

S5720-LI Series Simplified Gigabit Ethernet Switches

The S5720-LI series are energy-saving Gigabit Ethernet switches that provide flexible GE access ports and 10GE uplink ports.

Introduction

Building on next-generation, high-performance hardware and the Huawei Versatile Routing Platform (VRP), the S5720-LI series support intelligent stack (iStack), flexible Ethernet networking, and diversified security control. They provide customers with a green, easy-to-manage, easy-to-expand, and cost-effective gigabit to the desktop solution. In addition, Huawei customizes specialized models to meet customer requirements and to suit special scenarios.

The models with front power sockets can be installed in a 300 mm deep cabinet. They can be maintained through the front panel, saving space in small equipment rooms.




The S5720-12TP-LI-AC adopts the ground-free design. Only the 220 V power module needs to be grounded. This design facilitates switch deployment in the places where grounding is difficult, such as corridor.







The models that use a fan-free design reduce power consumption and noise.










Product Overview


Models and Appearances

Models and appearances of the S5720-LI series

Appearance	Description
 S5720-12TP-LI-AC	<ul style="list-style-type: none"> • 8 10/100/1000Base-T Ethernet ports, 4 GE SFP ports (2 of which are dual-purpose 10/100/1000Base-T or SFP ports) • AC power supply • Forwarding performance: 22.5 Mpps • Switching capacity: 336 Gbit/s
 S5720-12TP-PWR-LI-AC	<ul style="list-style-type: none"> • 8 10/100/1000Base-T Ethernet ports, 4 GE SFP ports (2 of which are dual-purpose 10/100/1000Base-T or SFP ports) • AC power supply • PoE+ • Forwarding performance: 22.5 Mpps • Switching capacity: 336 Gbit/s
 S5720-12TP-LI-AC	<ul style="list-style-type: none"> • 12 10/100/1000 Ethernet PoE++ ports, 2 10/100/1000Base-T Ethernet ports, 2 10GE SFP+ ports • AC power supply

Appearance	Description
S5720-16X-PWH-LI-AC	<ul style="list-style-type: none"> PoE++ Forwarding performance: 51 Mpps Switching capacity: 336 Gbit/s
 <p>S5720-28P-LI-AC</p>	<ul style="list-style-type: none"> 24 10/100/1000Base-T Ethernet ports, 4 GE SFP ports AC power supply, supporting redundant power supply (RPS) Forwarding performance: 51 Mpps/108 Mpps <p>NOTE</p> <p>The specifications, which are to the right of the slash (/), can be achieved by loading the GE to 10G electronic RTU license.</p> <ul style="list-style-type: none"> Switching capacity: 336 Gbit/s
 <p>S5720-28P-PWR-LI-AC</p>	<ul style="list-style-type: none"> 24 10/100/1000Base-T Ethernet ports, 4 GE SFP ports AC power supply, supporting RPS PoE+ Forwarding performance: 51 Mpps/108 Mpps <p>NOTE</p> <p>The specifications, which are to the right of the slash (/), can be achieved by loading the GE to 10G electronic RTU license.</p> <ul style="list-style-type: none"> Switching capacity: 336 Gbit/s
 <p>S5720-28TP-LI-AC</p>	<ul style="list-style-type: none"> 24 10/100/1000Base-T Ethernet ports, 4 GE SFP ports (2 of which are dual-purpose 10/100/1000Base-T or SFP ports) AC power supply Forwarding performance: 46.5 Mpps Switching capacity: 336 Gbit/s
 <p>S5720-28TP-PWR-LI-AC</p>	<ul style="list-style-type: none"> 24 10/100/1000Base-T Ethernet ports, 4 GE SFP ports (2 of which are dual-purpose 10/100/1000Base-T or SFP ports) AC power supply PoE+ Forwarding performance: 46.5 Mpps Switching capacity: 336 Gbit/s
 <p>S5720-28TP-PWR-LI-ACL</p>	<ul style="list-style-type: none"> 8 10/100/1000 Ethernet PoE+ ports, 16 10/100/1000Base-T Ethernet ports, 4 GE SFP ports (2 of which are dual-purpose 10/100/1000Base-T or SFP ports) AC power supply PoE+ Forwarding performance: 46.5 Mpps Switching capacity: 336 Gbit/s
 <p>S5720-28X-LI-24S-AC</p>  <p>S5720-28X-LI-24S-DC</p>	<ul style="list-style-type: none"> 24 Gig SFP ports (8 of which are dual-purpose 10/100/1000Base-T or SFP ports), 4 10GE SFP+ ports Two models: AC model and DC model, supporting RPS Forwarding performance: 108 Mpps Switching capacity: 336 Gbit/s
 <p>S5720-28X-LI-AC</p>	<ul style="list-style-type: none"> 24 10/100/1000Base-T Ethernet ports, 4 10GE SFP+ ports Two models: AC model and DC model, supporting RPS Forwarding performance: 108 Mpps Switching capacity: 336 Gbit/s

