NOTE</b> It is used with a DC power cable.	-	-

### S5300-28X-LI-24S-AC

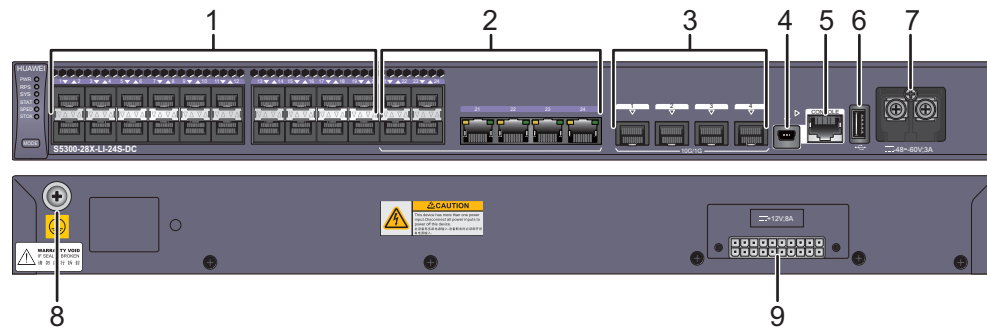
Figure 4-11 Appearance of the S5300-28X-LI-24S-AC



1	<p>Twenty 100/1000BASE-X Ethernet optical ports</p> <p>Applicable modules:</p> <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module</li> </ul>	2	<p>Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)</p> <p>Modules applicable to combo optical ports:</p> <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> </ul>
3	<p>Four 10GE SFP+ Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module</li> <li>● 10GE SFP+ optical module</li> <li>● 10GE-CWDM optical module (applicable in V200R005C00 and later versions)</li> <li>● 1 m, 3 m, 10 m SFP+ copper cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	<p>One Mini USB port</p>
5	<p>One console port</p>	6	<p>One USB port</p>
7	<p>AC socket</p> <p><b>NOTE</b> It is used with an AC power cable.</p>	8	<p>Jack for AC terminal locking latch</p> <p><b>NOTE</b> The AC terminal locking latch is not delivered with the switch.</p>
9	<p>Ground screw</p> <p><b>NOTE</b> It is used with a ground cable.</p>	10	<p>RPS socket</p> <p><b>NOTE</b> It is used with an RPS cable which is not hot swappable.</p>

## S5300-28X-LI-24S-DC

Figure 4-12 Appearance of the S5300-28X-LI-24S-DC

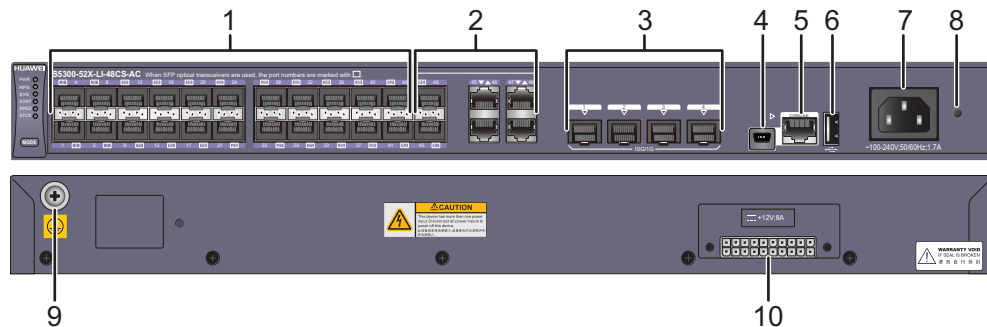


1	<p>Twenty 100/1000BASE-X Ethernet optical ports</p> <p>Applicable modules:</p> <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module</li> </ul>	2	<p>Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)</p> <p>Modules applicable to combo optical ports:</p> <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> </ul>
3	<p>Four 10GE SFP+ Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module</li> <li>● 10GE SFP+ optical module</li> <li>● 10GE-CWDM optical module (applicable in V200R005C00 and later versions)</li> <li>● 1 m, 3 m, 10 m SFP+ copper cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	One Mini USB port
5	One console port	6	One USB port
7	<p>DC power terminal</p> <p><b>NOTE</b></p> <p>It is used with a DC power cable.</p>	8	<p>Ground screw</p> <p><b>NOTE</b></p> <p>It is used with a ground cable.</p>

9	RPS socket <b>NOTE</b> It is used with an RPS cable which is not hot swappable.	-	-
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### S5300-52X-LI-48CS-AC

Figure 4-13 Appearance of the S5300-52X-LI-48CS-AC



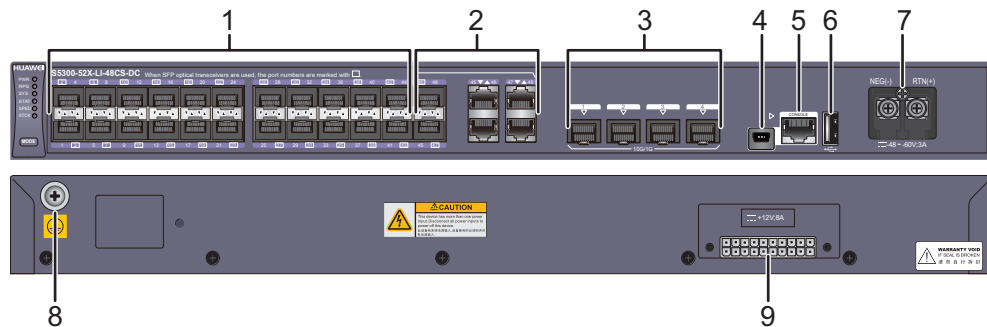
1	<p>Forty-four 100/1000BASE-X CSFP Ethernet ports</p> <p>Applicable modules:</p> <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module</li> <li>● CSFP optical module</li> </ul> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>● When all the ports have CSFP optical modules installed, each port functions as two ports. The switch has a total of 44 ports in this case.</li> <li>● When all the ports have SFP optical modules installed, the switch has a 22 ports.</li> </ul>	2	<p>Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)</p> <p>Modules applicable to combo optical ports:</p> <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● CSFP optical module</li> </ul> <p><b>NOTE</b></p> <p>The four combo ports (numbered 45, 46, 47, and 48) on a CSFP switch include four electrical ports and two optical ports. The two optical ports can function as four optical modules when they have Compact Small Form-Factor Pluggable (CSFP) optical modules installed. When the two optical ports have SFP optical modules installed, the electrical ports 45 and 48 can be used normally.</p>
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3	Four 10GE SFP+ Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module</li> <li>● 10GE SFP+ optical module</li> <li>● 10GE-CWDM optical module (applicable in V200R005C00 and later versions)</li> <li>● 1 m, 3 m, 10 m SFP+ copper cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	One Mini USB port
5	One console port	6	One USB port
7	AC socket <b>NOTE</b> It is used with an AC power cable.	8	Jack for AC terminal locking latch <b>NOTE</b> The AC terminal locking latch is not delivered with the switch.
9	Ground screw <b>NOTE</b> It is used with a ground cable.	10	RPS socket <b>NOTE</b> It is used with an RPS cable which is not hot swappable.

### S5300-52X-LI-48CS-DC

Figure 4-14 Appearance of the S5300-52X-LI-48CS-DC

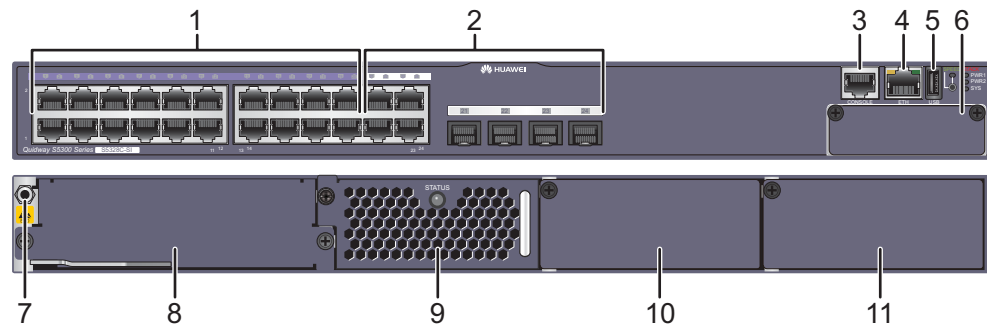


1	<p>Forty-four 100/1000BASE-X CSFP Ethernet ports</p> <p>Applicable modules:</p> <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module</li> <li>● CSFP optical module</li> </ul> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>● When all the ports have CSFP optical modules installed, each port functions as two ports. The switch has a total of 44 ports in this case.</li> <li>● When all the ports have SFP optical modules installed, the switch has a 22 ports.</li> </ul>	2	<p>Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)</p> <p>Modules applicable to combo optical ports:</p> <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● CSFP optical module</li> </ul> <p><b>NOTE</b></p> <p>The four combo ports (numbered 45, 46, 47, and 48) on a CSFP switch include four electrical ports and two optical ports. The two optical ports can function as four optical modules when they have Compact Small Form-Factor Pluggable (CSFP) optical modules installed. When the two optical ports have SFP optical modules installed, the electrical ports 45 and 48 can be used normally.</p>
3	<p>Four 10GE SFP+ Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module</li> <li>● 10GE SFP+ optical module</li> <li>● 10GE-CWDM optical module (applicable in V200R005C00 and later versions)</li> <li>● 1 m, 3 m, 10 m SFP+ copper cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	<p>One Mini USB port</p>
5	<p>One console port</p>	6	<p>One USB port</p>
7	<p>DC power terminal</p> <p><b>NOTE</b></p> <p>It is used with a DC power cable.</p>	8	<p>Ground screw</p> <p><b>NOTE</b></p> <p>It is used with a ground cable.</p>
9	<p>RPS socket</p> <p><b>NOTE</b></p> <p>It is used with an RPS cable which is not hot swappable.</p>	-	-

### 4.1.3 S5300-SI

## S5328C-SI

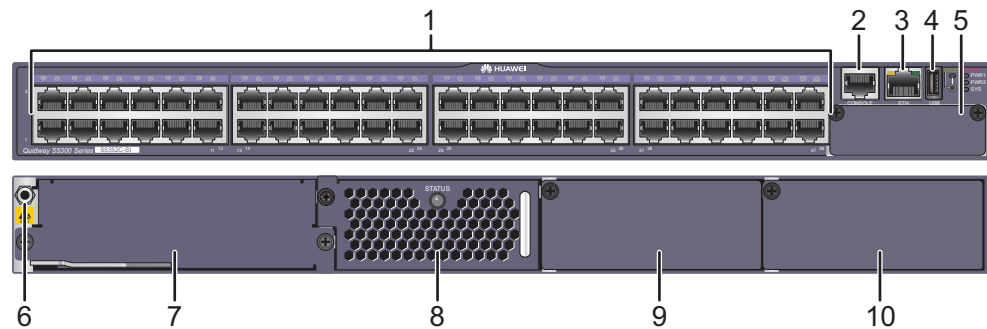
Figure 4-15 Appearance of the S5328C-SI



1	Twenty 10/100/1000BASE-T Ethernet electrical ports	2	Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)  Modules applicable to combo optical ports: ● FE optical module ● GE optical module ● GE-CWDM optical module
3	One console port	4	One ETH management port
5	One USB port	6	Front card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
7	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.	8	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
9	Fan module slot <b>NOTE</b> Available fans: CX7E1FANA Fan Module	10	Power module slot 2 <b>NOTE</b> Available power modules: ● 150 W AC Power Module ● 150 W DC Power Module
11	Power module slot 1 <b>NOTE</b> Available power modules: ● 150 W AC Power Module ● 150 W DC Power Module	-	-

## S5352C-SI

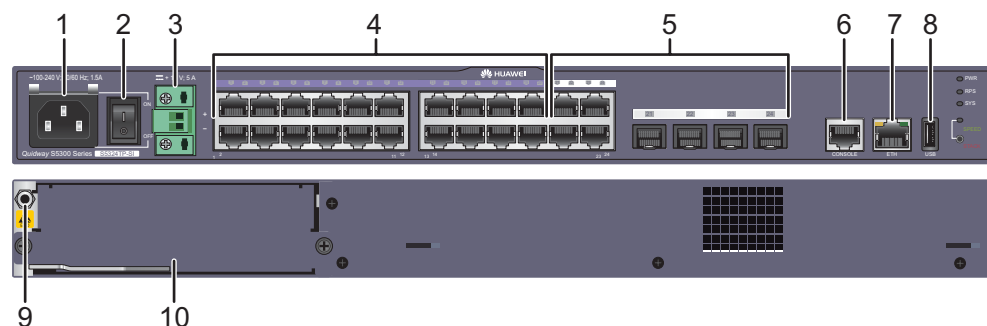
**Figure 4-16** Appearance of the S5352C-SI



1	Forty-eight 10/100/1000BASE-T Ethernet electrical ports	2	One console port
3	One ETH management port	4	One USB port
5	Front card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.	6	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.
7	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.	8	Fan module slot <b>NOTE</b> Available fans: CX7E1FANA Fan Module
9	Power module slot 2 <b>NOTE</b> Available power modules: ● 150 W AC Power Module ● 150 W DC Power Module	10	Power module slot 1 <b>NOTE</b> Available power modules: ● 150 W AC Power Module ● 150 W DC Power Module

## S5324TP-SI-AC

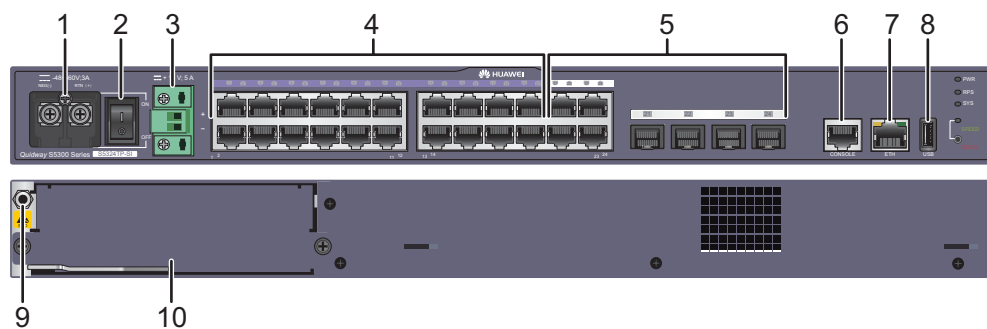
**Figure 4-17** Appearance of the S5324TP-SI-AC



1	AC socket <b>NOTE</b> It is used with an AC power cable.	2	Power switch
3	Backup power socket <b>NOTE</b> This socket can be connected to a backup power supply unit. The backup power supply unit must provide 12 V DC output voltage (ranging from 11 V to 13 V) and a minimum power of 100 W.	4	Twenty 10/100/1000BASE-T Ethernet electrical ports
5	Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)  Modules applicable to combo optical ports: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> </ul>	6	One console port
7	One ETH management port	8	One USB port
9	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.	10	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.

### S5324TP-SI-DC

**Figure 4-18** Appearance of the S5324TP-SI-DC

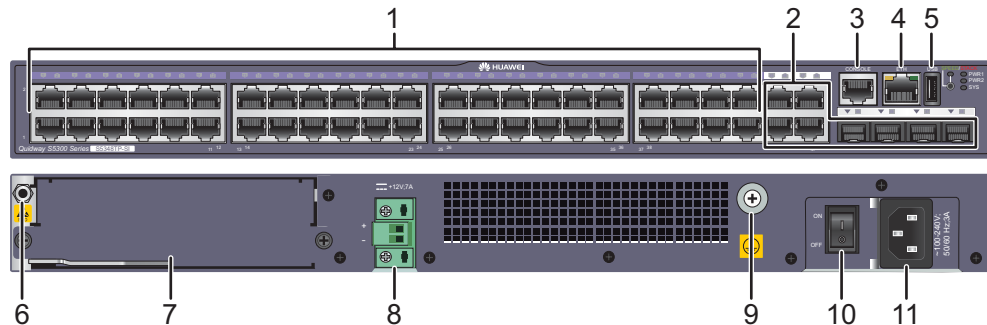


1	DC power terminal <b>NOTE</b> It is used with a DC power cable.	2	Power switch
---	---	---	--------------

3	Backup power socket <b>NOTE</b> This socket can be connected to a backup power supply unit. The backup power supply unit must provide 12 V DC output voltage (ranging from 11 V to 13 V) and a minimum power of 100 W.	4	Twenty 10/100/1000BASE-T Ethernet electrical ports
5	Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)  Modules applicable to combo optical ports: ● FE optical module ● GE optical module ● GE-CWDM optical module	6	One console port
7	One ETH management port	8	One USB port
9	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.	10	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.

## S5348TP-SI-AC

Figure 4-19 Appearance of the S5348TP-SI-AC

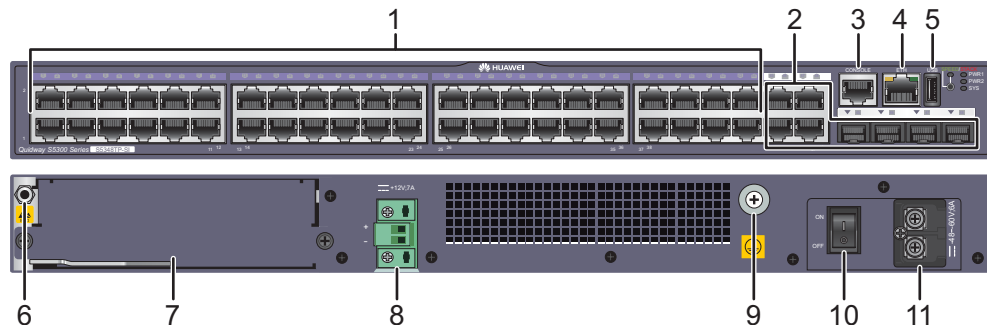


1	Forty-four 10/100/1000BASE-T Ethernet electrical ports	2	Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)  Modules applicable to combo optical ports: ● FE optical module ● GE optical module ● GE-CWDM optical module
3	One console port	4	One ETH management port

5	One USB port	6	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.
7	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.	8	Backup power socket <b>NOTE</b> This socket can be connected to a backup power supply unit. The backup power supply unit must provide 12 V DC output voltage (ranging from 11 V to 13 V) and a minimum power of 100 W.
9	Ground screw <b>NOTE</b> It is used with a ground cable.	10	Power switch
11	AC socket <b>NOTE</b> It is used with an AC power cable.	-	-

### S5348TP-SI-DC

Figure 4-20 Appearance of the S5348TP-SI-DC

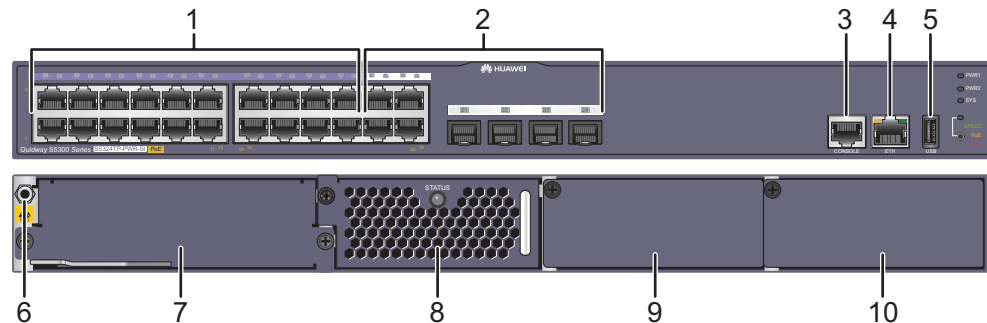


1	Forty-four 10/100/1000BASE-T Ethernet electrical ports	2	Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)  Modules applicable to combo optical ports: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> </ul>
3	One console port	4	One ETH management port

5	One USB port	6	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.
7	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.	8	Backup power socket <b>NOTE</b> This socket can be connected to a backup power supply unit. The backup power supply unit must provide 12 V DC output voltage (ranging from 11 V to 13 V) and a minimum power of 100 W.
9	Ground screw <b>NOTE</b> It is used with a ground cable.	10	Power switch
11	DC power terminal <b>NOTE</b> It is used with a DC power cable.	-	-

### S5324TP-PWR-SI

Figure 4-21 Appearance of the S5324TP-PWR-SI



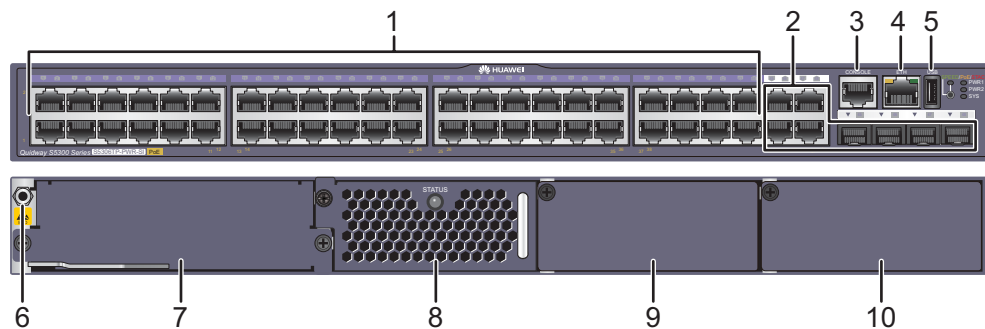
1	Twenty PoE+ 10/100/1000BASE-T Ethernet electrical ports	2	Four combo ports (10/100/1000BASE-T (PoE+) + 100/1000BASE-X)  Modules applicable to combo optical ports: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> </ul>
3	One console port	4	One ETH management port



5	One USB port	6	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.
7	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.	8	Fan module slot <b>NOTE</b> Available fans: CX7EIFANA Fan Module
9	Power module slot 2 <b>NOTE</b> Available power modules: <ul style="list-style-type: none"> <li>● 250 W AC PoE Power Module</li> <li>● 500 W AC PoE Power Module</li> <li>● 650 W DC PoE Power Module (applicable in V200R005C02 version)</li> </ul>	10	Power module slot 1 <b>NOTE</b> Available power modules: <ul style="list-style-type: none"> <li>● 250 W AC PoE Power Module</li> <li>● 500 W AC PoE Power Module</li> <li>● 650 W DC PoE Power Module (applicable in V200R005C02 version)</li> </ul>

## S5348TP-PWR-SI

Figure 4-22 Appearance of the S5348TP-PWR-SI

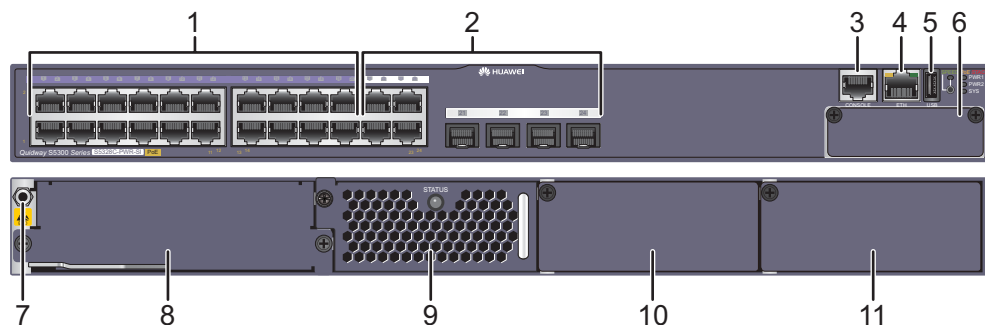


1	Forty-four PoE+ 10/100/1000BASE-T Ethernet electrical ports	2	Four combo ports (10/100/1000BASE-T (PoE+) + 100/1000BASE-X)  Modules applicable to combo optical ports: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> </ul>
3	One console port	4	One ETH management port

5	One USB port	6	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.
7	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.	8	Fan module slot <b>NOTE</b> Available fans: CX7EIFANA Fan Module
9	Power module slot 2 <b>NOTE</b> Available power modules: <ul style="list-style-type: none"> <li>● 250 W AC PoE Power Module</li> <li>● 500 W AC PoE Power Module</li> <li>● 650 W DC PoE Power Module (applicable in V200R005C02 version)</li> </ul>	10	Power module slot 1 <b>NOTE</b> Available power modules: <ul style="list-style-type: none"> <li>● 250 W AC PoE Power Module</li> <li>● 500 W AC PoE Power Module</li> <li>● 650 W DC PoE Power Module (applicable in V200R005C02 version)</li> </ul>

## S5328C-PWR-SI

Figure 4-23 Appearance of the S5328C-PWR-SI

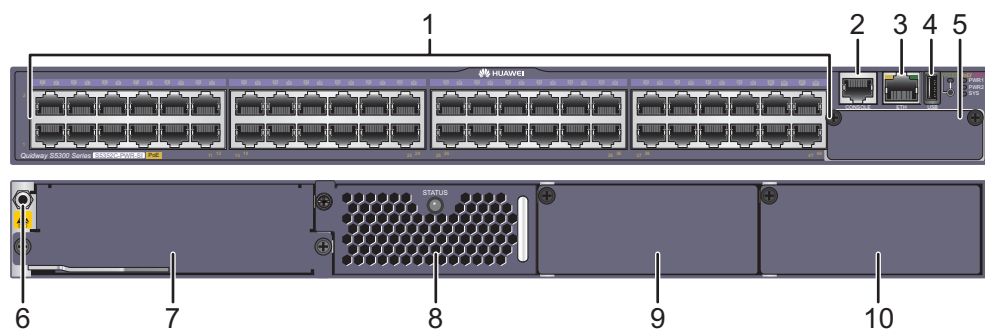


1	Twenty PoE+ 10/100/1000BASE-T Ethernet electrical ports	2	Four combo ports (10/100/1000BASE-T (PoE+) + 100/1000BASE-X)  Modules applicable to combo optical ports: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> </ul>
3	One console port	4	One ETH management port
5	One USB port	6	Front card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.

7	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.	8	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
9	Fan module slot <b>NOTE</b> Available fans: CX7E1FANA Fan Module	10	Power module slot 2 <b>NOTE</b> Available power modules: ● 250 W AC PoE Power Module ● 500 W AC PoE Power Module ● 650 W DC PoE Power Module (applicable in V200R005C02 version)
11	Power module slot 1 <b>NOTE</b> Available power modules: ● 250 W AC PoE Power Module ● 500 W AC PoE Power Module ● 650 W DC PoE Power Module (applicable in V200R005C02 version)	-	-

## S5352C-PWR-SI

Figure 4-24 Appearance of the S5352C-PWR-SI



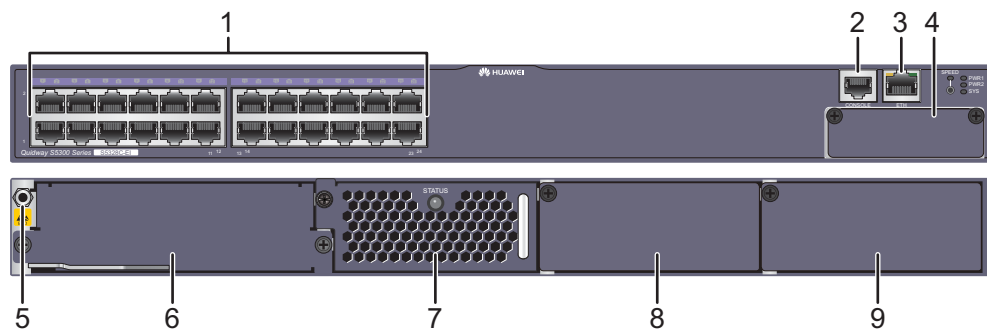
1	Forty-eight PoE+ 10/100/1000BASE-T Ethernet electrical ports	2	One console port
3	One ETH management port	4	One USB port
5	Front card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.	6	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.

7	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.	8	Fan module slot <b>NOTE</b> Available fans: CX7E1FANA Fan Module
9	Power module slot 2 <b>NOTE</b> Available power modules: <ul style="list-style-type: none"> <li>● 250 W AC PoE Power Module</li> <li>● 500 W AC PoE Power Module</li> <li>● 650 W DC PoE Power Module (applicable in V200R005C02 version)</li> </ul>	10	Power module slot 1 <b>NOTE</b> Available power modules: <ul style="list-style-type: none"> <li>● 250 W AC PoE Power Module</li> <li>● 500 W AC PoE Power Module</li> <li>● 650 W DC PoE Power Module (applicable in V200R005C02 version)</li> </ul>

### 4.1.4 S5300-EI

#### S5328C-EI

Figure 4-25 Appearance of the S5328C-EI

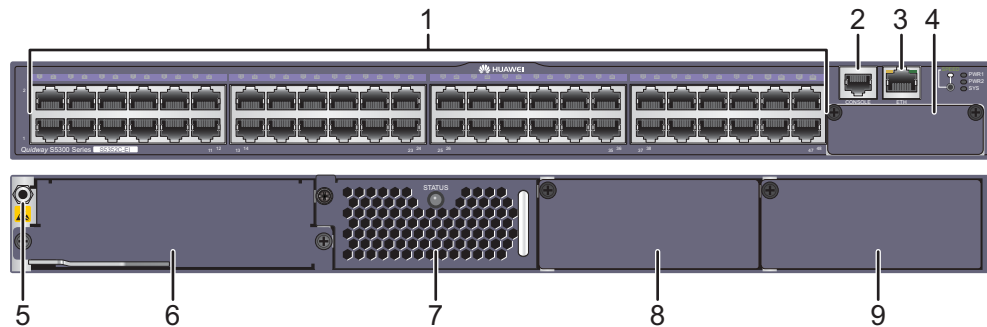


1	Twenty-four 10/100/1000BASE-T Ethernet electrical ports	2	One console port
3	One ETH management port	4	Front card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
5	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.	6	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.

7	Fan module slot <b>NOTE</b> Available fans: CX7E1FANA Fan Module	8	Power module slot 2 <b>NOTE</b> Available power modules: ● 150 W AC Power Module ● 150 W DC Power Module
9	Power module slot 1 <b>NOTE</b> Available power modules: ● 150 W AC Power Module ● 150 W DC Power Module	-	-

### S5352C-EI

**Figure 4-26** Appearance of the S5352C-EI

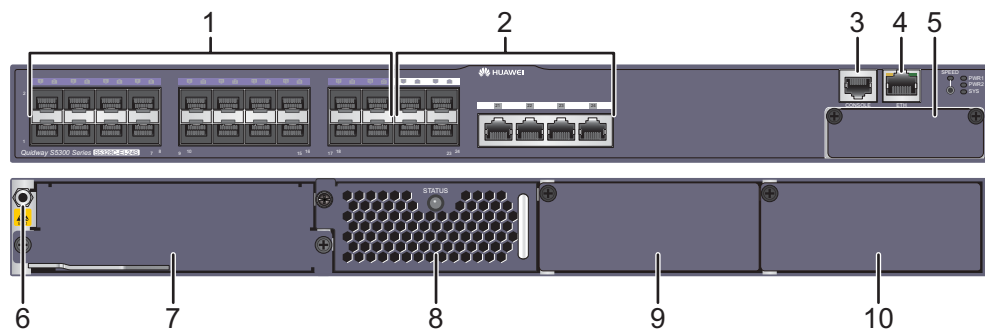


1	Forty-eight 10/100/1000BASE-T Ethernet electrical ports	2	One console port
3	One ETH management port	4	Front card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
5	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.	6	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
7	Fan module slot <b>NOTE</b> Available fans: CX7E1FANA Fan Module	8	Power module slot 2 <b>NOTE</b> Available power modules: ● 150 W AC Power Module ● 150 W DC Power Module

9	Power module slot 1  <b>NOTE</b> Available power modules: <ul style="list-style-type: none"> <li>● 150 W AC Power Module</li> <li>● 150 W DC Power Module</li> </ul>	-	-
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## S5328C-EI-24S

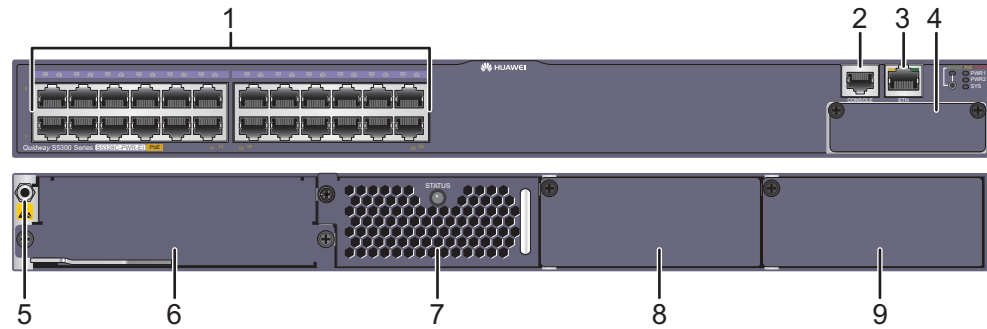
Figure 4-27 Appearance of the S5328C-EI-24S



1	Twenty 100/1000BASE-X Ethernet optical ports  Applicable modules: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE SFP copper module</li> </ul>	2	Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)  Modules applicable to combo optical ports: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> </ul>
3	One console port	4	One ETH management port
5	Front card slot  <b>NOTE</b> For details about the mapping between cards and switches, see Cards.	6	ESD jack  <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.
7	Rear card slot  <b>NOTE</b> For details about the mapping between cards and switches, see Cards.	8	Fan module slot  <b>NOTE</b> Available fans: <ul style="list-style-type: none"> <li>CX7E1FANA Fan Module</li> </ul>
9	Power module slot 2  <b>NOTE</b> Available power modules: <ul style="list-style-type: none"> <li>● 150 W AC Power Module</li> <li>● 150 W DC Power Module</li> </ul>	10	Power module slot 1  <b>NOTE</b> Available power modules: <ul style="list-style-type: none"> <li>● 150 W AC Power Module</li> <li>● 150 W DC Power Module</li> </ul>

## S5328C-PWR-EI

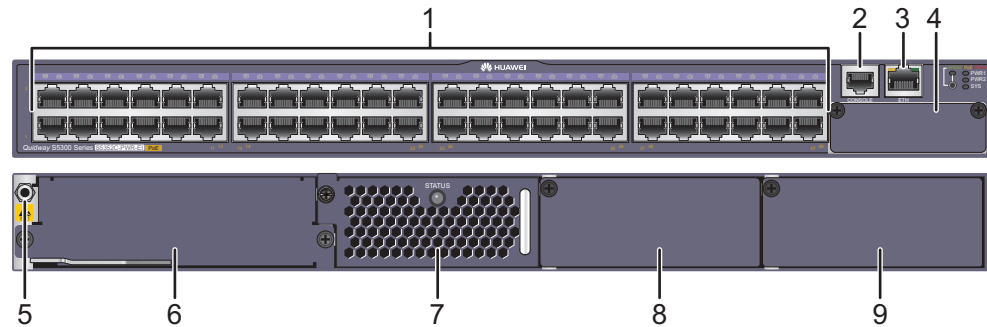
Figure 4-28 Appearance of the S5328C-PWR-EI



1	Twenty-four PoE+ 10/100/1000BASE-T Ethernet electrical ports	2	One console port
3	One ETH management port	4	Front card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
5	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.	6	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
7	Fan module slot <b>NOTE</b> Available fans: CX7E1FANA Fan Module	8	Power module slot 2 <b>NOTE</b> Available power modules: ● 250 W AC PoE Power Module ● 500 W AC PoE Power Module
9	Power module slot 1 <b>NOTE</b> Available power modules: ● 250 W AC PoE Power Module ● 500 W AC PoE Power Module	-	-

## S5352C-PWR-EI

Figure 4-29 Appearance of the S5352C-PWR-EI

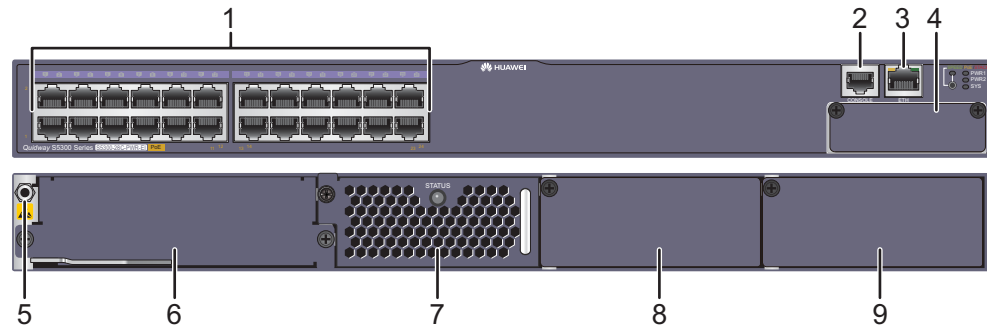


1	Forty-eight PoE+ 10/100/1000BASE-T Ethernet electrical ports	2	One console port
3	One ETH management port	4	Front card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
5	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.	6	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
7	Fan module slot <b>NOTE</b> Available fans: CX7E1FANA Fan Module	8	Power module slot 2 <b>NOTE</b> Available power modules: ● 250 W AC PoE Power Module ● 500 W AC PoE Power Module
9	Power module slot 1 <b>NOTE</b> Available power modules: ● 250 W AC PoE Power Module ● 500 W AC PoE Power Module	-	-



## S5300-28C-PWR-EI

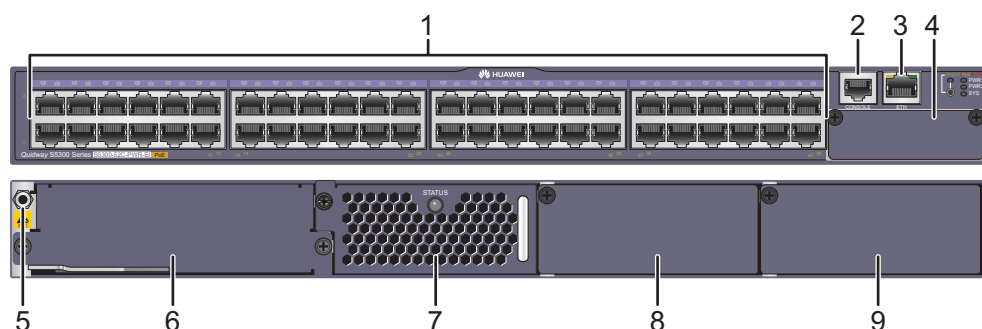
Figure 4-30 Appearance of the S5300-28C-PWR-EI



1	Twenty-four PoE+ 10/100/1000BASE-T Ethernet electrical ports	2	One console port
3	One ETH management port	4	Front card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
5	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.	6	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
7	Fan module slot <b>NOTE</b> Available fans: CX7E1FANA Fan Module	8	Power module slot 2 <b>NOTE</b> Available power modules: ● 250 W AC PoE Power Module ● 500 W AC PoE Power Module
9	Power module slot 1 <b>NOTE</b> Available power modules: ● 250 W AC PoE Power Module ● 500 W AC PoE Power Module	-	-

## S5300-52C-PWR-EI

Figure 4-31 Appearance of the S5300-52C-PWR-EI

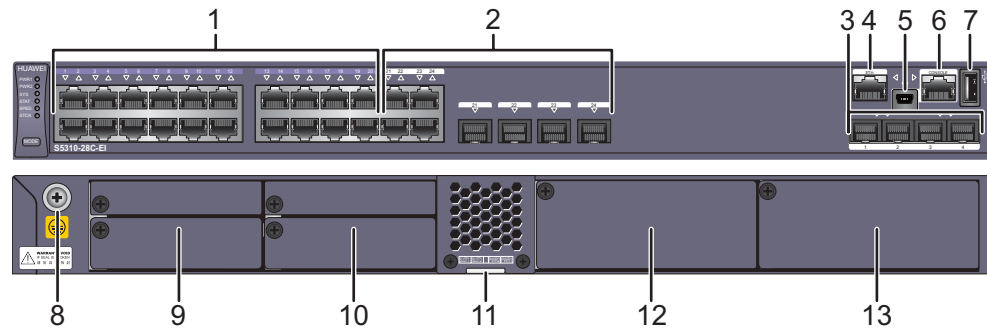


1	Forty-eight PoE+ 10/100/1000BASE-T Ethernet electrical ports	2	One console port
3	One ETH management port	4	Front card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
5	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.	6	Rear card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
7	Fan module slot <b>NOTE</b> Available fans: CX7E1FANA Fan Module	8	Power module slot 2 <b>NOTE</b> Available power modules: ● 250 W AC PoE Power Module ● 500 W AC PoE Power Module
9	Power module slot 1 <b>NOTE</b> Available power modules: ● 250 W AC PoE Power Module ● 500 W AC PoE Power Module	-	-

### 4.1.5 S5310-EI

## S5310-28C-EI

Figure 4-32 Appearance of the S5310-28C-EI

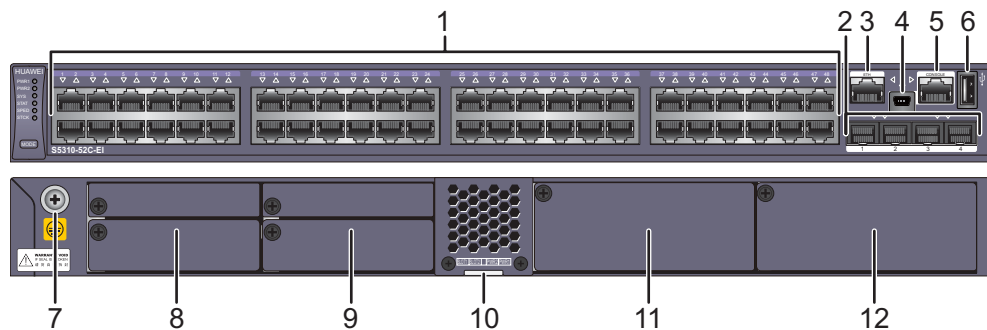


1	Twenty 10/100/1000BASE-T Ethernet electrical ports	2	Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)  Modules applicable to combo optical ports: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> </ul>
3	Four 10GE SFP+ Ethernet optical ports  Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical modules</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE SFP copper module</li> <li>● 10GE SFP+ optical module</li> <li>● 10GE-CWDM optical module (applicable in V200R005C00 version)</li> <li>● 1 m, 3 m, 10 m SFP+ copper cables</li> <li>● 3 m, 10 m AOC cables (applicable in V200R003C00 and later versions)</li> </ul>	4	One ETH management port
5	One Mini USB port	6	One console port
7	One USB port	8	Ground screw <b>NOTE</b> It is used with a ground cable.