Appearance	Description
 <p>S5720-28X-LI-DC</p>	
 <p>S5720-28X-PWR-LI-AC</p>	<ul style="list-style-type: none"> • 24 10/100/1000Base-T Ethernet ports, 4 10GE SFP+ ports • AC power supply, supporting RPS • PoE+ • Forwarding performance: 108 Mpps • Switching capacity: 336 Gbit/s
 <p>S5720-28X-PWH-LI-AC</p>	<ul style="list-style-type: none"> • 16 10/100/1000Base-T Ethernet ports, 8 100/1000/2500Base-T PoE ports, 4 10GE SFP+ ports • AC power supply, supporting RPS • PoE++ • Forwarding performance: 126 Mpps • Switching capacity: 336 Gbit/s
 <p>S5720-52P-LI-AC</p>	<ul style="list-style-type: none"> • 48 10/100/1000Base-T Ethernet ports, 4 GE SFP ports • AC power supply, supporting RPS • Forwarding performance: 87 Mpps/144 Mpps <p>NOTE The specifications, which are to the right of the slash (/), can be achieved by loading the GE to 10G electronic RTU license.</p> <ul style="list-style-type: none"> • Switching capacity: 336 Gbit/s
 <p>S5720-52P-PWR-LI-AC</p>	<ul style="list-style-type: none"> • 48 10/100/1000Base-T Ethernet ports, 4 GE SFP ports • AC power supply, supporting RPS • PoE+ • Forwarding performance: 87 Mpps/144 Mpps <p>NOTE The specifications, which are to the right of the slash (/), can be achieved by loading the GE to 10G electronic RTU license.</p> <ul style="list-style-type: none"> • Switching capacity: 336 Gbit/s
 <p>S5720-52X-LI-AC</p>  <p>S5720-52X-LI-DC</p>	<ul style="list-style-type: none"> • 48 10/100/1000Base-T Ethernet ports, 4 10GE SFP+ ports • Two models: AC model and DC model, supporting RPS • Forwarding performance: 144 Mpps • Switching capacity: 336 Gbit/s
 <p>S5720-52X-PWR-LI-AC</p>	<ul style="list-style-type: none"> • 48 10/100/1000Base-T Ethernet ports, 4 10GE SFP+ ports • AC power supply, supporting RPS • PoE+ • Forwarding performance: 144 Mpps • Switching capacity: 336 Gbit/s
 <p>S5720-52X-PWR-LI-ACF</p>	<ul style="list-style-type: none"> • 48 10/100/1000Base-T Ethernet ports, 4 10GE SFP+ ports • AC power supply, supporting RPS • PoE+ • Forwarding performance: 144 Mpps • Switching capacity: 336 Gbit/s

Appearance	Description
 <p>S5720-52X-LI-48S-AC</p>	<ul style="list-style-type: none"> • 48 Gig SFP ports, 2 of which are dual-purpose 10/100/1000Base-T or SFP ports, 4 × 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • Forwarding performance: 144 Mpps • Switching capacity: 336 Gbit/s

Power Supply

PoE Power Supply Configuration

The S5720-LI series PoE-capable switches, including S5720-12TP-PWR-LI-AC, S5720-16X-PWH-LI-AC, S5720-28P-PWR-LI-AC, S5720-28TP-PWR-LI-AC, S5720-28TP-PWR-LI-ACL, S5720-28X-PWR-LI-AC, S5720-28X-PWH-LI-AC, S5720-52P-PWR-LI-AC, S5720-52X-PWR-LI-AC, and S5720-52X-PWR-LI-ACF, have built-in PoE power supplies.

The S5720-12TP-PWR-LI-AC and S5720-28TP-PWR-LI-ACL have a built-in power supply and do not support pluggable power supplies. The built-in power supply can provide 124 W PoE power, which ensures full PoE power on eight ports in compliance with 802.3af or on four ports in compliance with 802.3at. These switches cannot connect to an RPS.

The S5720-28TP-PWR-LI-AC, S5720-28P-PWR-LI-AC, and S5720-52P-PWR-LI-AC have a built-in power supply and do not support pluggable power supplies. The built-in power supply can provide 370 W PoE power, which ensures full PoE power on 24 ports in compliance with 802.3af or on 12 ports in compliance with 802.3at. These switches cannot connect to an RPS.