9	Card slot 1 <b>NOTE</b> For details about the mapping between cards and switches, see Cards.	10	Card slot 2 <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
11	Bar code label <b>NOTE</b> This label is drawable, and you can pull it outward to view the bar code and MAC address of the switch.	12	Power module slot 2 <b>NOTE</b> Available power modules: ● 150 W AC Power Module ● 150 W DC Power Module
13	Power module slot 1 <b>NOTE</b> Available power modules: ● 150 W AC Power Module ● 150 W DC Power Module	-	-

### S5310-52C-EI

Figure 4-33 Appearance of the S5310-52C-EI



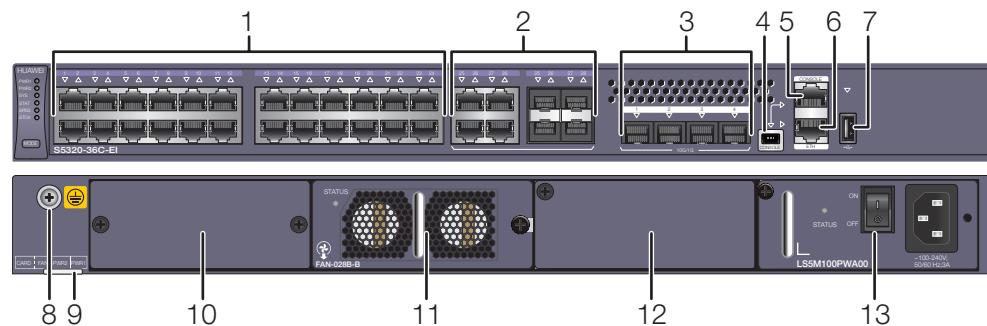
1	Forty-eight 10/100/1000BASE-T Ethernet electrical ports	2	Four 10GE SFP+ Ethernet optical ports Applicable modules and cables: ● GE optical modules ● GE-CWDM optical module ● GE-DWDM optical module ● GE SFP copper module ● 10GE SFP+ optical module ● 10GE-CWDM optical module (applicable in V200R005C00 version) ● 1 m, 3 m, 10 m SFP+ copper cables ● 3 m, 10 m AOC cables (applicable in V200R003C00 and later versions)
3	One ETH management port	4	One Mini USB port

5	One console port	6	One USB port
7	Ground screw <b>NOTE</b> It is used with a ground cable.	8	Card slot 1 <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
9	Card slot 2 <b>NOTE</b> For details about the mapping between cards and switches, see Cards.	10	Bar code label <b>NOTE</b> This label is drawable, and you can pull it outward to view the bar code and MAC address of the switch.
11	Power module slot 2 <b>NOTE</b> Available power modules: <ul style="list-style-type: none"> <li>● 150 W AC Power Module</li> <li>● 150 W DC Power Module</li> </ul>	12	Power module slot 1 <b>NOTE</b> Available power modules: <ul style="list-style-type: none"> <li>● 150 W AC Power Module</li> <li>● 150 W DC Power Module</li> </ul>

## 4.1.6 S5320-EI

### S5320-36C-EI-AC

Figure 4-34 Appearance of the S5320-36C-EI-AC



**NOTE**

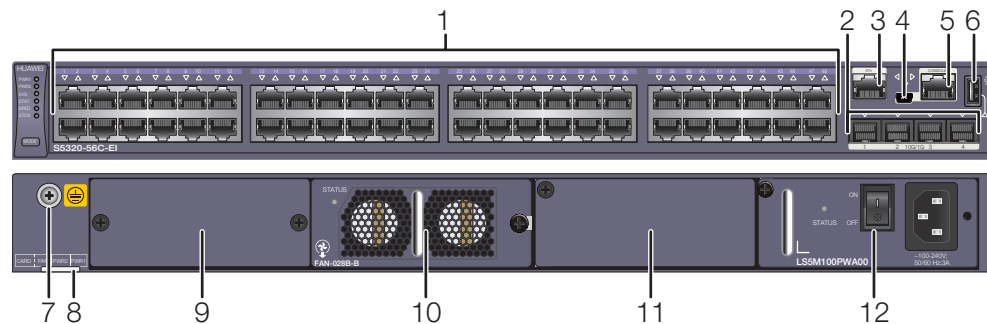
The S5320-36C-EI-AC and S5320-36C-EI-DC have the same appearance and functions. The difference lies in the power modules delivered with them. The S5320-36C-EI-DC is delivered with a 150 W DC power module by default, whereas the S5320-36C-EI-AC is delivered with a 150 W AC power module by default.

1	Twenty-four 10/100/1000BASE-T Ethernet electrical ports	2	Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)  Modules applicable to combo optical ports: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> </ul>
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3	<p>Four 10GE SFP+ Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	<p>One Mini USB port</p>
5	<p>One console port</p> <p><b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.</p>	6	<p>One ETH management port</p>
7	<p>One USB port</p>	8	<p>Ground screw</p> <p><b>NOTE</b> It is used with a ground cable.</p>
9	<p>Equipment serial number (ESN) label</p> <p><b>NOTE</b> You can draw it out to view the ESN and MAC address of the switch.</p>	10	<p>Extended card slot</p> <p>Applicable cards:</p> <ul style="list-style-type: none"> <li>● LS5D21X02S01</li> <li>● LS5D21X02T01</li> <li>● LS5D21VST000</li> </ul>
11	<p>Fan module slot</p> <p>Applicable fan module: FAN-028B-B</p>	12	<p>Power module slot 2</p> <p>Applicable power modules:</p> <ul style="list-style-type: none"> <li>● 150 W AC power module</li> <li>● 150 W DC power module</li> </ul>
13	<p>Power module slot 1</p> <p>Applicable power modules:</p> <ul style="list-style-type: none"> <li>● 150 W AC power module</li> <li>● 150 W DC power module</li> </ul>	-	-

## S5320-56C-EI-AC

Figure 4-35 Appearance of the S5320-56C-EI-AC



**NOTE**

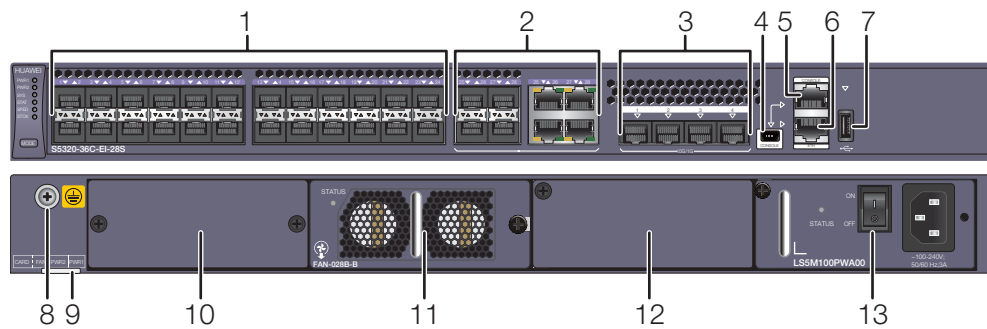
The S5320-56C-EI-AC and S5320-56C-EI-DC have the same appearance and functions. The difference lies in the power modules delivered with them. The S5320-56C-EI-DC is delivered with a 150 W DC power module by default, whereas the S5320-56C-EI-AC is delivered with a 150 W AC power module by default.

1	Forty-eight 10/100/1000BASE-T Ethernet electrical ports	2	Four 10GE SFP+ Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
3	One ETH management port	4	One Mini USB port
5	One console port <b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.	6	One USB port
7	Ground screw <b>NOTE</b> It is used with a ground cable.	8	Equipment serial number (ESN) label <b>NOTE</b> You can draw it out to view the ESN and MAC address of the switch.

9	Extended card slot  Applicable cards: <ul style="list-style-type: none"> <li>● LS5D21X02S01</li> <li>● LS5D21X02T01</li> <li>● LS5D21VST000</li> </ul>	10	Fan module slot  Applicable fan module: FAN-028B-B
11	Power module slot 2  Applicable power modules: <ul style="list-style-type: none"> <li>● 150 W AC power module</li> <li>● 150 W DC power module</li> </ul>	12	Power module slot 1  Applicable power modules: <ul style="list-style-type: none"> <li>● 150 W AC power module</li> <li>● 150 W DC power module</li> </ul>

### S5320-36C-EI-28S-AC

Figure 4-36 Appearance of the S5320-36C-EI-28S-AC



**NOTE**

The S5320-36C-EI-28S-DC and S5320-36C-EI-28S-AC have the same appearance and functions. The difference lies in the power modules delivered with them. The S5320-36C-EI-28S-DC is delivered with a 150 W DC power module by default, whereas the S5320-36C-EI-AC is delivered with a 150 W AC power module by default.

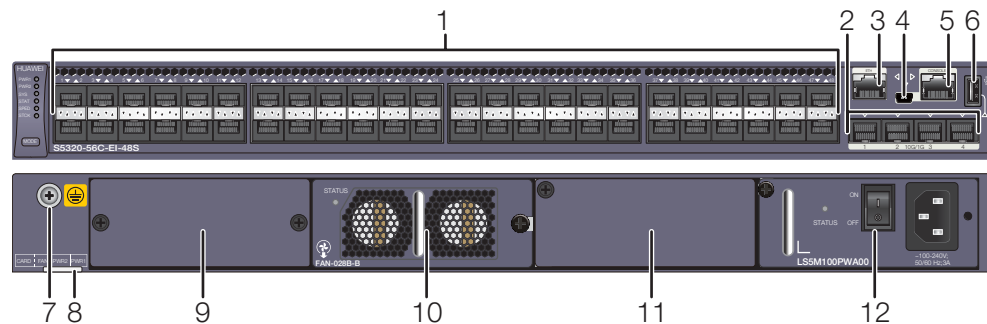
1	Twenty-four 100/1000BASE-X Ethernet optical ports  Applicable modules: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE copper module</li> </ul>	2	Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)  Modules applicable to combo optical ports: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> </ul>
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3	<p>Four 10GE SFP+ Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	One Mini USB port
5	<p>One console port</p> <p><b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.</p>	6	One ETH management port
7	One USB port	8	<p>Ground screw</p> <p><b>NOTE</b> It is used with a ground cable.</p>
9	<p>Equipment serial number (ESN) label</p> <p><b>NOTE</b> You can draw it out to view the ESN and MAC address of the switch.</p>	10	<p>Extended card slot</p> <p>Applicable cards:</p> <ul style="list-style-type: none"> <li>● LS5D21X02S01</li> <li>● LS5D21X02T01</li> <li>● LS5D21VST000</li> </ul>
11	<p>Fan module slot</p> <p>Applicable fan module: FAN-028B-B</p>	12	<p>Power module slot 2</p> <p>Applicable power modules:</p> <ul style="list-style-type: none"> <li>● 150 W AC power module</li> <li>● 150 W DC power module</li> </ul>
13	<p>Power module slot 1</p> <p>Applicable power modules:</p> <ul style="list-style-type: none"> <li>● 150 W AC power module</li> <li>● 150 W DC power module</li> </ul>	-	-

## S5320-56C-EI-48S-AC

**Figure 4-37** Appearance of the S5320-56C-EI-48S-AC



**NOTE**

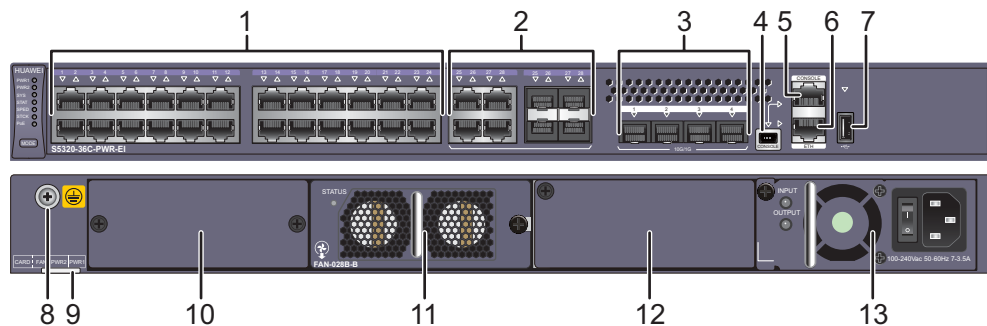
The S5320-56C-EI-48S-DC and S5320-56C-EI-48S-AC have the same appearance and functions. The difference lies in the power modules delivered with them. The S5320-56C-EI-48S-DC is delivered with a 150 W DC power module by default, whereas the S5320-56C-EI-48S-AC is delivered with a 150 W AC power module by default.

1	<p>Forty-eight 100/1000BASE-X Ethernet optical ports</p> <p>Applicable modules:</p> <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE copper module</li> </ul>	2	<p>Four 10GE SFP+ Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
3	<p>One ETH management port</p>	4	<p>One Mini USB port</p>
5	<p>One console port</p> <p><b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.</p>	6	<p>One USB port</p>
7	<p>Ground screw</p> <p><b>NOTE</b> It is used with a ground cable.</p>	8	<p>Equipment serial number (ESN) label</p> <p><b>NOTE</b> You can draw it out to view the ESN and MAC address of the switch.</p>

9	Extended card slot Applicable cards: ● LS5D21X02S01 ● LS5D21X02T01 ● LS5D21VST000	10	Fan module slot Applicable fan module: FAN-028B-B
11	Power module slot 2 Applicable power modules: ● 150 W AC power module ● 150 W DC power module	12	Power module slot 1 Applicable power modules: ● 150 W AC power module ● 150 W DC power module

### S5320-36C-PWR-EI-AC

Figure 4-38 Appearance of the S5320-36C-PWR-EI-AC



**NOTE**

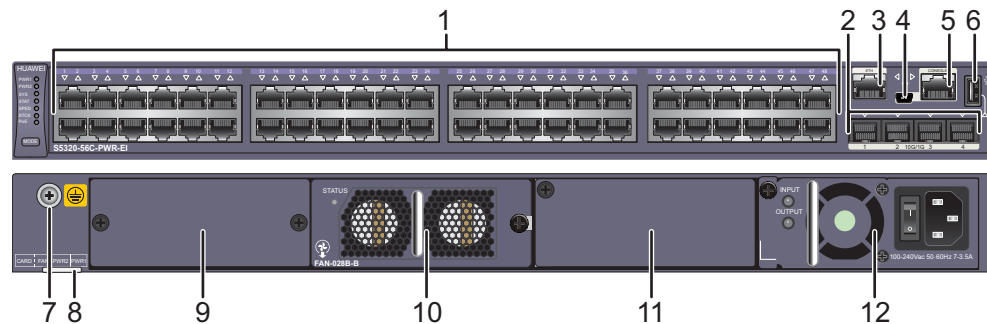
The S5320-36C-PWR-EI-DC and S5320-36C-PWR-EI-AC have the same appearance and functions. The difference lies in the power modules delivered with them. The S5320-36C-PWR-EI-DC is delivered with a 650 W DC PoE power module by default, whereas the S5320-36C-PWR-EI-AC is delivered with a 500 W AC PoE power module by default.

1	Twenty-four PoE+ 10/100/1000BASE-T Ethernet electrical ports	2	Four combo ports (10/100/1000BASE-T (PoE+) + 100/1000BASE-X)  Modules applicable to combo optical ports: ● FE optical module ● GE optical module ● GE-CWDM optical module
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3	<p>Four 10GE SFP+ Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	<p>One Mini USB port</p>
5	<p>One console port</p> <p><b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.</p>	6	<p>One ETH management port</p>
7	<p>One USB port</p>	8	<p>Ground screw</p> <p><b>NOTE</b> It is used with a ground cable.</p>
9	<p>Equipment serial number (ESN) label</p> <p><b>NOTE</b> You can draw it out to view the ESN and MAC address of the switch.</p>	10	<p>Extended card slot</p> <p>Applicable cards:</p> <ul style="list-style-type: none"> <li>● LS5D21X02S01</li> <li>● LS5D21X02T01</li> <li>● LS5D21VST000</li> </ul>
11	<p>Fan module slot</p> <p>Applicable fan module: FAN-028B-B</p>	12	<p>Power module slot 2</p> <p>Applicable power modules:</p> <ul style="list-style-type: none"> <li>● 500 W AC PoE power module</li> <li>● 650 W DC PoE power module</li> </ul>
13	<p>Power module slot 1</p> <p>Applicable power modules:</p> <ul style="list-style-type: none"> <li>● 500 W AC PoE power module</li> <li>● 650 W DC PoE power module</li> </ul>	-	-

## S5320-56C-PWR-EI-AC

Figure 4-39 Appearance of the S5320-56C-PWR-EI-AC

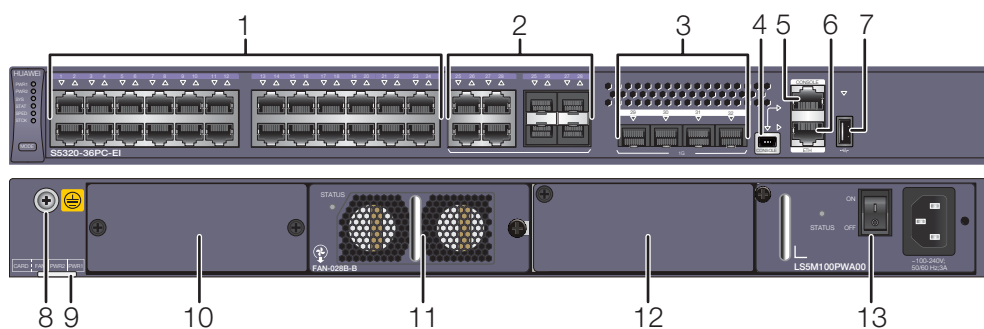


1	Forty-eight PoE+ 10/100/1000BASE-T Ethernet electrical ports	2	Four 10GE SFP+ Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
3	One ETH management port	4	One Mini USB port
5	One console port <b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.	6	One USB port
7	Ground screw <b>NOTE</b> It is used with a ground cable.	8	Equipment serial number (ESN) label <b>NOTE</b> You can draw it out to view the ESN and MAC address of the switch.
9	Extended card slot Applicable cards: <ul style="list-style-type: none"> <li>● LS5D21X02S01</li> <li>● LS5D21X02T01</li> <li>● LS5D21VST000</li> </ul>	10	Fan module slot Applicable fan module: FAN-028B-B

<p>11 Power module slot 2</p> <p>Applicable power modules:</p> <ul style="list-style-type: none"> <li>● 500 W AC PoE power module</li> <li>● 650 W DC PoE power module</li> </ul>	<p>12 Power module slot 1</p> <p>Applicable power modules:</p> <ul style="list-style-type: none"> <li>● 500 W AC PoE power module</li> <li>● 650 W DC PoE power module</li> </ul>
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## S5320-36PC-EI-AC

**Figure 4-40** Appearance of the S5320-36PC-EI-AC



**NOTE**

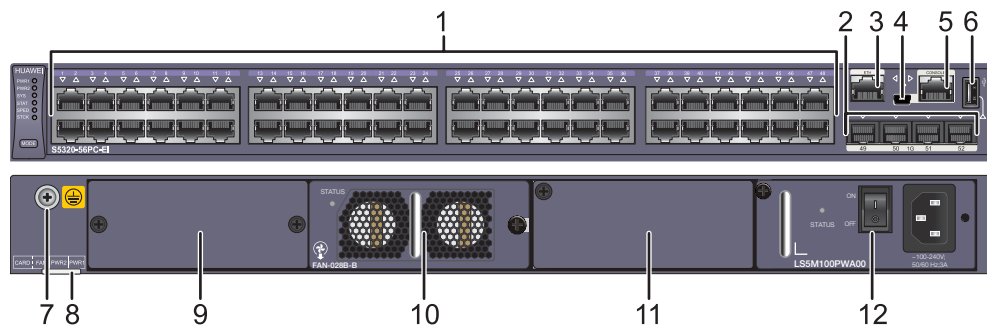
The S5320-36PC-EI-AC and S5320-36PC-EI-DC have the same appearance and functions. The difference lies in the power modules delivered with them. The S5320-36PC-EI-DC is delivered with a 150 W DC power module by default, whereas the S5320-36PC-EI-AC is delivered with a 150 W AC power module by default.

1	<p>Twenty-four 10/100/1000BASE-T Ethernet electrical ports</p>	2	<p>Four combo ports (10/100/1000BASE-T + 100/1000BASE-X)</p> <p>Modules applicable to combo optical ports:</p> <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> </ul>
3	<p>Four 1000BASE-X Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module (only working at 1 Gbit/s)</li> <li>● 1 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	<p>One Mini USB port</p>

5	One console port <b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.	6	One ETH management port
7	One USB port	8	Ground screw <b>NOTE</b> It is used with a ground cable.
9	Equipment serial number (ESN) label <b>NOTE</b> You can draw it out to view the ESN and MAC address of the switch.	10	Extended card slot Applicable cards: ● LS5D21X02S01 ● LS5D21X02T01 ● LS5D21VST000
11	Fan module slot Applicable fan module: FAN-028B-B	12	Power module slot 2 Applicable power modules: ● 150 W AC power module ● 150 W DC power module
13	Power module slot 1 Applicable power modules: ● 150 W AC power module ● 150 W DC power module	-	-

## S5320-56PC-EI-AC

Figure 4-41 Appearance of the S5320-56PC-EI-AC



**NOTE**

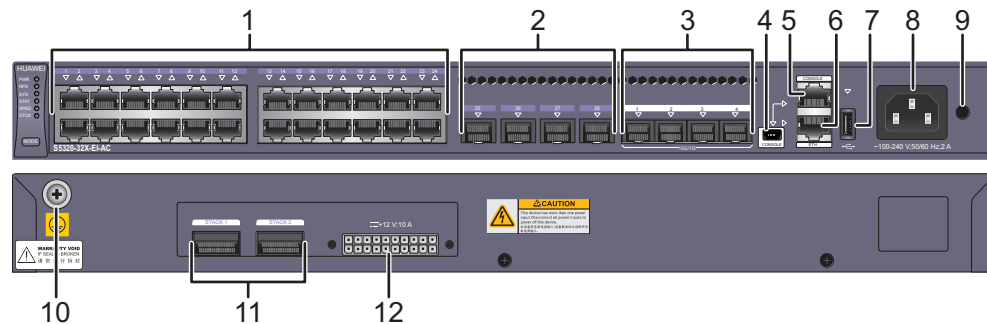
The S5320-56PC-EI-AC and S5320-56PC-EI-DC have the same appearance and functions. The difference lies in the power modules delivered with them. The S5320-56PC-EI-DC is delivered with a 150 W DC power module by default, whereas the S5320-56PC-EI-AC is delivered with a 150 W AC power module by default.

1	Forty-eight 10/100/1000BASE-T Ethernet electrical ports	2	Four 1000BASE-X Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module (only working at 1 Gbit/s)</li> <li>● 1 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
3	One ETH management port	4	One Mini USB port
5	One console port <b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.	6	One USB port
7	Ground screw <b>NOTE</b> It is used with a ground cable.	8	Equipment serial number (ESN) label <b>NOTE</b> You can draw it out to view the ESN and MAC address of the switch.
9	Extended card slot Applicable cards: <ul style="list-style-type: none"> <li>● LS5D21X02S01</li> <li>● LS5D21X02T01</li> <li>● LS5D21VST000</li> </ul>	10	Fan module slot Applicable fan module: FAN-028B-B
11	Power module slot 2 Applicable power modules: <ul style="list-style-type: none"> <li>● 150 W AC power module</li> <li>● 150 W DC power module</li> </ul>	12	Power module slot 1 Applicable power modules: <ul style="list-style-type: none"> <li>● 150 W AC power module</li> <li>● 150 W DC power module</li> </ul>



## S5320-32X-EI-AC

Figure 4-42 Appearance of the S5320-32X-EI-AC

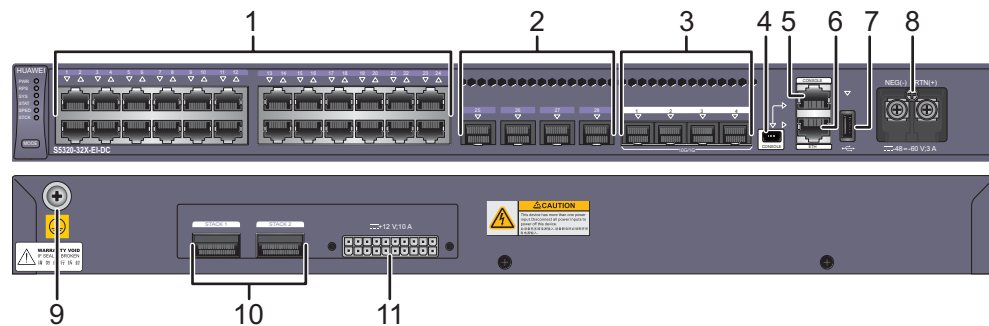


1	Twenty-four 10/100/1000BASE-T Ethernet electrical ports	2	Four 100/1000BASE-X Ethernet optical ports  Applicable modules: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE copper module</li> </ul>
3	Four 10GE SFP+ Ethernet optical ports  Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	One Mini USB port
5	One console port <b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.	6	One ETH management port
7	One USB port	8	AC power socket <b>NOTE</b> It is used with an AC power cable.

9	Jack reserved for AC terminal locking latch <b>NOTE</b> The AC terminal locking latch is not delivered with the switch.	10	Ground screw <b>NOTE</b> It is used with a ground cable.
11	Two QSFP+ stack optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>	12	RPS socket <b>NOTE</b> It is used with an RPS cable, which is not hot swappable.

### S5320-32X-EI-DC

Figure 4-43 Appearance of the S5320-32X-EI-DC

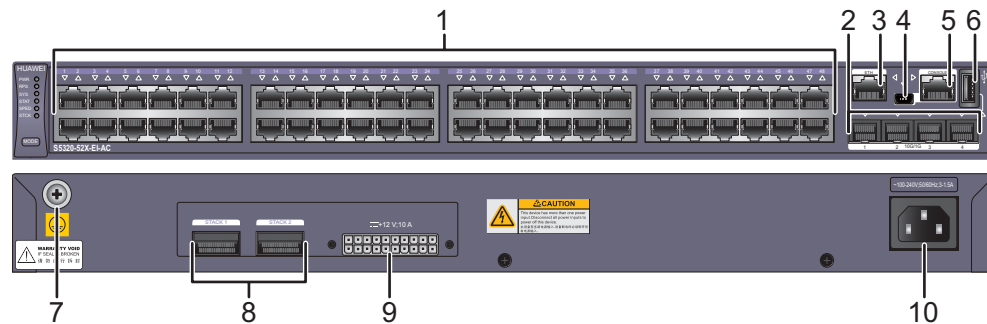


1	Twenty-four 10/100/1000BASE-T Ethernet electrical ports	2	Four 100/1000BASE-X Ethernet optical ports Applicable modules: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE copper module</li> </ul>
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3	<p>Four 10GE SFP+ Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	One Mini USB port
5	<p>One console port</p> <p><b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.</p>	6	One ETH management port
7	One USB port	8	<p>DC power socket</p> <p><b>NOTE</b> It is used with a DC power cable.</p>
9	<p>Ground screw</p> <p><b>NOTE</b> It is used with a ground cable.</p>	10	<p>Two QSFP+ stack optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>
11	<p>RPS socket</p> <p><b>NOTE</b> It is used with an RPS cable, which is not hot swappable.</p>	-	-

## S5320-52X-EI-AC

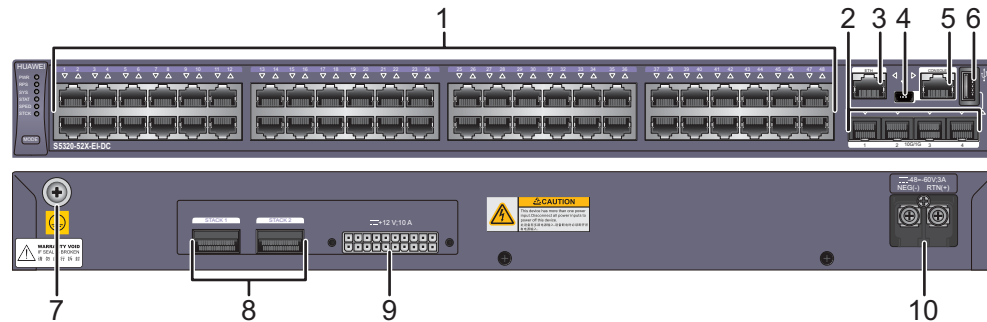
Figure 4-44 Appearance of the S5320-52X-EI-AC



1	Forty-eight 10/100/1000BASE-T Ethernet electrical ports	2	Four 10GE SFP+ Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
3	One ETH management port	4	One Mini USB port
5	One console port <b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.	6	One USB port
7	Ground screw <b>NOTE</b> It is used with a ground cable.	8	Two QSFP+ stack optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>
9	RPS socket <b>NOTE</b> It is used with an RPS cable, which is not hot swappable.	10	AC power socket <b>NOTE</b> It is used with an AC power cable.

## S5320-52X-EI-DC

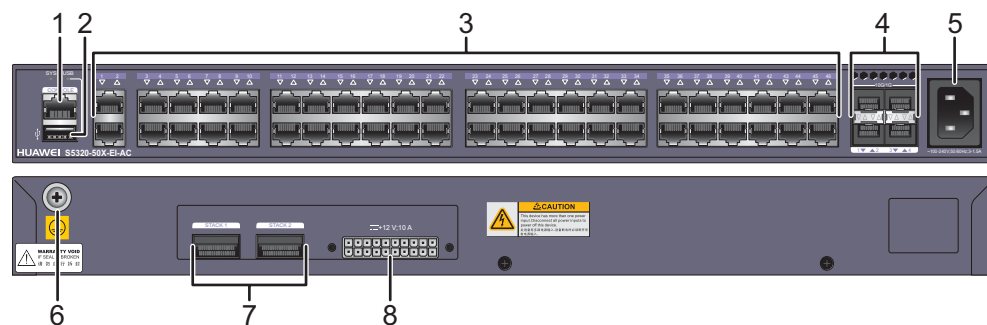
Figure 4-45 Appearance of the S5320-52X-EI-DC



1	Forty-eight 10/100/1000BASE-T Ethernet electrical ports	2	Four 10GE SFP+ Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
3	One ETH management port	4	One Mini USB port
5	One console port <b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.	6	One USB port
7	Ground screw <b>NOTE</b> It is used with a ground cable.	8	Two QSFP+ stack optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>
9	RPS socket <b>NOTE</b> It is used with an RPS cable, which is not hot swappable.	10	DC power socket <b>NOTE</b> It is used with a DC power cable.

## S5320-50X-EI-AC

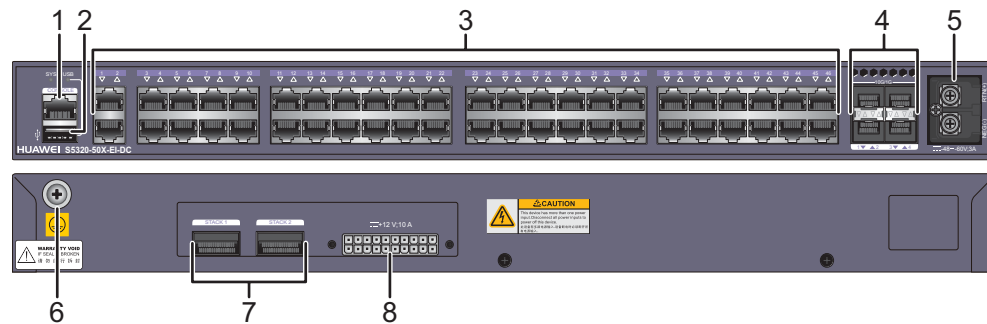
Figure 4-46 Appearance of the S5320-50X-EI-AC



1	<p>One console port</p> <p><b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.</p>	2	<p>One USB port</p>
3	<p>Forty-six 10/100/1000BASE-T Ethernet electrical ports</p>	4	<p>Four 10GE SFP+ Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
5	<p>AC power socket</p> <p><b>NOTE</b> It is used with an AC power cable.</p>	6	<p>Ground screw</p> <p><b>NOTE</b> It is used with a ground cable.</p>
7	<p>Two QSFP+ stack optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>	8	<p>RPS socket</p> <p><b>NOTE</b> It is used with an RPS cable, which is not hot swappable.</p>

## S5320-50X-EI-DC

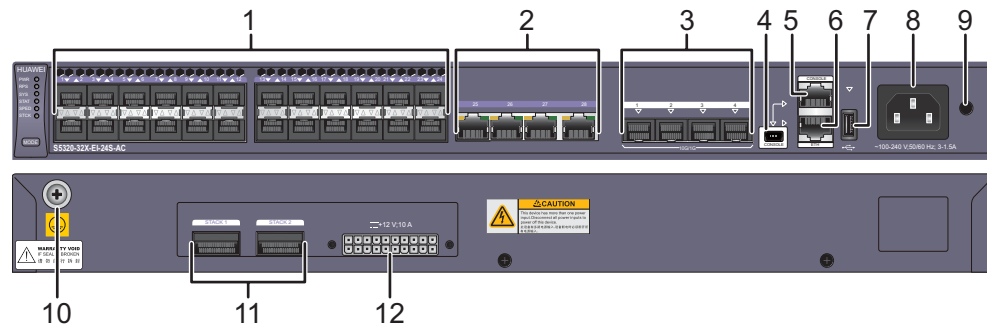
Figure 4-47 Appearance of the S5320-50X-EI-DC



1	<p>One console port</p> <p><b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.</p>	2	<p>One USB port</p>
3	<p>Forty-six 10/100/1000BASE-T Ethernet electrical ports</p>	4	<p>Four 10GE SFP+ Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
5	<p>DC power socket</p> <p><b>NOTE</b> It is used with a DC power cable.</p>	6	<p>Ground screw</p> <p><b>NOTE</b> It is used with a ground cable.</p>
7	<p>Two QSFP+ stack optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>	8	<p>RPS socket</p> <p><b>NOTE</b> It is used with an RPS cable, which is not hot swappable.</p>

## S5320-32X-EI-24S-AC

Figure 4-48 Appearance of the S5320-32X-EI-24S-AC



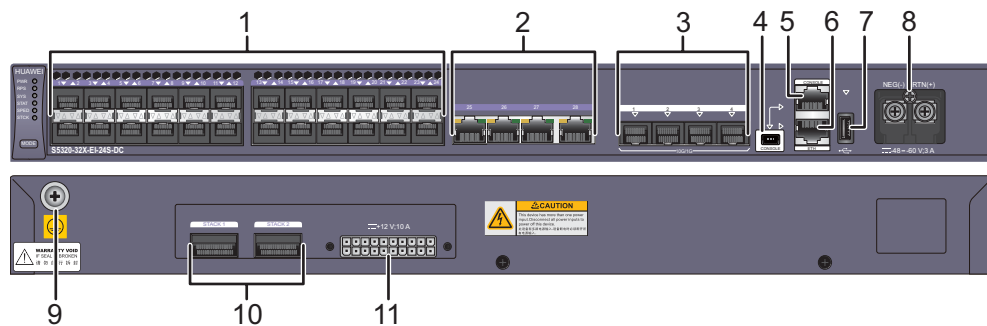
1	<p>Twenty-four 100/1000BASE-X Ethernet optical ports</p> <p>Applicable modules:</p> <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE copper module</li> </ul>	2	<p>Four 10/100/1000BASE-T Ethernet electrical ports</p>
3	<p>Four 10GE SFP+ Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	<p>One Mini USB port</p>
5	<p>One console port</p> <p><b>NOTE</b></p> <p>It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.</p>	6	<p>One ETH management port</p>
7	<p>One USB port</p>	8	<p>AC power socket</p> <p><b>NOTE</b></p> <p>It is used with an AC power cable.</p>



9	Jack reserved for AC terminal locking latch <b>NOTE</b> The AC terminal locking latch is not delivered with the switch.	10	Ground screw <b>NOTE</b> It is used with a ground cable.
11	Two QSFP+ stack optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>	12	RPS socket <b>NOTE</b> It is used with an RPS cable, which is not hot swappable.

### S5320-32X-EI-24S-DC

Figure 4-49 Appearance of the S5320-32X-EI-24S-DC

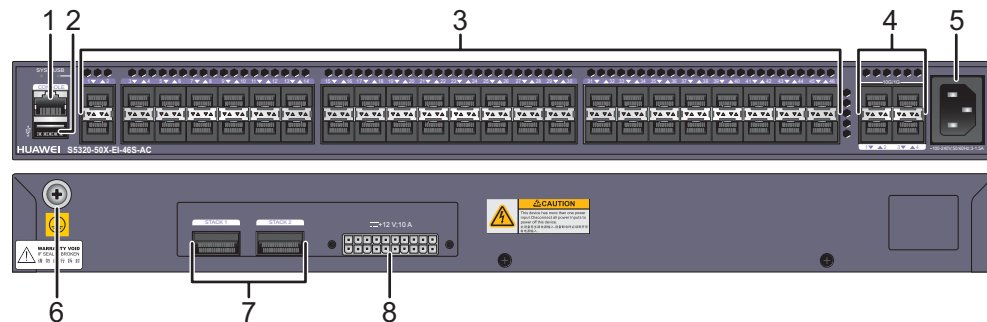


1	Twenty-four 100/1000BASE-X Ethernet optical ports Applicable modules: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE copper module</li> </ul>	2	Four 10/100/1000BASE-T Ethernet electrical ports
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3	Four 10GE SFP+ Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	One Mini USB port
5	One console port <b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.	6	One ETH management port
7	One USB port	8	DC power socket <b>NOTE</b> It is used with a DC power cable.
9	Ground screw <b>NOTE</b> It is used with a ground cable.	10	Two QSFP+ stack optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>
11	RPS socket <b>NOTE</b> It is used with an RPS cable, which is not hot swappable.	-	-

## S5320-50X-EI-46S-AC

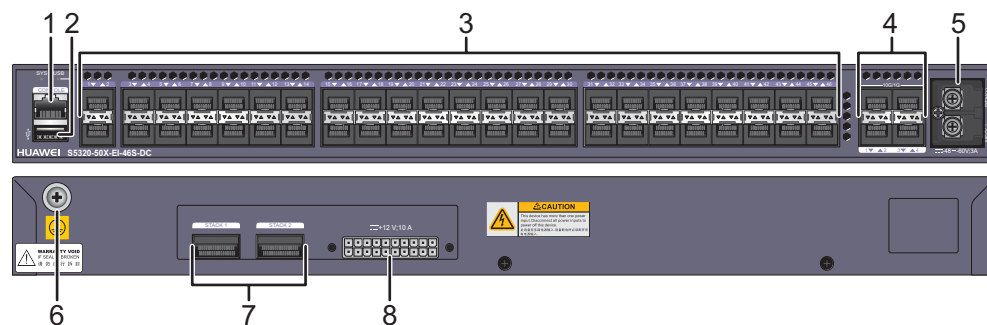
Figure 4-50 Appearance of the S5320-50X-EI-46S-AC