The S5720-16X-PWH-LI-AC and S5720-28X-PWH-LI-AC have a built-in power supply and do not support pluggable power supplies. The S5720-16X-PWH-LI-AC and S5720-28X-PWH-LI-AC are PoE switches with a built-in PoE power supply. The PoE power supply capacity is shown in the following table.

Available PoE Power	Maximum Number of Ports (Fully Loaded)
360 W	<ul style="list-style-type: none"> • 802.3af (15.4 W per port): 12 • 802.3at (30 W per port): 12 • Non-standard (60 W per port): 6

The S5720-16X-PWH-LI-AC supports the standby mode. In this mode, the switch does not provide PoE power supply and works in low-power state. All ports of the S5720-16X-PWH-LI-AC, except GE0/0/13 and GE0/0/14, are shut down in the standby mode.


Non-PoE Power Supply Configuration

The S5720-LI series non-PoE-capable switches have a single internal power supply and do not support pluggable power supplies.

The S5720-28X-LI-AC, S5720-28X-LI-DC, S5720-28X-PWR-LI-AC, S5720-28X-LI-24S-AC, S5720-28X-LI-24S-DC, S5720-52X-LI-AC, S5720-52X-LI-DC, and S5720-52X-PWR-LI-AC support the RPS1800 and use the RPS1800 as the backup power supply.

RPS1800

Technical specifications of RPS1800 available in the S5720-LI series

Power Module	Technical Specifications	Applied Switch Model
 <p>RPS1800</p>	<ul style="list-style-type: none"> • Dimensions (W x D x H): 442.0 mm x 310.0 mm x 43.6 mm • Weight: <ul style="list-style-type: none"> – Without power modules installed: 4 kg – With one power module installed: 5.5 kg – With two power modules installed: 7 kg • Rated input voltage: 220/110 V AC, 50/60 Hz 	S5720-X-LI and S5720-P-LI series

Power Module	Technical Specifications	Applied Switch Model
	<ul style="list-style-type: none"> • Input voltage range: 200 V AC to 240 V AC (220 V rated voltage input)/100 V AC to 120 V AC (110 V rated voltage input), 50/60 Hz • Maximum input voltage range: 90 V AC to 290 V AC, 45 Hz to 65 Hz • Input current: 12 A • Maximum output current (without power modules installed): +12 V: 29.17 A • Maximum output current (with one power module installed): <ul style="list-style-type: none"> – +12 V: 29.17 A – -53.5 V: 14.95 A (input voltage range: 200 V AC to 240 V AC) • Maximum output current (with two power modules installed): <ul style="list-style-type: none"> – +12 V: 29.17 A – -53.5 V: 15 A output per port (input voltage range: 200 V AC to 240 V AC) – -53.5 V: 15 A output per port (input voltage range: 100 V AC to 120 V AC, two 870 W PoE power modules required) • Maximum output power (without power modules installed): <ul style="list-style-type: none"> – 12 V: 140 W • Maximum output power (with one power module installed): <ul style="list-style-type: none"> – 12 V: 140 W – -53.5 V: 800 W (input voltage range: 200 V AC to 240 V AC) • Maximum output power (with two power modules installed): <ul style="list-style-type: none"> – 12 V: 140 W – -53.5 V: 1600 W (input voltage range: 200 V AC to 240 V AC) – -53.5 V: 800 W (input voltage range: 100 V AC to 120 V AC, two 870 W PoE power modules required) • Hot swap: The 870 W PoE power modules and RPS cables are not hot swappable. 	

 **NOTE**

For more information about the RPS1800, visit <http://support.huawei.com/enterprise/en/doc/EDOC1000013597?section=j06e&topicName=rps1800-power-supply> or contact your local Huawei sales office.

Product Features and Highlights

Flexible Ethernet Networking

- In addition to traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), and Multiple Spanning Tree Protocol (MSTP), the S5720-LI supports Huawei-developed Smart Ethernet Protection (SEP) technology and the latest Ethernet

Ring Protection Switching (ERPS) standard. SEP is a ring protection protocol specific to the Ethernet link layer, and applies to various ring network topologies, such as open ring topology, closed ring topology, and cascading ring topology. This protocol is reliable and easy to maintain, and implements fast protection switching within 50 ms. ERPS is defined in ITU-T G.8032. It implements millisecond-level protection switching based on traditional Ethernet MAC and bridging functions.