1	<p>One console port</p> <p><b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.</p>	2	<p>One USB port</p>
3	<p>Forty-six 100/1000BASE-X Ethernet optical ports</p> <p>Applicable modules:</p> <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE copper module</li> </ul>	4	<p>Four 10GE SFP+ Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
5	<p>AC power socket</p> <p><b>NOTE</b> It is used with an AC power cable.</p>	6	<p>Ground screw</p> <p><b>NOTE</b> It is used with a ground cable.</p>
7	<p>Two QSFP+ stack optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>	8	<p>RPS socket</p> <p><b>NOTE</b> It is used with an RPS cable, which is not hot swappable.</p>

## S5320-50X-EI-46S-DC

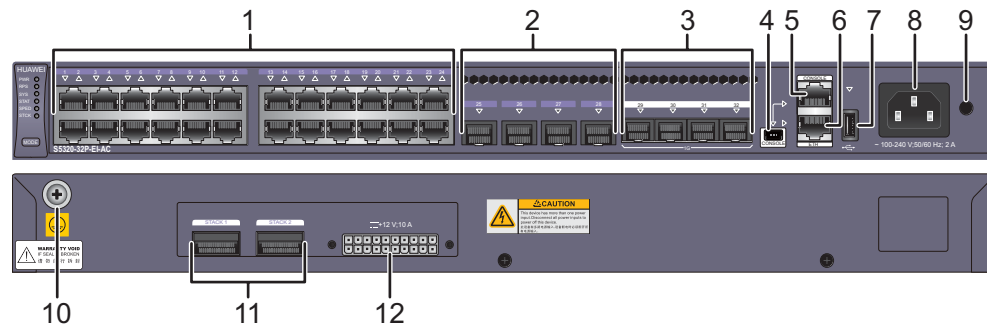
Figure 4-51 Appearance of the S5320-50X-EI-46S-DC



1	<p>One console port</p> <p><b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.</p>	2	<p>One USB port</p>
3	<p>Forty-six 100/1000BASE-X Ethernet optical ports</p> <p>Applicable modules:</p> <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE copper module</li> </ul>	4	<p>Four 10GE SFP+ Ethernet optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module</li> <li>● 10GE SFP+ optical module (OSXD22N00 not supported)</li> <li>● 10GE-CWDM optical module</li> <li>● 1 m, 3 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
5	<p>DC power socket</p> <p><b>NOTE</b> It is used with a DC power cable.</p>	6	<p>Ground screw</p> <p><b>NOTE</b> It is used with a ground cable.</p>
7	<p>Two QSFP+ stack optical ports</p> <p>Applicable modules and cables:</p> <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>	8	<p>RPS socket</p> <p><b>NOTE</b> It is used with an RPS cable, which is not hot swappable.</p>

## S5320-32P-EI-AC

Figure 4-52 Appearance of the S5320-32P-EI-AC

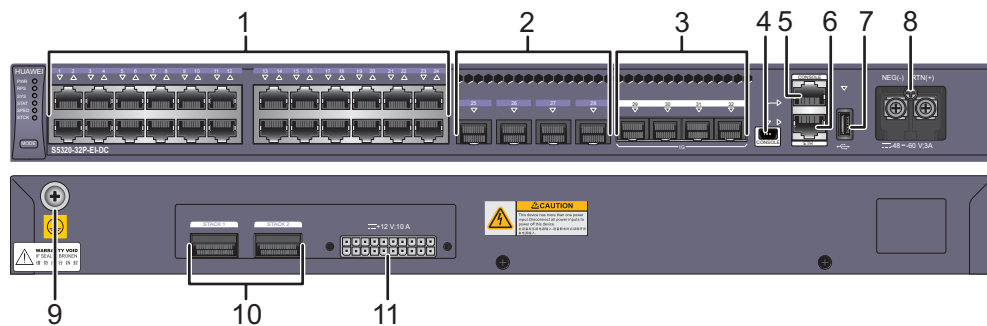


1	Twenty-four 10/100/1000BASE-T Ethernet electrical ports	2	Four 100/1000BASE-X Ethernet optical ports  Applicable modules: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE copper module</li> </ul>
3	Four 1000BASE-X Ethernet optical ports  Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module (only working at 1 Gbit/s)</li> <li>● 1 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	One Mini USB port
5	One console port <b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.	6	One ETH management port
7	One USB port	8	AC power socket <b>NOTE</b> It is used with an AC power cable.

9	Jack reserved for AC terminal locking latch <b>NOTE</b> The AC terminal locking latch is not delivered with the switch.	10 Ground screw <b>NOTE</b> It is used with a ground cable.
11	Two QSFP+ stack optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>	12 RPS socket <b>NOTE</b> It is used with an RPS cable, which is not hot swappable.

### S5320-32P-EI-DC

Figure 4-53 Appearance of the S5320-32P-EI-DC

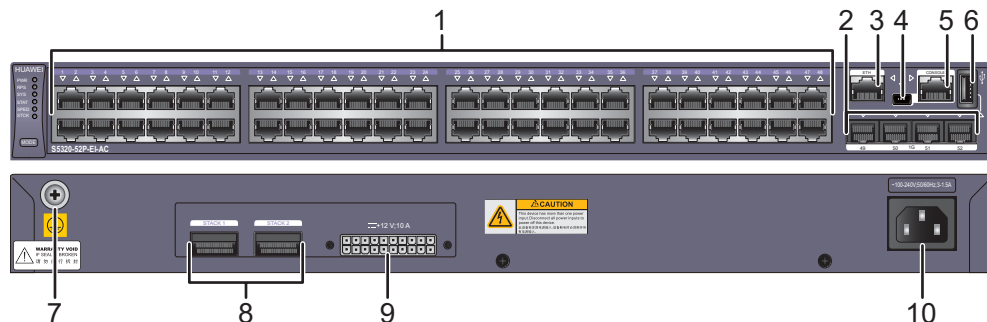


1	Twenty-four 10/100/1000BASE-T Ethernet electrical ports	2 Four 100/1000BASE-X Ethernet optical ports Applicable modules: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE copper module</li> </ul>
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3	Four 1000BASE-X Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module (only working at 1 Gbit/s)</li> <li>● 1 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>	4	One Mini USB port
5	One console port <b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.	6	One ETH management port
7	One USB port	8	DC power socket <b>NOTE</b> It is used with a DC power cable.
9	Ground screw <b>NOTE</b> It is used with a ground cable.	10	Two QSFP+ stack optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>
11	RPS socket <b>NOTE</b> It is used with an RPS cable, which is not hot swappable.	-	-

### S5320-52P-EI-AC

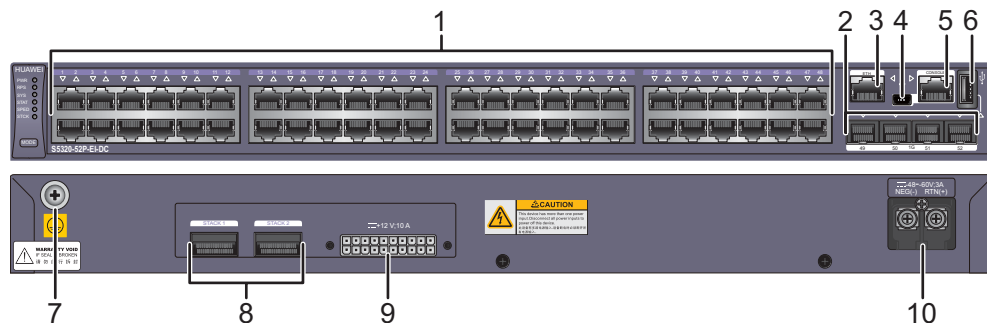
Figure 4-54 Appearance of the S5320-52P-EI-AC



1	Forty-eight 10/100/1000BASE-T Ethernet electrical ports	2	Four 1000BASE-X Ethernet optical ports  Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module (only working at 1 Gbit/s)</li> <li>● 1 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
3	One ETH management port	4	One Mini USB port
5	One console port  <b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.	6	One USB port
7	Ground screw  <b>NOTE</b> It is used with a ground cable.	8	Two QSFP+ stack optical ports  Applicable modules and cables: <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>
9	RPS socket  <b>NOTE</b> It is used with an RPS cable, which is not hot swappable.	10	AC power socket  <b>NOTE</b> It is used with an AC power cable.

### S5320-52P-EI-DC

Figure 4-55 Appearance of the S5320-52P-EI-DC



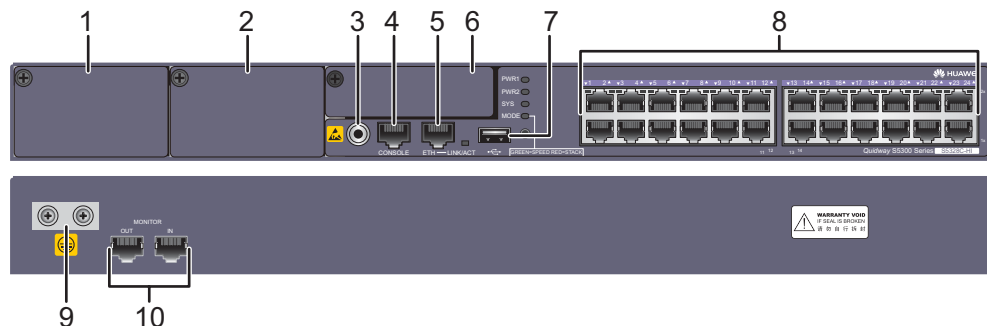


1	Forty-eight 10/100/1000BASE-T Ethernet electrical ports	2	Four 1000BASE-X Ethernet optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE-DWDM optical module</li> <li>● GE copper module (only working at 1 Gbit/s)</li> <li>● 1 m, 10 m SFP+ high-speed cables</li> <li>● 3 m, 10 m AOC cables</li> </ul>
3	One ETH management port	4	One Mini USB port
5	One console port <b>NOTE</b> It is used with a console cable. The console cable is not delivered with the switch and needs to be separately purchased if needed.	6	One USB port
7	Ground screw <b>NOTE</b> It is used with a ground cable.	8	Two QSFP+ stack optical ports Applicable modules and cables: <ul style="list-style-type: none"> <li>● QSFP+ optical module (only QSFP-40G-SR4 and QSFP-40G-iSR4 supported)</li> <li>● 1 m, 3 m, 5 m QSFP+ copper cables</li> </ul>
9	RPS socket <b>NOTE</b> It is used with an RPS cable, which is not hot swappable.	10	DC power socket <b>NOTE</b> It is used with a DC power cable.

### 4.1.7 S5300-HI

#### S5328C-HI

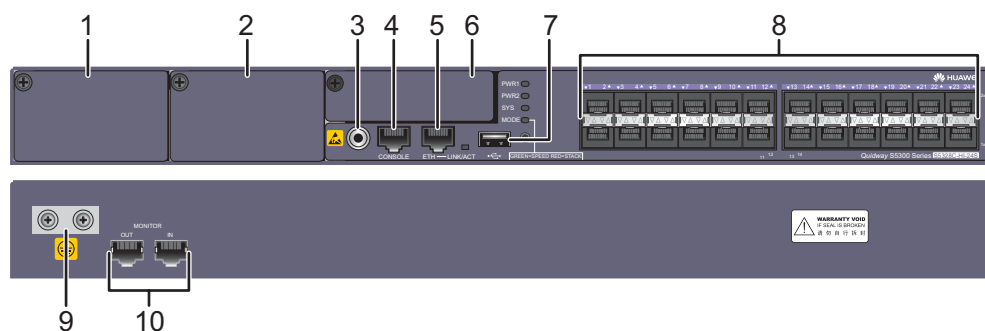
Figure 4-56 Appearance of the S5328C-HI



1	Power module slot 1 <b>NOTE</b> Available power modules: ● 170 W AC Power Module ● 170 W DC Power Module	2	Power module slot 2 <b>NOTE</b> Available power modules: ● 170 W AC Power Module ● 170 W DC Power Module
3	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.	4	One console port
5	One ETH management port	6	Front card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
7	One USB port	8	Twenty-four 10/100/1000BASE-T Ethernet electrical ports
9	Ground screw <b>NOTE</b> It is used with a ground cable.	10	Monitoring port <b>NOTE</b> The monitoring port monitors the cabinet door, power module, battery power, and power supply of the air conditioner.

### S5328C-HI-24S

Figure 4-57 Appearance of the S5328C-HI-24S



1	Power module slot 1 <b>NOTE</b> Available power modules: ● 170 W AC Power Module ● 170 W DC Power Module	2	Power module slot 2 <b>NOTE</b> Available power modules: ● 170 W AC Power Module ● 170 W DC Power Module
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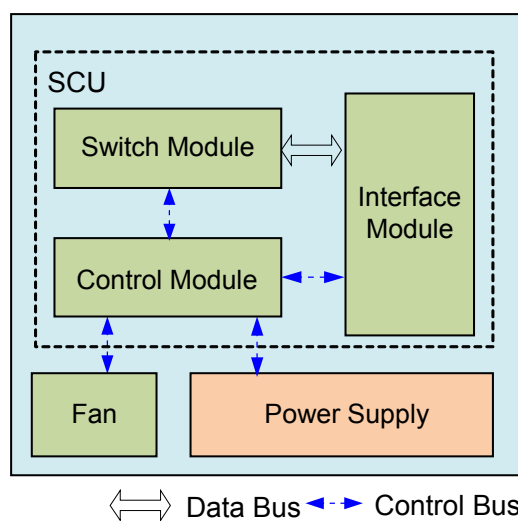
3	ESD jack <b>NOTE</b> When you install or maintain a switch, wear an ESD wrist strap and insert the other end of the ESD wrist strap into this ESD jack.	4	One console port
5	One ETH management port	6	Front card slot <b>NOTE</b> For details about the mapping between cards and switches, see Cards.
7	One USB port	8	Twenty-four 100/1000BASE-X Ethernet optical ports  Applicable modules: <ul style="list-style-type: none"> <li>● FE optical module</li> <li>● GE optical module</li> <li>● GE-CWDM optical module</li> <li>● GE SFP copper module</li> </ul>
9	Ground screw <b>NOTE</b> It is used with a ground cable.	10	Monitoring port <b>NOTE</b> The monitoring port monitors the cabinet door, power module, battery power, and power supply of the air conditioner.

## 4.2 Hardware Modules

Figure 4-58 shows the logical structure of hardware modules of the switch.

Hardware modules of the S5300 refer to the interface card, SCU (Switch Control Unit), power supply, Pluggable Modules for Interfaces, and fan.

Figure 4-58 Logical structure of hardware modules



## SCU

The SCU is fixed on the S5300. Each S5300 has one SCU.

The SCU is responsible for packet switching and device management. It integrates multiple functional modules, namely, the main control module, switching module, and interface module.

### Main Control Module

The main control module implements the following functions:

- Processing protocols
- Functioning as an agent of the user to manage the system and monitor the system performance according to instructions of the user, and report the running status of the device to the user
- Monitoring and maintaining the interface module and switching module on the SCU

### Switching Module

The switching module, also called the switching fabric, is responsible for packet exchange, multicast replication, QoS scheduling, and access control on the interface module of the SCU.

The switching module adopts high performance chips to implement line-speed forwarding and fast switching of data with different priorities.

### Interface Module

The interface module provides Ethernet interfaces for accessing Ethernet services.

## Power Supply

For details about S5306TP-LI-AC power supply configuration, see *S5300 Hardware Description - Chassis - S5306TP-LI-AC - Power Supply*.

For details about S5300-LI power supply configuration, see *S5300 Hardware Description - Chassis - S5300-LI - Power Supply*.

For details about S5300-SI power supply configuration, see *S5300 Hardware Description - Chassis - S5300-SI - Power Supply*.

For details about S5300-EI power supply configuration, see *S5300 Hardware Description - Chassis - S5300-EI - Power Supply*.

For details about power supply configuration of the S5310-EI, see *S5300 Hardware Description - Chassis - S5310-EI - Power Supply*.

For details about power supply configuration of the S5320-EI, see *S5300 Hardware Description - Chassis - S5320-EI - Power Supply*.

For details about S5300-HI power supply configuration, see *S5300 Hardware Description - Chassis - S5300-HI - Power Supply*.

## Cards

The S5300 supports service and stack cards. Service cards allow flexible networking and provide cost-effective and customized solutions. Stack cards connect multiple switches into one logical

switch, which implements on-demand expansion, reduces investments, simplifies management, and improves network reliability.

For details about cards supported by the S5300, see *S5300 Hardware Description - Cards*.

## Fan Modules

A fan module provides heat dissipation for the system. Fan modules work in intelligent or forcible mode.

In intelligent mode, fan modules start to operate only when the ambient temperature goes higher than a specified value. You can run the **display fan speed-adjust threshold minus** command to view the temperature thresholds for fan speed adjustment. This command is supported only in V200R003C00 and later versions.

In forcible mode, fan modules start to work as soon as the switch starts.

For details about fan modules supported by the S5300, see *S5300 Hardware Description - Fan Modules*.

## Pluggable Modules for Interfaces

For specifications of various pluggable Modules for Interfaces, see "Pluggable Modules for Interfaces" in the *S5300 Series Ethernet Switches Hardware Description*.

# 5 Product Performance

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## About This Chapter

[5.1 Product Features](#)

[5.2 Performance Specifications](#)

## 5.1 Product Features

 **NOTE**

Unless otherwise specified, this document describes switch features and software performance of the latest version.

**Table 5-1** lists features supported by the S5300.

**Table 5-1** Features supported by the S5300

Feature		Description	Difference
Ethernet features	Ethernet	Operating modes of full-duplex, half-duplex and auto-negotiation	Only the S5320EI do not support the operating mode of half-duplex.
		Rates of an Ethernet interface: 10 Mbit/s, 100 Mbit/s, 1000 Mbit/s, 10 Gbit/s and auto-negotiation	None
		Flow control on interfaces	
		Jumbo frames	
		Link aggregation	
		Load balancing among links of a trunk	
		Transparent transmission of Layer 2 protocol packets	
		Device Link Detection Protocol (DLDP)	
		Link Layer Discovery Protocol (LLDP)	
		Link Layer Discovery Protocol-Media Endpoint Discovery (LLDP-MED)	
		Interface isolation and forwarding restriction	
		Broadcast storm suppression	
	VLAN	Access modes of access, trunk, hybrid, and QinQ	None
	Default VLAN		

Feature		Description	Difference	
		VLAN assignment based on interfaces, MAC addresses, protocols, and IP subnets		
		VLAN assignment based on the following policies: <ul style="list-style-type: none"> <li>● MAC address + IP address</li> <li>● MAC address + IP address + interface number</li> <li>● DHCP policies</li> </ul>		
		VLAN stacking for untagged packets	None	
		Super VLAN	Only the S5300LI and S5306LI do not support this function.	
		VLAN mapping	None	
		Selective QinQ		
		MUX VLAN		
		Voice VLAN		
		Guest VLAN		
		GVRP	Generic Attribute Registration Protocol (GARP)	None
			GARP VLAN Registration Protocol (GVRP)	
		MAC	Automatic learning and aging of MAC addresses	None
			Static, dynamic, and blackhole MAC address entries	
			Packet filtering based on source MAC addresses	
			Interface-based MAC learning limiting	
	Sticky MAC address entries			
	MAC address flapping detection			



Feature		Description	Difference
		Configuring MAC address learning priorities for interfaces	Only the S5306TP-LI, S5310EI, S5320EI, and S5300HI support this function.
		MAC address spoofing defense	Only the S5306TP-LI, S5310EI, S5320EI, and S5300HI do not support this function.
		Port bridge	None
	ARP	Static and dynamic ARP entries	None
		RARP	
		ARP in a VLAN	
		Aging of ARP entries	
		Proxy ARP	Only the S5300LI and S5306TP-LI do not support this function.
		Multi-port ARP for connecting to the NLB cluster server	Only the S5310EI, S5320EI, and S5300HI support this function.
	Ethernet loop protection	MSTP	STP
RSTP			
MSTP			
VBST			
BPDU protection, root protection, and loop protection			
TC-BPDU attack defense			
STP loop detection			
Loopback detection		Loop detection on an interface	
SEP		Smart Ethernet Protection (SEP)	
Smart Link		Smart Link	
		Smart Link multi-instance	
		Monitor Link	
RRPP		RRPP protective switchover	

Feature		Description	Difference
		Single RRPP ring, tangent RRPP ring, and intersecting RRPP ring	
		Hybrid networking of RRPP rings and other ring networks	
	ERPS	G.8032 v1/v2	
		Single closed ring	
		Subring	
IPv4/IPv6 forwarding	IPv4 and unicast routes	Static IPv4 routes	None
		VRF	
		DHCP client	
		DHCP server	Only the S5306LI does not support this function.
		DHCP relay	
		DHCP policy VLAN	Only the S5300LI and S5306LI do not support this function.
		URPF check	
		Routing policies	
		RIPv1/RIPv2	Only the S5300LI, S5306LI, and S5300SI do not support this function.
	OSPF		
	BGP		
	MBGP		
	IS-IS		
	PBR (redirection in a traffic policy)		
	Multicast routing features	IGMPv1/v2/v3	Only the S5300LI, S5306LI, and S5300SI do not support this function.
		PIM-DM	
		PIM-SM	
		PIM-SSM	
		MSDP	
Multicast routing policies			
RPF			
IPv6 features	IPv6 protocol stack	None	
	ND and ND snooping		

Feature		Description	Difference
		DHCPv6 snooping	Only the S5300LI and S5306LI do not support this function.
		RIPng	
		DHCPv6 server	
		DHCPv6 relay	
		OSPFv3	Only the S5300LI, S5306LI, and S5300SI do not support this function.
		BGP4+ & ISIS for IPv6	
		VRRP6	
		MLDv1 and MLDv2	
		PIM-DM for IPv6	
		PIM-SM for IPv6	
		PIM-SSM for IPv6	
	Transition technology	6 over 4 tunnel	Only the S5300LI does not support this function.
6PE		Only the S5310EI and S5300HI support this function.	
Layer 2 multicast features	-	IGMPv1/v2/v3 snooping	None
		Fast leave	
		IGMP proxy	
		MLD snooping	
		Interface-based multicast traffic suppression	
		Inter-VLAN multicast replication	
		Controllable multicast	
MPLS&V PN	Basic MPLS functions	LDP	Only the S5310EI and S5300HI support this function.
		Double MPLS labels	
		Mapping from DSCP to EXP priorities in MPLS packets	
		Mapping from 802.1p priorities to EXP priorities in MPLS packets	
	MPLS TE	MPLS TE tunnel	
		MPLS TE protection group	

Feature		Description	Difference
	VPN	Multi-VPN-Instance CE (MCE)	Only the S5300LI, S5306LI, and S5300SI do not support this function.
		VLL in SVC, Martini, CCC, and Kompella modes	Only the S5310EI and S5300HI support this function.
		VLL FRR	
		VPLS	
		MPLS L3VPN	
Device reliability	BFD	Basic BFD functions	Only the S5300LI, S5306LI, and S5300SI do not support this function.
		BFD for static route/IS-IS/OSPF/BGP	
		BFD for PIM	
		BFD for VRRP	
	Stacking	Stack card supporting the stacking function	Only the S5300SI, S5300EI, and S5320EI support this function.
		Service interface supporting the stacking function	Only the S5300LI (except S5300-10P-LI-AC, S5300-28P-LI-BAT, S5300-28P-LI-24S-BAT), S5310EI, and S5300HI support this function.
Others	VRRP	Only the S5300LI, S5306LI, and S5300SI do not support this function.	
Ethernet OAM	EFM OAM (802.3ah)	Automatic discovery	None
		Link fault detection	
		Link fault troubleshooting	
		Remote loopback	
	CFM OAM (802.1ag)	Software-level CCM	None
		MAC ping	
		MAC trace	
		Hardware-level CCM	Only the S5300HI supports this function.

Feature		Description	Difference
	OAM association	Association between 802.1ag and 802.1ah	The S5300LI does not support this function.
		Association between 802.1ah and 802.1ag	
	Y.1731	Delay and variation measurement	None
		Hardware-level delay and variation measurement	Only the S5300HI supports this function.
QoS features	Traffic classifier	Traffic classification based on ACLs	None
		Traffic classification based on outer 802.1p priorities, outer VLAN IDs, source MAC addresses, and Ethernet types	
		Traffic classification based on inner VLAN IDs priorities	Only the S5300LI and S5300SI do not support this function.
		Traffic classification based on inner 802.1p priorities	Only the S5300LI and S5300SI do not support this function.
	Traffic behavior	Access control after traffic classification	None
		Traffic policing based on traffic classification	
		Re-marking based on traffic classification	
		Associating traffic classifiers with traffic behaviors	
	Traffic policing	Rate limit on inbound and outbound interfaces	
	Traffic shaping	Traffic shaping on interfaces and queues	
	Congestion avoidance	Simple Random Early Detection (SRED)	Only the S5300EI supports this function.
		Weighted Random Early Detection (WRED)	Only the S5310EI, S5320EI, S5300HI, and S5306LI support this function.
		Tail drop	None

Feature		Description	Difference	
	Congestion management	Queue mapping	None	
		Priority Queuing (PQ)		
		Deficit Round Robin (DRR)		
		PQ+DRR		
		Weighted Round Robin (WRR)		
		PQ+WRR		
Configuration and maintenance	Login and configuration management	Command line configuration	None	
		Error message and help information in English and Chinese		
		Login through console and Telnet terminals		
		SSH1.5/SSH2		
		Send function and data communication between terminal users		
		Hierarchical user authority management and commands		
		SNMP-based NMS management (U2000)		
		Web page-based configuration and management		
		EasyDeploy (client)		
		EasyDeploy (commander)		Only the S5300LI and S5306LI do not support this function.
	Easy deployment and maintenance			
	File system	File system	File system	None
			Directory and file management	
			File upload and download through FTP, TFTP, SFTP, SCP, and FTPS	
	Monitoring and maintenance	Hardware monitoring	Hardware monitoring	None
Reporting alarms on abnormal device temperature				
Second-time fault detection to prevent detection errors caused by instant interference				

Feature		Description	Difference
		Version matching check	
		Dying gasp	Only the S5300LI (except S5300-52X-LI-48CS-AC, S5300-52X-LI-48CS-DC, S5300-28P-LI-BAT, S5300-28P-LI-24S-BAT), S5306LI, S5320EI, and S5300HI support this function.
		Information center and unified management over logs, alarms, and debugging information	None
		Electronic labels, and command line query and backup	
		Virtual cable test (VCT)	
		User operation logs	
		Detailed debugging information for network fault diagnosis	
		Network test tools such as traceroute and ping commands	
		Port mirroring, flow mirroring, and remote mirroring	
		Energy saving	
	Version upgrade	Device software loading and online software loading	None
		BootROM online upgrade	
		Remote in-service upgrade	
		In-service patching	
Security	AAA	Local authentication and authorization	None
		RADIUS authentication, authorization, and accounting	
		HWTACACS authentication, authorization, and accounting	
	NAC	802.1x authentication	None
		MAC address authentication	

Feature		Description	Difference
		Portal authentication	The S5300LI does not support this function.
ARP security		ARP packet rate limiting based on source MAC addresses	Only the S5306LI, S5310EI, S5320EI, and S5300HI support this function.
		ARP packet rate limiting based on source IP addresses, interfaces, and VLANs, and global ARP packet rate limiting	None
		ARP anti-spoofing	None
		Association between ARP and STP	The S5300LI does not support this function.
		ARP gateway anti-collision	The S5300LI does not support this function.
		Dynamic ARP Inspection (DAI) and Static ARP Inspection (SAI)	None
		Egress ARP Inspection (EAI)	
IP security		ICMP attack defense	None
		IP source guard	
CPU attack defense		CPU attack defense	
MPF		MAC-Forced Forwarding (MPF)	
DHCP snooping		DHCP snooping	
		Option 82 function and dynamic rate limiting for DHCP packets	
Attack defense		Defense against flood attacks without IP payloads, attacks from IGMP null payload packets, LAND attacks, Smurf attacks, and attacks from packets with invalid TCP flag bits	



Feature		Description	Difference
		Defense against attacks from many fragments, attacks from many packets with offsets, attacks from repeated packet fragments, Tear Drop attacks, Syndrop attacks, NewTear attacks, Bonk attacks, Nesta attacks Rose attacks, Fawx attacks, Ping of Death attacks, and Jolt attacks	
		Defense against TCP SYN flood attacks, UDP flood attacks (including Fraggle attacks and UDP diagnosis port attacks), and ICMP flood attacks	
Network management	-	Ping and traceroute	None
		NQA	
		Network Time Protocol (NTP)	
		SNMP v1/v2c/v3	
		Standard MIB	
		HTTP	
		Hypertext Transfer Protocol Secure (HTTPS)	
		Remote network monitoring (RMON)	
		RMON2	Only the S5310EI, S5320EI, and S5300HI support this function.
sFlow	The S5300SI does not support this function.		

## 5.2 Performance Specifications

 **NOTE**

- Unless otherwise specified, this document describes switch features and software performance of the latest version.
- The specifications provided in this manual are tested in lab environment (for example, the tested device has been installed with a certain type of boards or only one protocol is run on the device). Results may differ from the listed specifications when you attempt to obtain the maximum values with multiple functions enabled on the device.

**Table 5-2** Performance specifications of the S5300

Attribute	Service Feature	Specifications
Ethernet	MAC	<ul style="list-style-type: none"> <li>● S5300-LI: 16K</li> <li>● S5300-SI: 16K</li> <li>● S5300-EI: 32K</li> <li>● S5310-EI: 32K</li> <li>● S5320-HI: 32K(non-large MAC mode)/64K (large MAC mode)</li> <li>● S5300-HI: 32K</li> </ul>
	Maximum number of VLANs	4K
	Maximum number of link aggregation groups	<ul style="list-style-type: none"> <li>● S5306-LI: 20</li> <li>● S5300-LI: 64</li> <li>● S5300-SI: 28</li> <li>● S5300-EI: 64</li> <li>● S5310-EI: 64</li> <li>● S5320-EI: 128</li> <li>● S5300-HI: 64</li> </ul>
	Maximum number of member interfaces in a link aggregation group	8
	Maximum number of dynamic ARP entries in the system	<ul style="list-style-type: none"> <li>● S5306-LI: 256</li> <li>● S5300-LI: 256</li> <li>● S5300-SI: 2K</li> <li>● S5300-EI: 8K</li> <li>● S5310-EI: 16K</li> <li>● S5320-EI: 12K</li> <li>● S5300-HI: 16K</li> </ul>
QoS	Maximum number of outbound QoS queues on an interface	8
	CAR	<ul style="list-style-type: none"> <li>● S5306-LI: 8 kbit/s</li> <li>● S5300-LI: 8 kbit/s</li> <li>● S5300-SI: 64 kbit/s</li> <li>● S5300-EI: 64 kbit/s</li> <li>● S5310-EI: 8 kbit/s</li> <li>● S5320-EI: 8 kbit/s</li> <li>● S5300-HI: 8 kbit/s</li> </ul>

Attribute	Service Feature	Specifications
ACL	ACLv4	<p>Maximum number of IPv4 ACLs supported:</p> <ul style="list-style-type: none"> <li>● S5306-LI: 1024/256</li> <li>● S5300-LI: 900 (400 on the S5300-10P-LI-AC)</li> <li>● S5300-SI: 1024/256</li> <li>● S5300-EI: 2816/256</li> <li>● S5310-EI: 7168/512</li> <li>● S5310-EI: 3K/0.5K</li> <li>● S5300-HI: 3072/256</li> </ul> <p><b>NOTE</b> The value 1024/256 indicates that 1024 ACLs are used for inbound traffic and 256 ACLs for outbound traffic. The value 400 indicates that the inbound and outbound traffic share 400 ACLs.</p>
	ACLv6	<p>Maximum number of IPv6 ACLs supported:</p> <ul style="list-style-type: none"> <li>● S5306-LI: 512/256</li> <li>● S5300-LI: 900 (400 on the S5300-10P-LI-AC)</li> <li>● S5300-SI: 1024/256</li> <li>● S5300-EI: 512/128</li> <li>● S5310-EI: 3584/256</li> <li>● S5320-EI: 1.5K/256</li> <li>● S5300-HI: 1536/128</li> </ul>
MPLS	Maximum number of LSPs	<ul style="list-style-type: none"> <li>● S5310-EI, S5300-HI: 4K</li> <li>● Other models: do not support MPLS</li> </ul>
L2 VPN	Total number of VLL connections supported	<ul style="list-style-type: none"> <li>● S5310-EI, S5300-HI: 1K</li> <li>● Other models: do not support VLL</li> </ul>
	Number of VSIs	<ul style="list-style-type: none"> <li>● S5310-EI, S5300-HI: 256</li> <li>● Other models: do not support VSI</li> </ul>
L3 VPN	Maximum number of VPN routes	<ul style="list-style-type: none"> <li>● S5310-EI: 16K</li> <li>● S5300-HI: 12K</li> <li>● Other models: do not support L3VPN</li> </ul>

Attribute	Service Feature	Specifications
IP unicast	IPv4 Route capacity	<ul style="list-style-type: none"> <li>● S5306-LI: 16</li> <li>● S5300-LI: 32</li> <li>● S5300-SI: 4K</li> <li>● S5300-EI: 12K</li> <li>● S5310-EI: 16K</li> <li>● S5320-EI: 16K</li> <li>● S5300-HI: 12K</li> </ul>
	IPv6 Route capacity	<ul style="list-style-type: none"> <li>● S5306-LI: 16</li> <li>● S5300-LI: 16</li> <li>● S5300-SI: 1K</li> <li>● S5300-EI: 6K</li> <li>● S5310-EI: 8K</li> <li>● S5320-EI: 8K</li> <li>● S5300-HI: 6K</li> </ul>
Multicast	Number of multicast groups on the switch (Maximum number of IPv4 multicast routes)	<ul style="list-style-type: none"> <li>● S5306-LI: 2K</li> <li>● S5300-LI: 1K</li> <li>● S5300-SI: 1K</li> <li>● S5300-EI: 2K</li> <li>● S5310-EI: 2K</li> <li>● S5320-EI: 2K</li> <li>● S5300-HI: 2K</li> </ul>
	Maximum number of multicast routes (Maximum number of L3 multicast forwarding entries)	<ul style="list-style-type: none"> <li>● S5300-EI: 2K</li> <li>● S5310-EI: 2K</li> <li>● S5320-EI: 2K</li> <li>● S5300-HI: 2K</li> <li>● Other models: do not support L3 multicast forwarding</li> </ul>
Reliability	BFD	Maximum number of BFD sessions: <ul style="list-style-type: none"> <li>● S5300-EI: 128</li> <li>● S5310-EI: 128</li> <li>● S5320-EI: 128</li> <li>● S5300-HI: 128</li> <li>● Other models: do not support BFD</li> </ul>

Attribute	Service Feature	Specifications
	RRPP	<ul style="list-style-type: none"> <li>● Maximum number of RRPP instances: 64</li> <li>● Maximum number of RRPP rings: 16</li> <li>● Maximum number of RRPP domains: 8</li> </ul>
	VRRP	<ul style="list-style-type: none"> <li>● Maximum number of VRRP groups:                             <ul style="list-style-type: none"> <li>- S5300-EI: 64</li> <li>- S5310-EI: 64</li> <li>- S5320-EI: 64</li> <li>- S5300-HI: 64</li> <li>- Other models: do not support VRRP</li> </ul> </li> <li>● Maximum number of virtual IP addresses in each VRRP backup group:                             <ul style="list-style-type: none"> <li>- S5300-EI: 16</li> <li>- S5310-EI: 16</li> <li>- S5320-EI: 16</li> <li>- S5300-HI: 16</li> <li>- Other models: do not support VRRP</li> </ul> </li> </ul>
	Smart Link	<ul style="list-style-type: none"> <li>● Maximum number of instances: 64</li> <li>● Maximum number of Smart Link groups: 16</li> </ul>
	MSTP	Maximum number of MSTIs: 64
	VBST	Number of protected VLANs on the device: 128
	SEP	Maximum number of segments: 16

# 6 Technical Specifications

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## 6.1 S5306TP-LI-AC

**Table 6-1** lists specifications of the S5306TP-LI-AC.

**Table 6-1** Specifications of the S5306TP-LI-AC

Item		Description
Memory (RAM)		512 MB
Flash		64 MB
Mean time between failures (MTBF)		33.1 years
Mean time to repair (MTTR)		2 hours
Availability		> 0.99999
Surge protection	Service port protection	Common mode: $\pm 2$ kV
	Power supply protection	Differential mode: $\pm 6$ kV; common mode: $\pm 6$ kV
Dimensions (W x D x H)		250.0 mm x 180.0 mm x 43.6 mm
Weight		1.5 kg
Stack port		Not supported
RPS		Not supported
PoE		Not supported
Input AC voltage	Rated input voltage range	100 V AC to 240 V AC, 50/60 Hz
	Maximum voltage range	90 V AC to 264 V AC, 47 Hz to 63 Hz
Maximum power consumption (100% throughput, full speed of fans)		28.9 W

Item		Description
Temperature	Operating temperature	-5°C to +65°C <b>NOTE</b> <ul style="list-style-type: none"> <li>● The chassis can work at a highest temperature of 65°C when industrial SFP optical modules are used.</li> <li>● The chassis can work at a highest temperature of 55°C when commercial SFP optical modules are used.</li> </ul>
	Storage temperature	-40°C to +70°C
Noise under normal temperature (27°C, sound power)		Less than 55 dBA
Relative humidity		5% RH to 95% RH, noncondensing
Operating altitude		0 m to 5000 m
EMC		<ul style="list-style-type: none"> <li>● CISPR22 Class A</li> <li>● CISPR24</li> <li>● EN55022 Class A</li> <li>● EN50024</li> <li>● ETSI EN 300 386 Class A</li> <li>● CFR 47 FCC Part 15 Class A</li> <li>● ICES 003 Class A</li> <li>● AS/NZS CISPR22 Class A</li> <li>● IEC61000-4-2</li> <li>● ITU-T K 20</li> <li>● ITU-T K 44</li> </ul>
Environmental standard		<ul style="list-style-type: none"> <li>● RoHS</li> <li>● REACH</li> <li>● WEEE</li> </ul>
Security		<ul style="list-style-type: none"> <li>● IEC 60950-1</li> <li>● EN 60950-1/A11/A12</li> <li>● UL 60950-1</li> <li>● CSA C22.2 No 60950-1</li> <li>● AS/NZS 60950.1</li> </ul>
Laser safety		<ul style="list-style-type: none"> <li>● IEC60825-1</li> <li>● IEC60825-2</li> <li>● EN60825-1</li> <li>● EN60825-2</li> </ul>



## 6.2 S5300-LI

**Table 6-2** lists specifications of the S5300-LI.

**Table 6-2** Specifications of the S5300-LI

Item		Description
Memory (RAM)		256 MB
Flash		<ul style="list-style-type: none"> <li>● V200R001: 64 MB</li> <li>● V200R002 and later versions: 200 MB</li> </ul>
Mean time between failures (MTBF)		<ul style="list-style-type: none"> <li>● S5300-28P-LI-AC: 49.69 years</li> <li>● S5300-28P-LI-DC: 49.69 years</li> <li>● S5300-52P-LI-AC: 39.26 years</li> <li>● S5300-52P-LI-DC: 39.26 years</li> <li>● S5300-10P-LI-AC: 44.41 years</li> <li>● S5300-28X-LI-AC: 70.32 years</li> <li>● S5300-28X-LI-DC: 70.32 years</li> <li>● S5300-52X-LI-AC: 61.86 years</li> <li>● S5300-52X-LI-DC: 61.86 years</li> <li>● S5300-28X-LI-24S-AC: 89.91 years</li> <li>● S5300-28X-LI-24S-DC: 89.91 years</li> <li>● S5300-52X-LI-48CS-AC: 92.57 years</li> <li>● S5300-52X-LI-48CS-DC: 92.57 years</li> </ul>
Mean time to repair (MTTR)		2 hours
Availability		> 0.99999
Surge protection	Service port protection	Combo electrical ports on the CSFP switch: $\pm 2$ kV in common mode; electrical ports on the other models: $\pm 6$ kV in common mode
	Power supply protection	<ul style="list-style-type: none"> <li>● DC: <math>\pm 1</math> kV in differential mode; <math>\pm 2</math> kV in common mode</li> <li>● AC: <math>\pm 6</math> kV in differential mode; <math>\pm 6</math> kV in common mode</li> </ul>