- The S5720-LI supports Smart Link, which implements backup of uplinks. One S5720-LI switch can connect to multiple aggregation switches through multiple links, significantly improving reliability of access devices.
- The S5720-LI supports Ethernet OAM (IEEE 802.3ah/802.1ag) to fast detect link faults.

Diversified Security Control

- The S5720-LI supports 802.1X authentication, MAC address authentication, and combined authentication on a per port basis, as well as Portal authentication on a per VLANIF interface basis, and implements dynamic policy delivery (VLAN, QoS, and ACL) to users.
- The S5720-LI provides a series of mechanisms to defend against DoS and user-targeted attacks. DoS attacks are targeted at switches and include SYN flood, Land, Smurf, and ICMP flood attacks. User-targeted attacks include bogus DHCP server attacks, IP/MAC address spoofing, DHCP request flood, and change of the DHCP CHADDR value.
- The S5720-LI collects and maintains information about access users, such as IP addresses, MAC addresses, IP address leases, VLAN IDs, and interface numbers in a DHCP snooping binding table. In this way, IP addresses and access interfaces of DHCP users can be tracked. You can specify DHCP snooping trusted and untrusted ports to ensure that users connect only to the authorized DHCP server.
- The S5720-LI supports strict ARP learning. This feature prevents ARP spoofing attackers from exhausting ARP entries so that users can connect to the Internet normally.

Easy Operations and Maintenance (O&M)

- The S5720-LI supports Huawei EasyOperation which is a solution that provides zero-touch deployment, replacement of faulty devices without additional configuration, USB-based deployment, batch configuration, and batch remote upgrade. The EasyOperation solution facilitates device deployment, upgrade, service provisioning, and other management and maintenance operations, and also greatly reduces O&M costs. The S5720-LI can be managed and maintained using Simple Network Management Protocol (SNMP) V1, V2, and V3, Command Line Interface (CLI), web-based network management system, or Secure Shell (SSH) V2.0. Additionally, it supports remote network monitoring (RMON), multiple log hosts, port traffic statistics collection, and network quality analysis, helping with network consolidation and reconstruction.
- EasyDeploy: The Commander collects topology information about the connected clients and stores the clients' startup information based on the topology. Clients can be replaced with zero-touch configuration. The Commander can deliver configurations and scripts to clients in batches and query the delivery results. In addition, the Commander can collect and display information about power consumption on the entire network.
- The S5720-LI can use the GARP VLAN Registration Protocol (GVRP) to implement dynamic distribution, registration, and propagation of VLAN attributes. GVRP reduces manual configuration workload and ensures correct configuration. Additionally, the S5720-LI supports MUX VLAN, which involves a principal VLAN and multiple subordinate VLANs. Subordinate VLANs are classified into group VLANs and separate VLANs. Ports in the principal VLAN can communicate with ports in subordinate VLANs. Ports in a subordinate group VLAN can communicate with each other, whereas ports in a subordinate separate VLAN can communicate only with ports in the principal VLAN. The S5720-LI also supports VLAN Central Management Protocol (VCMP) and VLAN-Based Spanning Tree (VBST) protocol.

Intelligent O&M

- The S5720-LI provides telemetry technology to collect device data in real time and send the data to Huawei campus network analyzer CampusInsight. The CampusInsight analyzes network data based on the intelligent fault identification algorithm, accurately displays the real-time network status, effectively demarcates and locates faults in a timely manner, and identifies network problems that affect user experience, accurately guaranteeing user experience.
- The S5720-LI supports Enhanced Media Delivery Index (eMDI). It functions as a monitoring node to periodically collect and report eMDI fault data to eSight, and then eSight quickly locates video service quality faults based on monitoring results of multiple nodes. The device can also report eMDI fault data to the campus network analyzer CampusInsight for intelligent diagnosis of video services.

iStack

- The S5720-LI supports intelligent stack (iStack). This technology combines multiple switches into a single logical switch. Member switches in a stack implement redundancy backup to improve device reliability and use inter-device link aggregation to improve link reliability. iStack provides high network scalability. You can increase ports, bandwidth, and processing capacity of a

stack by simply adding member switches to the stack. iStack also simplifies device configuration and management. After a stack is set up, multiple physical switches are virtualized into a single logical device. You can log in to any member switch in the stack to manage all the member switches in the stack. The S5720-LI supports stacking through electrical ports.

Excellent Network Traffic Analysis

- The S5720-LI supports the sFlow function. It uses a method defined in the sFlow standard to sample traffic passing through it and sends sampled traffic to the collector in real time. The collected traffic statistics are used to generate statistical reports, helping enterprises maintain their networks.