Item	Description		
Dimensions (W x D x H)	<ul style="list-style-type: none"> <li>● S5300-28P-LI-AC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5300-28P-LI-DC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5300-52P-LI-AC: 442.0 mm x 310.0 mm x 43.6 mm</li> <li>● S5300-52P-LI-DC: 442.0 mm x 310.0 mm x 43.6 mm</li> <li>● S5300-10P-LI-AC: 250.0 mm x 180.0 mm x 43.6 mm</li> <li>● S5300-28X-LI-AC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5300-28X-LI-DC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5300-52X-LI-AC: 442.0 mm x 310.0 mm x 43.6 mm</li> <li>● S5300-52X-LI-DC: 442.0 mm x 310.0 mm x 43.6 mm</li> <li>● S5300-28X-LI-24S-AC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5300-28X-LI-24S-DC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5300-52X-LI-48CS-AC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5300-52X-LI-48CS-DC: 442.0 mm x 220.0 mm x 43.6 mm</li> </ul>		
Weight	≤ 5 kg		
Stack port	<p>S5300-P-LI (with GE uplink ports):</p> <ul style="list-style-type: none"> <li>● V200R001: The last two uplink 1000Base-X optical ports can be used as stack ports.</li> <li>● V200R002 and later versions: The four uplink 1000Base-X optical ports can be used as stack ports.</li> </ul> <p>S5300-X-LI (with 10GE uplink ports): The four uplink 10GE SFP+ optical ports can be used as stack ports.</p> <p><b>NOTE</b> The S5300-10P-LI-AC does not support stacking.</p>		
Maximum stack bandwidth (bidirectional)	<p>S5300-P-LI (with GE uplink ports):</p> <ul style="list-style-type: none"> <li>● V200R001: 10 Gbit/s (using 1 m passive SFP+ cables); 20 Gbit/s (using 10 m active SFP+ cables)</li> <li>● V200R002: 20 Gbit/s (using 1 m passive SFP+ cables); 40 Gbit/s (using 10 m active SFP+ cables)</li> <li>● V200R003 and later versions: 20 Gbit/s (using 1 m passive SFP+ cables, stack optical module, or 3 m/10 m AOC cables); 40 Gbit/s (using 10 m active SFP+ cables)</li> </ul> <p>S5300-X-LI (with 10GE uplink ports): 80 Gbit/s</p>		
RPS	All S5300-LI series switches except the S5300-10P-LI-AC support RPS.		
PoE	Not supported		
Input DC voltage	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%; text-align: center;">Rated input voltage range</td> <td style="text-align: center;">-48 V DC to -60 V DC</td> </tr> </table>	Rated input voltage range	-48 V DC to -60 V DC
Rated input voltage range	-48 V DC to -60 V DC		

Item		Description
	Maximum voltage range	-36 V DC to -72 V DC
Input AC voltage	Rated input voltage range	100 V AC to 240 V AC, 50/60 Hz
	Maximum voltage range	90 V AC to 264 V AC, 47 Hz to 63 Hz
Maximum system power consumption (100% throughput, full speed of fans)		<ul style="list-style-type: none"> <li>● S5300-28P-LI-AC: 24 W</li> <li>● S5300-28P-LI-DC: 24 W</li> <li>● S5300-52P-LI-AC: 48.4 W</li> <li>● S5300-52P-LI-DC: 48.3 W</li> <li>● S5300-10P-LI-AC: 11.5 W</li> <li>● S5300-28X-LI-AC: 39.5 W</li> <li>● S5300-28X-LI-DC: 42 W</li> <li>● S5300-52X-LI-AC: 61 W</li> <li>● S5300-52X-LI-DC: 60 W</li> <li>● S5300-28X-LI-24S-AC: 60 W</li> <li>● S5300-28X-LI-24S-DC: 57 W</li> <li>● S5300-52X-LI-48CS-AC: 79.93 W</li> <li>● S5300-52X-LI-48CS-DC: 78.69 W</li> </ul>
Temperature	Operating temperature	<p>The operating temperature of the S5300-10P-LI-AC, S5300-28X-LI-24S-AC, S5300-28X-LI-24S-DC, S5300-52X-LI-48CS-AC, and S5300-52X-LI-48CS-DC is 0°C to 45°C at an altitude between 0 m and 1800 m. The operating temperature of the other S5300-LI models is 0°C to 50°C at an altitude between 0 m and 1800 m.</p> <p><b>NOTE</b> When the altitude is between 1800 m and 5000 m, the highest operating temperature reduces 1°C every time the altitude increases 220 m.</p>
	Storage temperature	-40°C to +70°C

Item	Description
Noise under normal temperature (27°C, sound power)	<ul style="list-style-type: none"> <li>● S5300-28P-LI-AC: 0 (The device has no fans.)</li> <li>● S5300-28P-LI-DC: 0 (The device has no fans.)</li> <li>● S5300-52P-LI-AC: less than 43.8 dBA</li> <li>● S5300-52P-LI-DC: less than 43.8 dBA</li> <li>● S5300-10P-LI-AC: 0 (The device has no fans.)</li> <li>● S5300-28X-LI-AC: less than 45.8 dBA</li> <li>● S5300-28X-LI-DC: less than 45.8 dBA</li> <li>● S5300-52X-LI-AC: less than 47.9 dBA</li> <li>● S5300-52X-LI-DC: less than 47.9 dBA</li> <li>● S5300-28X-LI-24S-AC: less than 49.6 dBA</li> <li>● S5300-28X-LI-24S-DC: less than 49.6 dBA</li> <li>● S5300-52X-LI-48CS-AC: less than 67.3 dBA</li> <li>● S5300-52X-LI-48CS-DC: less than 67.3 dBA</li> </ul>
Relative humidity	5% RH to 95% RH, noncondensing
Operating altitude	<ul style="list-style-type: none"> <li>● S5300-28P-LI-DC: 0 m to 3000 m</li> <li>● S5300-52P-LI-DC, S5300-28X-LI-DC, S5300-52X-LI-DC, S5300-28X-LI-24S-DC, S5300-52X-LI-48CS-DC: 0 m to 2000 m</li> <li>● Others: 0 m to 5000 m</li> </ul>
EMC	<ul style="list-style-type: none"> <li>● CISPR22 Class A</li> <li>● CISPR24</li> <li>● EN55022 Class A</li> <li>● EN50024</li> <li>● ETSI EN 300 386 Class A</li> <li>● CFR 47 FCC Part 15 Class A</li> <li>● ICES 003 Class A</li> <li>● AS/NZS CISPR22 Class A</li> <li>● IEC61000-4-2</li> <li>● ITU-T K 20</li> <li>● ITU-T K 44</li> </ul>
Environmental standards	<ul style="list-style-type: none"> <li>● RoHS</li> <li>● REACH</li> <li>● WEEE</li> </ul>

Item	Description
Safety	<ul style="list-style-type: none"> <li>● IEC 60950-1</li> <li>● EN 60950-1/A11/A12</li> <li>● UL 60950-1</li> <li>● CSA C22.2 No 60950-1</li> <li>● AS/NZS 60950.1</li> </ul>
Laser Safety	<ul style="list-style-type: none"> <li>● IEC60825-1</li> <li>● IEC60825-2</li> <li>● EN60825-1</li> <li>● EN60825-2</li> </ul>

## 6.3 S5300-SI

**Table 6-3** lists specifications of the S5300-SI.

**Table 6-3** Specifications of the S5300-SI

Item	Description
Memory (RAM)	256 MB
Flash	32 MB
Mean time between failures (MTBF)	<ul style="list-style-type: none"> <li>● S5348TP-SI-AC: 34 years</li> <li>● S5348TP-SI-DC: 34 years</li> <li>● S5324TP-SI-DC: 37 years</li> <li>● S5324TP-SI-AC: 37 years</li> <li>● S5348TP-PWR-SI: 71.7 years</li> <li>● S5324TP-PWR-SI: 84.3 years</li> <li>● S5328C-PWR-SI: 53.6 years when a 2x10GE card is configured; 74.6 years when a 4xGE front card is configured; 25.68 years when a 4x10GE front card is configured</li> <li>● S5352C-PWR-SI: 50.4 years when a 2x10GE card is configured; 68.6 years when a 4xGE front card is configured; 35.58 years when a 4x10GE front card is configured</li> <li>● S5328C-SI: 53.7 years when a 2x10GE card is configured; 74.9 years when a 4xGE front card is configured; 29.58 years when a 4x10GE front card is configured</li> <li>● S5352C-SI: 51.3 years when a 2x10GE card is configured; 70.3 years when a 4xGE front card is configured; 28.58 years when a 4x10GE front card is configured</li> </ul>

Item		Description
Mean time to repair (MTTR)		2 hours
Availability		> 0.99999
Surge protection	Service port protection	<ul style="list-style-type: none"> <li>● Non-PoE switch: <math>\pm 2</math> kV in common mode</li> <li>● PoE switch: <math>\pm 1</math> kV in common mode</li> </ul>
	Power supply protection	<ul style="list-style-type: none"> <li>● Non-PoE switch:                             <ul style="list-style-type: none"> <li>- AC: <math>\pm 6</math> kV in differential mode; <math>\pm 6</math> kV in common mode</li> <li>- DC: <math>\pm 1</math> kV in differential mode; <math>\pm 2</math> kV in common mode</li> </ul> </li> <li>● PoE switch: <math>\pm 2</math> kV in differential mode; <math>\pm 4</math> kV in common mode</li> </ul>
Dimensions (W x D x H)		<ul style="list-style-type: none"> <li>● S5348TP-SI-AC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5348TP-SI-DC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5324TP-SI-DC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5324TP-SI-AC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5352C-PWR-SI: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5348TP-PWR-SI: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5324TP-PWR-SI: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5328C-PWR-SI: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5328C-SI: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5352C-SI: 442.0 mm x 420.0 mm x 43.6 mm</li> </ul>
Weight	Fully loaded	$\leq 8.5$ kg
	Empty loaded	$\leq 5$ kg
Stack port		Two stack ports available on each stack card
Maximum stack bandwidth (bidirectional)		48 Gbit/s
RPS		Not supported
PoE		The PWR series support PoE.
Input DC voltage	Rated input voltage range	-48 V DC to -60 V DC

Item		Description
	Maximum voltage range	-36 V DC to -72 V DC
Input AC voltage	Rated input voltage range	100 V AC to 240 V AC, 50/60 Hz
	Maximum voltage range	90 V AC to 264 V AC, 47 Hz to 63 Hz
Maximum system power consumption (100% throughput, 100% PoE loads, full speed of fans)		<ul style="list-style-type: none"> <li>● S5348TP-SI-AC: 64 W</li> <li>● S5348TP-SI-DC: 64 W</li> <li>● S5324TP-SI-DC: 40 W</li> <li>● S5324TP-SI-AC: 40 W</li> <li>● S5352C-PWR-SI: 917 W (system power consumption: 177 W; PoE: 740 W)</li> <li>● S5348TP-PWR-SI: 907 W (system power consumption: 167 W; PoE: 740 W)</li> <li>● S5324TP-PWR-SI: 455 W (system power consumption: 85 W; PoE: 370 W)</li> <li>● S5328C-PWR-SI: 466 W (system power consumption: 96 W; PoE: 370 W)</li> <li>● S5328C-SI: 56 W</li> <li>● S5352C-SI: 78 W</li> </ul>
Temperature	Operating temperature	0°C to 50°C
	Storage temperature	-40°C to +70°C

Item	Description
Noise under normal temperature (27°C, sound power)	<ul style="list-style-type: none"> <li>● S5348TP-SI-AC: 0</li> <li>● S5348TP-SI-DC: 0</li> <li>● S5324TP-SI-DC: 0</li> <li>● S5324TP-SI-AC: 0</li> <li>● S5352C-PWR-SI: less than 45 dBA</li> <li>● S5348TP-PWR-SI: less than 51 dBA</li> <li>● S5324TP-PWR-SI: less than 51 dBA</li> <li>● S5328C-PWR-SI: less than 45 dBA</li> <li>● S5328C-SI: less than 41 dBA</li> <li>● S5352C-SI: less than 41 dBA</li> </ul>
Relative humidity	5% RH to 95% RH, noncondensing
Operating altitude	<ul style="list-style-type: none"> <li>● Non-PoE switch:               <ul style="list-style-type: none"> <li>- AC: 0 m to 5000 m</li> <li>- DC: 0 m to 2000 m</li> </ul> </li> <li>● PoE switch: 0 m to 5000 m</li> </ul>
EMC	<ul style="list-style-type: none"> <li>● CISPR22 Class A</li> <li>● CISPR24</li> <li>● EN55022 Class A</li> <li>● EN50024</li> <li>● ETSI EN 300 386 Class A</li> <li>● CFR 47 FCC Part 15 Class A</li> <li>● ICES 003 Class A</li> <li>● AS/NZS CISPR22 Class A</li> <li>● IEC61000-4-2</li> <li>● ITU-T K 20</li> <li>● ITU-T K 44</li> </ul>
Environmental standards	<ul style="list-style-type: none"> <li>● RoHS</li> <li>● REACH</li> <li>● WEEE</li> </ul>
Security	<ul style="list-style-type: none"> <li>● IEC 60950-1</li> <li>● EN 60950-1/A11/A12</li> <li>● UL 60950-1</li> <li>● CSA C22.2 No 60950-1</li> <li>● AS/NZS 60950.1</li> </ul>



Item	Description
Laser safety	<ul style="list-style-type: none"> <li>● IEC60825-1</li> <li>● IEC60825-2</li> <li>● EN60825-1</li> <li>● EN60825-2</li> </ul>

## 6.4 S5300-EI

**Table 6-4** lists specifications of the S5300-EI.

**Table 6-4** Specifications of the S5300-EI

Item	Description
Memory (RAM)	256 MB
Flash	32 MB
Mean time between failures (MTBF)	<ul style="list-style-type: none"> <li>● S5328C-EI: 53.11 years when a 2x10GE card is configured; 68.33 years when a 4xGE front card is configured; 25.52 years when a 4x10GE front card is configured</li> <li>● S5352C-EI: 46.05 years when a 2x10GE card is configured; 57.08 years when a 4xGE front card is configured; 25.58 years when a 4x10GE front card is configured</li> <li>● S5328C-EI-24S: 41.33 years when a 2x10GE card is configured; 50.00 years when a 4xGE front card is configured; 26.52 years when a 4x10GE front card is configured</li> <li>● S5328C-PWR-EI: 52 years when a 2x10GE card is configured; 55.4 years when a 4xGE front card is configured</li> <li>● S5352C-PWR-EI: 44.8 years when a 2x10GE card is configured; 66.8 years when a 4xGE front card is configured</li> <li>● S5300-28C-PWR-EI: 52 years when a 2x10GE card is configured; 55.4 years when a 4xGE front card is configured; 32.92 years when a 4x10GE front card is configured</li> <li>● S5300-52C-PWR-EI: 44.8 years when a 2x10GE card is configured; 66.8 years when a 4xGE front card is configured; 29.89 years when a 4x10GE front card is configured</li> </ul>
Mean time to repair (MTTR)	2 hours
Availability	> 0.99999

Item		Description
Surge protection	Service port protection	<ul style="list-style-type: none"> <li>● Non-PoE switch: <math>\pm 2</math> kV in common mode</li> <li>● PoE switch: <math>\pm 1</math> kV in common mode</li> </ul>
	Power supply protection	<ul style="list-style-type: none"> <li>● Non-PoE switch:                             <ul style="list-style-type: none"> <li>- AC: <math>\pm 6</math> kV in differential mode; <math>\pm 6</math> kV in common mode</li> <li>- DC: <math>\pm 1</math> kV in differential mode; <math>\pm 2</math> kV in common mode</li> </ul> </li> <li>● PoE switch: <math>\pm 2</math> kV in differential mode; <math>\pm 4</math> kV in common mode</li> </ul>
Dimensions (W x D x H)		442.0 mm x 420.0 mm x 43.6 mm
Weight	Fully loaded	$\leq 8.5$ kg
	Empty loaded	$\leq 5$ kg
Stack port		Two stack ports available on each stack card
Maximum stack bandwidth (bidirectional)		48 Gbit/s
RPS		Not supported
PoE		The PWR series support PoE.
Input DC voltage	Rated input voltage range	-48 V DC to -60 V DC
	Maximum voltage range	-36 V DC to -72 V DC
Input AC voltage	Rated input voltage range	100 V AC to 240 V AC, 50/60 Hz
	Maximum voltage range	90 V AC to 264 V AC, 47 Hz to 63 Hz

Item		Description
Maximum system power consumption (100% throughput, 100% PoE loads, full speed of fans)		<ul style="list-style-type: none"> <li>● S5328C-EI: 60 W</li> <li>● S5352C-EI: 88 W</li> <li>● S5328C-EI-24S: 63 W</li> <li>● S5328C-PWR-EI: 472 W (system power consumption: 102 W; PoE: 370 W)</li> <li>● S5352C-PWR-EI: 930 W (system power consumption: 190 W; PoE: 740 W)</li> <li>● S5300-28C-PWR-EI: 842 W (system power consumption: 102 W; PoE: 740 W)</li> <li>● S5300-52C-PWR-EI: 930 W (system power consumption: 190 W; PoE: 740 W)</li> </ul>
Temperature	Operating temperature	0°C to 50°C
	Storage temperature	-40°C to +70°C
Noise under normal temperature (27°C, sound power)		<ul style="list-style-type: none"> <li>● S5328C-EI: less than 41 dBA</li> <li>● S5352C-EI: less than 41 dBA</li> <li>● S5328C-EI-24S: less than 41 dBA</li> <li>● S5328C-PWR-EI: less than 45 dBA</li> <li>● S5352C-PWR-EI: less than 45 dBA</li> <li>● S5300-28C-PWR-EI: less than 45 dBA</li> <li>● S5300-52C-PWR-EI: less than 45 dBA</li> </ul>
Relative humidity		5% RH to 95% RH, noncondensing
Operating altitude		<ul style="list-style-type: none"> <li>● Non-PoE switch:                             <ul style="list-style-type: none"> <li>- AC: 0 m to 5000 m</li> <li>- DC: 0 m to 2000 m</li> </ul> </li> <li>● PoE switch: 0 m to 5000 m</li> </ul>

Item	Description
EMC	<ul style="list-style-type: none"> <li>● CISPR22 Class A</li> <li>● CISPR24</li> <li>● EN55022 Class A</li> <li>● EN50024</li> <li>● ETSI EN 300 386 Class A</li> <li>● CFR 47 FCC Part 15 Class A</li> <li>● ICES 003 Class A</li> <li>● AS/NZS CISPR22 Class A</li> <li>● IEC61000-4-2</li> <li>● ITU-T K 20</li> <li>● ITU-T K 44</li> </ul>
Environmental standards	<ul style="list-style-type: none"> <li>● RoHS</li> <li>● REACH</li> <li>● WEEE</li> </ul>
Security	<ul style="list-style-type: none"> <li>● IEC 60950-1</li> <li>● EN 60950-1/A11/A12</li> <li>● UL 60950-1</li> <li>● CSA C22.2 No 60950-1</li> <li>● AS/NZS 60950.1</li> </ul>
Laser safety	<ul style="list-style-type: none"> <li>● IEC60825-1</li> <li>● IEC60825-2</li> <li>● EN60825-1</li> <li>● EN60825-2</li> </ul>

## 6.5 S5310-EI

**Table 6-5** lists specifications of the S5310-EI.

**Table 6-5** Specifications of the S5310-EI

Item	Description
Memory (RAM)	512 MB
Flash	200 MB

Item		Description
Mean time between failures (MTBF)		<ul style="list-style-type: none"> <li>● S5310-28C-EI: 55.98 years when a 8xGE optical interface card is configured; 54.93 years when a 8xGE electrical interface card is configured; 52.69 years when a 2x10GE interface card is configured</li> <li>● S5310-52C-EI: 45.57 years when a 8xGE optical interface card is configured; 44.85 years when a 8xGE electrical interface card is configured; 43.33 years when a 2x10GE interface card is configured</li> </ul>
Mean time to repair (MTTR)		2 hours
Availability		> 0.99999
Surge protection	Service port protection	±2 kV in common mode
	Power supply protection	<ul style="list-style-type: none"> <li>● DC: ±1 kV in differential mode; ±2 kV in common mode</li> <li>● AC: ±6 kV in differential mode; ±6 kV in common mode</li> </ul>
Dimensions (W x D x H)		442.0 mm x 420.0 mm x 43.6 mm When a 1150 W power module is installed, it extrudes out from the chassis. Therefore, the total depth of the switch changes to 507.3 mm.
Weight	Fully loaded	≤ 10 kg
	Empty	≤ 6 kg
Stack port		Four 10GE SFP+ ports or two 10GE SFP+ rear card ports
Maximum stack bandwidth (bidirectional)		160 Gbit/s
RPS		Not supported
PoE		Not supported
Input DC voltage	Rated input voltage range	-48 V DC to -60 V DC
	Maximum voltage range	-36 V DC to -72 V DC

Item		Description
Input AC voltage	Rated input voltage range	100 V AC to 240 V AC, 50/60 Hz
	Maximum voltage range	90 V AC to 264 V AC, 47 Hz to 63 Hz
Maximum system power consumption (100% throughput, full speed of fans)		<ul style="list-style-type: none"> <li>● S5310-28C-EI: 98 W</li> <li>● S5310-52C-EI: 146.9 W</li> </ul>
Temperature	Operating temperature	0°C to 50°C (at 0 m to 1800 m altitude) <b>NOTE</b> When the altitude is between 1800 m and 5000 m, the highest operating temperature reduces 1°C every time the altitude increases 220 m.
	Storage temperature	-40°C to +70°C
Noise under normal temperature (27°C, sound power)		Less than 53.9 dBA
Relative humidity		5% RH to 95% RH, noncondensing
Operating altitude		<ul style="list-style-type: none"> <li>● S5310-28C-EI: 0 m to 5000 m when AC power module is configured; 0 m to 2000 m when DC power module is configured</li> <li>● S5310-52C-EI: 0 m to 5000 m when AC power module is configured; 0 m to 2000 m when DC power module is configured</li> </ul>
EMC		<ul style="list-style-type: none"> <li>● CISPR22 Class A</li> <li>● CISPR24</li> <li>● EN55022 Class A</li> <li>● EN50024</li> <li>● ETSI EN 300 386 Class A</li> <li>● CFR 47 FCC Part 15 Class A</li> <li>● ICES 003 Class A</li> <li>● AS/NZS CISPR22 Class A</li> <li>● IEC61000-4-2</li> <li>● ITU-T K 20</li> <li>● ITU-T K 44</li> </ul>

Item	Description
Environmental standards	<ul style="list-style-type: none"> <li>● RoHS</li> <li>● REACH</li> <li>● WEEE</li> </ul>
Safety	<ul style="list-style-type: none"> <li>● IEC 60950-1</li> <li>● EN 60950-1/A11/A12</li> <li>● UL 60950-1</li> <li>● CSA C22.2 No 60950-1</li> <li>● AS/NZS 60950.1</li> </ul>
Laser safety	<ul style="list-style-type: none"> <li>● IEC60825-1</li> <li>● IEC60825-2</li> <li>● EN60825-1</li> <li>● EN60825-2</li> </ul>

## 6.6 S5320-EI

**Table 6-6** lists specifications of the S5320-EI series switches.

**Table 6-6** Specifications of the S5320-EI series switches

Item	Description
Memory (RAM)	2 GB
Flash	340 MB

Item	Description
Mean time between failures (MTBF)	<ul style="list-style-type: none"> <li>● S5320-36C-EI-AC: 80.05 years without card; 73.65 years when a 2x10GE SFP+ card is configured; 71.58 years when a 2x10GE RJ45 card is configured; 71.74 years when a stack card is configured</li> <li>● S5320-36C-EI-DC: 80.05 years without card; 73.65 years when a 2x10GE SFP+ card is configured; 71.58 years when a 2x10GE RJ45 card is configured; 71.74 years when a stack card is configured</li> <li>● S5320-56C-EI-AC: 71.18 years without card; 66.07 years when a 2x10GE SFP+ card is configured; 66.40 years when a 2x10GE RJ45 card is configured; 64.53 years when a stack card is configured</li> <li>● S5320-56C-EI-DC: 71.18 years without card; 66.07 years when a 2x10GE SFP+ card is configured; 66.40 years when a 2x10GE RJ45 card is configured; 64.53 years when a stack card is configured</li> <li>● S5320-36C-EI-28S-AC: 85.45 years without card; 78.2 years when a 2x10GE SFP+ card is configured; 75.87 years when a 2x10GE RJ45 card is configured; 76.05 years when a stack card is configured</li> <li>● S5320-36C-EI-28S-DC: 85.45 years without card; 78.2 years when a 2x10GE SFP+ card is configured; 75.87 years when a 2x10GE RJ45 card is configured; 76.05 years when a stack card is configured</li> <li>● S5320-56C-EI-48S-AC: 73.91 years without card; 68.42 years when a 2x10GE SFP+ card is configured; 66.63 years when a 2x10GE RJ45 card is configured; 66.77 years when a stack card is configured</li> <li>● S5320-56C-EI-48S-DC: 73.91 years without card; 68.42 years when a 2x10GE SFP+ card is configured; 66.63 years when a 2x10GE RJ45 card is configured; 66.77 years when a stack card is configured</li> <li>● S5320-36C-PWR-EI-AC: 60.72 years without card; 56.97 years when a 2x10GE SFP+ card is configured; 55.72 years when a 2x10GE RJ45 card is configured; 55.82 years when a stack card is configured</li> <li>● S5320-36C-PWR-EI-DC: 60.72 years without card; 56.97 years when a 2x10GE SFP+ card is configured; 55.72 years when a 2x10GE RJ45 card is configured; 55.82 years when a stack card is configured</li> <li>● S5320-56C-PWR-EI-AC: 51.34 years without card; 48.63 years when a 2x10GE SFP+ card is configured; 47.71 years when a 2x10GE RJ45 card is configured; 47.79 years when a stack card is configured</li> <li>● S5320-36PC-EI-AC: 80.05 years without card; 73.65 years when a 2x10GE SFP+ card is configured; 71.58 years when a 2x10GE</li> </ul>



Item		Description
		<p>RJ45 card is configured; 71.74 years when a stack card is configured</p> <ul style="list-style-type: none"> <li>● S5320-36PC-EI-DC: 80.05 years without card; 73.65 years when a 2x10GE SFP+ card is configured; 71.58 years when a 2x10GE RJ45 card is configured; 71.74 years when a stack card is configured</li> <li>● S5320-56PC-EI-AC: 71.18 years without card; 66.07 years when a 2x10GE SFP+ card is configured; 66.40 years when a 2x10GE RJ45 card is configured; 64.53 years when a stack card is configured</li> <li>● S5320-56PC-EI-DC: 71.18 years without card; 66.07 years when a 2x10GE SFP+ card is configured; 66.40 years when a 2x10GE RJ45 card is configured; 64.53 years when a stack card is configured</li> <li>● S5320-32X-EI-AC: 80.32 years</li> <li>● S5320-32X-EI-DC: 80.32 years</li> <li>● S5320-52X-EI-AC: 73.12 years</li> <li>● S5320-52X-EI-DC: 73.12 years</li> <li>● S5320-50X-EI-AC: 74.31 years</li> <li>● S5320-50X-EI-DC: 74.31 years</li> <li>● S5320-32X-EI-24S-AC: 82.54 years</li> <li>● S5320-32X-EI-24S-DC: 82.54 years</li> <li>● S5320-50X-EI-46S-AC: 67.59 years</li> <li>● S5320-50X-EI-46S-DC: 67.59 years</li> <li>● S5320-32P-EI-AC: 80.32 years</li> <li>● S5320-32P-EI-DC: 80.32 years</li> <li>● S5320-52P-EI-AC: 73.12 years</li> <li>● S5320-52P-EI-DC: 73.12 years</li> </ul>
Mean time to repair (MTTR)		2 hours
Availability		> 0.99999
Surge protection	Service port protection	Common mode: $\pm 6$ kV
	Power supply protection	<ul style="list-style-type: none"> <li>● Non-PoE switch: <ul style="list-style-type: none"> <li>- DC: <math>\pm 1</math> kV in differential mode; <math>\pm 2</math> kV in common mode</li> <li>- AC: <math>\pm 6</math> kV in differential mode; <math>\pm 6</math> kV in common mode</li> </ul> </li> <li>● PoE switch: <math>\pm 2</math> kV in differential mode; <math>\pm 4</math> kV in common mode</li> </ul>

Item		Description
Dimensions (W x D x H)		<ul style="list-style-type: none"> <li>● S5320-36C-EI-AC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-36C-EI-DC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-56C-EI-AC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-56C-EI-DC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-36C-EI-28S-AC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-36C-EI-28S-DC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-56C-EI-48S-AC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-56C-EI-48S-DC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-36C-PWR-EI-AC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-36C-PWR-EI-DC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-56C-PWR-EI-AC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-36PC-EI-AC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-36PC-EI-DC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-56PC-EI-AC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-56PC-EI-DC: 442.0 mm x 420.0 mm x 43.6 mm</li> <li>● S5320-32X-EI-AC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5320-32X-EI-DC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5320-52X-EI-AC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5320-52X-EI-DC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5320-50X-EI-AC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5320-50X-EI-DC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5320-32X-EI-24S-AC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5320-32X-EI-24S-DC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5320-50X-EI-46S-AC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5320-50X-EI-46S-DC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5320-32P-EI-AC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5320-32P-EI-DC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5320-52P-EI-AC: 442.0 mm x 220.0 mm x 43.6 mm</li> <li>● S5320-52P-EI-DC: 442.0 mm x 220.0 mm x 43.6 mm</li> </ul>
Weight	Fully loaded	≤ 12 kg
	Empty chassis	≤ 8 kg

Item		Description
Stack port		<ul style="list-style-type: none"> <li>● S5320-C-EI: ports on the 2xQSFP+ dedicated stack card</li> <li>● S5320-PC-EI: ports on the 2xQSFP+ dedicated stack card</li> <li>● S5320-X-EI: two fixed QSFP+ dedicated stack ports on the rear panel</li> <li>● S5320-P-EI: two fixed QSFP+ dedicated stack ports on the rear panel</li> </ul>
RPS		Supported by the S5320-X-EI and S5320-P-EI series switches
PoE		Supported by the PWR models
DC input voltage	Rated voltage range	-48 V DC to -60 V DC
	Maximum voltage range	-36 V DC to -72 V DC
AC input voltage	Rated voltage range	100 V AC to 240 V AC, 50/60 Hz
	Maximum voltage range	90 V AC to 264 V AC, 47 Hz to 63 Hz

Item	Description
<p>Maximum power consumption (100% throughput, full speed of fans)</p>	<ul style="list-style-type: none"> <li>● S5320-36C-EI-AC: 75.8 W</li> <li>● S5320-36C-EI-DC: 75.8 W</li> <li>● S5320-56C-EI-AC: 86.9 W</li> <li>● S5320-56C-EI-DC: 86.9 W</li> <li>● S5320-36C-EI-28S-AC: 83.9 W</li> <li>● S5320-36C-EI-28S-DC: 83.9 W</li> <li>● S5320-56C-EI-48S-AC: 104 W</li> <li>● S5320-56C-EI-48S-DC: 104 W</li> <li>● S5320-36C-PWR-EI-AC: <ul style="list-style-type: none"> <li>- Without PoE: 78 W</li> <li>- 100% PoE loads: 864.3 W (system power consumption: 124.3W, PoE: 740 W)</li> </ul> </li> <li>● S5320-36C-PWR-EI-DC: <ul style="list-style-type: none"> <li>- Without PoE: 78 W</li> <li>- 100% PoE loads: 864.3 W (system power consumption: 124.3W, PoE: 740 W)</li> </ul> </li> <li>● S5320-56C-PWR-EI-AC: <ul style="list-style-type: none"> <li>- Without PoE: 91.6 W</li> <li>- 100% PoE loads: 889.4 W (system power consumption: 149.4 W, PoE: 740 W)</li> </ul> </li> <li>● S5320-36PC-EI-AC: 74.6 W</li> <li>● S5320-36PC-EI-DC: 74.6 W</li> <li>● S5320-56PC-EI-AC: 85.7 W</li> <li>● S5320-56PC-EI-DC: 85.7 W</li> <li>● S5320-32X-EI-AC: 51.9 W</li> <li>● S5320-32X-EI-DC: 51.9 W</li> <li>● S5320-52X-EI-AC: 61.5 W</li> <li>● S5320-52X-EI-DC: 61.5 W</li> <li>● S5320-50X-EI-AC: 55.3 W</li> <li>● S5320-50X-EI-DC: 55.3 W</li> <li>● S5320-32X-EI-24S-AC: 58.9 W</li> <li>● S5320-32X-EI-24S-DC: 58.9 W</li> <li>● S5320-50X-EI-46S-AC: 81.5 W</li> <li>● S5320-50X-EI-46S-DC: 81.5 W</li> <li>● S5320-32P-EI-AC: 50.7 W</li> <li>● S5320-32P-EI-DC: 50.7 W</li> <li>● S5320-52P-EI-AC: 60.3 W</li> <li>● S5320-52P-EI-DC: 60.3 W</li> </ul>

Item		Description
Temperature	Operating temperature	0°C to 45°C (at altitude of 0-1800 m) <b>NOTE</b> When the altitude is between 1800 m and 5000 m, the operating temperature reduces by 1°C every time the altitude increases by 220 m.
	Storage temperature	-40°C to +70°C
Noise under normal temperature (27°C, sound power)		<ul style="list-style-type: none"> <li>● S5320-36C-EI-AC: less than 51.2 dBA</li> <li>● S5320-36C-EI-DC: less than 51.2 dBA</li> <li>● S5320-56C-EI-AC: less than 51.2 dBA</li> <li>● S5320-56C-EI-DC: less than 51.2 dBA</li> <li>● S5320-36C-EI-28S-AC: less than 51.2 dBA</li> <li>● S5320-36C-EI-28S-DC: less than 51.2 dBA</li> <li>● S5320-56C-EI-48S-AC: less than 51.2 dBA</li> <li>● S5320-56C-EI-48S-DC: less than 51.2 dBA</li> <li>● S5320-36C-PWR-EI-AC: less than 53.7 dBA</li> <li>● S5320-36C-PWR-EI-DC: less than 53.7 dBA</li> <li>● S5320-56C-PWR-EI-AC: less than 53.7 dBA</li> <li>● S5320-36PC-EI-AC: less than 51.2 dBA</li> <li>● S5320-36PC-EI-DC: less than 51.2 dBA</li> <li>● S5320-56PC-EI-AC: less than 51.2 dBA</li> <li>● S5320-56PC-EI-DC: less than 51.2 dBA</li> <li>● S5320-32X-EI-AC: less than 49.3 dBA</li> <li>● S5320-32X-EI-DC: less than 49.3 dBA</li> <li>● S5320-52X-EI-AC: less than 49.3 dBA</li> <li>● S5320-52X-EI-DC: less than 49.3 dBA</li> <li>● S5320-50X-EI-AC: less than 49.3 dBA</li> <li>● S5320-50X-EI-DC: less than 49.3 dBA</li> <li>● S5320-32X-EI-24S-AC: less than 49.3 dBA</li> <li>● S5320-32X-EI-24S-DC: less than 49.3 dBA</li> <li>● S5320-50X-EI-46S-AC: less than 51.1 dBA</li> <li>● S5320-50X-EI-46S-DC: less than 51.1 dBA</li> <li>● S5320-32P-EI-AC: less than 49.3 dBA</li> <li>● S5320-32P-EI-DC: less than 49.3 dBA</li> <li>● S5320-52P-EI-AC: less than 49.3 dBA</li> <li>● S5320-52P-EI-DC: less than 49.3 dBA</li> </ul>
Relative humidity		5% RH to 95% RH, noncondensing

Item	Description
Operating altitude	<ul style="list-style-type: none"> <li>● Non-PoE switch:                             <ul style="list-style-type: none"> <li>- DC power modules configured: 0 m to 2000 m</li> <li>- AC power modules configured: 0 m to 5000 m</li> </ul> </li> <li>● PoE switch: 0 m to 5000 m</li> </ul>
EMC	<ul style="list-style-type: none"> <li>● CISPR22 Class A</li> <li>● CISPR24</li> <li>● EN55022 Class A</li> <li>● EN50024</li> <li>● ETSI EN 300 386 Class A</li> <li>● CFR 47 FCC Part 15 Class A</li> <li>● ICES 003 Class A</li> <li>● AS/NZS CISPR22 Class A</li> <li>● IEC61000-4-2</li> <li>● ITU-T K 20</li> <li>● ITU-T K 44</li> </ul>
Environmental standards	<ul style="list-style-type: none"> <li>● RoHS</li> <li>● REACH</li> <li>● WEEE</li> </ul>
Safety	<ul style="list-style-type: none"> <li>● IEC 60950-1</li> <li>● EN 60950-1/A11/A12</li> <li>● UL 60950-1</li> <li>● CSA C22.2 No 60950-1</li> <li>● AS/NZS 60950.1</li> </ul>
Laser safety	<ul style="list-style-type: none"> <li>● IEC60825-1</li> <li>● IEC60825-2</li> <li>● EN60825-1</li> <li>● EN60825-2</li> </ul>

## 6.7 S5300-HI

**Table 6-7** lists specifications of the S5300-HI.

**Table 6-7** Specifications of the S5300-HI

Item		Description
Memory (RAM)		512 MB
Flash		64 MB
Mean time between failures (MTBF)		<ul style="list-style-type: none"> <li>● S5328C-HI: 28.7 years when a 4x10GE card is configured; 41.1 years when a 2x10GE card is configured; 42.9 years when a 4xGE card is configured</li> <li>● S5328C-HI-24S: 25.5 years when a 4x10GE card is configured; 34.8 years when a 2x10GE card is configured; 36.1 years when a 4xGE card is configured</li> </ul>
Mean time to repair (MTTR)		2 hours
Availability		> 0.99999
Surge protection	Service port protection	<ul style="list-style-type: none"> <li>● S5328C-HI: <math>\pm 2</math> kV in common mode</li> <li>● S5328C-HI-24S: N/A</li> </ul>
	Power supply protection	<ul style="list-style-type: none"> <li>● AC: <math>\pm 6</math> kV in differential mode; <math>\pm 6</math> kV in common mode</li> <li>● DC: <math>\pm 1</math> kV in differential mode; <math>\pm 2</math> kV in common mode</li> </ul>
Dimensions (W x D x H)		442.0 mm x 220.0 mm x 43.6 mm
Weight	Fully loaded	$\leq 6.5$ kg
	Empty loaded	$\leq 5$ kg
Stack port		<p>Versions earlier than V200R003C00 do not support stack ports.</p> <p>Since V200R003C00, the 10GE ports on the front card can be used as stack ports.</p>
Maximum stack bandwidth (bidirectional)		80 Gbit/s
RPS		Not supported
PoE		Not supported
Input DC voltage	Rated input voltage range	-48 V DC to -60 V DC

Item		Description
	Maximum voltage range	-36 V DC to -72 V DC
Input AC voltage	Rated input voltage range	100 V AC to 240 V AC, 50/60 Hz
	Maximum voltage range	90 V AC to 264 V AC, 47 Hz to 63 Hz
Maximum power consumption (100% throughput, full speed of fans)		<ul style="list-style-type: none"> <li>● S5328C-HI: 76.6 W</li> <li>● S5328C-HI-24S: 80.7 W</li> </ul>
Temperature	Operating temperature	-5°C to +55°C <b>NOTE</b> When the switch has the 40 km or longer transmission distance SFP+ optical module installed, the operating temperature range is -5°C to +50°C.
	Storage temperature	-40°C to +70°C
Noise under normal temperature (27°C, sound power)		Less than 60 dBA
Relative humidity		5% RH to 95% RH, noncondensing
Operating altitude		<ul style="list-style-type: none"> <li>● Use AC power modules: 0 m to 5000 m</li> <li>● Use DC power modules: 0 m to 2000 m</li> </ul>



Item	Description
EMC	<ul style="list-style-type: none"> <li>● CISPR22 Class A</li> <li>● CISPR24</li> <li>● EN55022 Class A</li> <li>● EN50024</li> <li>● ETSI EN 300 386 Class A</li> <li>● CFR 47 FCC Part 15 Class A</li> <li>● ICES 003 Class A</li> <li>● AS/NZS CISPR22 Class A</li> <li>● IEC61000-4-2</li> <li>● ITU-T K 20</li> <li>● ITU-T K 44</li> </ul>
Environmental standards	<ul style="list-style-type: none"> <li>● RoHS</li> <li>● REACH</li> <li>● WEEE</li> </ul>
Safety	<ul style="list-style-type: none"> <li>● IEC 60950-1</li> <li>● EN 60950-1/A11/A12</li> <li>● UL 60950-1</li> <li>● CSA C22.2 No 60950-1</li> <li>● AS/NZS 60950.1</li> </ul>
Laser safety	<ul style="list-style-type: none"> <li>● IEC60825-1</li> <li>● IEC60825-2</li> <li>● EN60825-1</li> <li>● EN60825-2</li> </ul>