Easy O&M with the Front Panel

- The models with front power sockets can be installed in a 300 mm deep cabinet, and can be maintained through the front panel. This simplifies equipment O&M and allows more flexible cabinet deployment. The small-sized cabinets can be placed against a wall or back to back to save space in the equipment room.

Cloud Management

- The Huawei cloud management platform allows users to configure, monitor, and inspect switches on the cloud, reducing on-site deployment and O&M manpower costs and decreasing network OPEX. Huawei switches support both cloud management and on-premise management modes. These two management modes can be flexibly switched as required to achieve smooth evolution while maximizing return on investment (ROI).

OPS

- The Open Programmability System (OPS) is an open platform based on the Python language. IT administrators can program the O&M functions of a switch through Python scripts to quickly innovate functions and implement intelligent O&M.

PoE Features

- When a PoE switch is rebooted after the software version is upgraded, the power supply to PDs is not interrupted. This capability ensures that PDs are not powered off during the switch reboot.
- The S5720-16X/28X-PWH-LI-AC can provide Ethernet power supply (PoE++) for APs and surveillance cameras. As the 802.11ac standard and related products are released, the wireless access rate has reached 2.5 Gbit/s. The S5720-28X-PWH-LI fixed switch can match perfectly with high-speed APs, and provide the long-distance 200-meter PoE++ supply function and 60 W PoE on a port.
- S5720-28X-PWH-LI-AC and S5720-16X-PWH-LI-AC switches can supply power to PDs within 10 seconds after they are powered on. This is different from common switches that generally take 1 to 3 minutes to start to supply power to PDs. When a PoE switch reboots due to a power failure, the PoE switch continues to supply power to the PDs immediately after being powered on without waiting until it finishes reboot. This greatly shortens the power failure time of PDs.
- When some PoE++ ports on Huawei S5720-28X-PWH-LI-AC work at 2.5 Gbit/s and Category 5E shielded network cables are used, the switch can provide 200-meter PoE power supply to Huawei specific APs, such as AP7052DN, AP7152DN, AP6052DN, AP8082DN, AP8182DN, and AP7052DE.

Product Specifications

Functions and Features

The following table lists the functions and features available on the S5720-LI.

Function and feature metrics for the S5720-LI series

Function and Feature		Description	S5720-P-LI series S5720-P-PWR-LI series	S5720-TP-LI series S5720-TP-PWR-LI series	S5720-X-LI series	S5720-X-PWR-LI series S5720-X-PWH-LI series
Ethernet features	Ethernet basics	Full-duplex, half-duplex,	Yes	Yes	Yes	Yes

Function and Feature		Description	S5720-P-LI series S5720-P-PWR-LI series	S5720-TP-LI series S5720-TP-PWR-LI series	S5720-X-LI series	S5720-X-PWR-LI series S5720-X-PWH-LI series
		and auto-negotiation				
		Rate auto-negotiation on an interface	Yes	Yes	Yes	Yes
		Flow control on an interface	Yes	Yes	Yes	Yes
		Jumbo frames	Yes	Yes	Yes	Yes
		Link aggregation	Yes	Yes	Yes	Yes
		Load balancing among links of a trunk	Yes	Yes	Yes	Yes
		Transparent transmission of Layer 2 protocol packets	Yes	Yes	Yes	Yes
		Device Link Detection Protocol (DLDP)	Yes	Yes	Yes	Yes
		Link Layer Discovery Protocol (LLDP)	Yes	Yes	Yes	Yes
		Link Layer Discovery Protocol-Media Endpoint Discovery (LLDP-MED)	Yes	Yes	Yes	Yes
		Interface isolation	Yes	Yes	Yes	Yes
		Broadcast traffic suppression on an interface	Yes	Yes	Yes	Yes
		Multicast traffic suppression on an interface	Yes	Yes	Yes	Yes
		Unknown unicast traffic suppression on an interface	Yes	Yes	Yes	Yes
		VLAN broadcast traffic suppression	Yes	Yes	Yes	Yes
		VLAN multicast traffic suppression	Yes	Yes	Yes	Yes
		VLAN unknown unicast traffic suppression	Yes	Yes	Yes	Yes
	VLAN	VLAN specification	4K	4K	4K	4K
		VLANIF interface specification	1024	1024	1024	1024
		Access mode	Yes	Yes	Yes	Yes
Trunk mode		Yes	Yes	Yes	Yes	
Hybrid mode		Yes	Yes	Yes	Yes	
QinQ mode		Yes	Yes	Yes	Yes	

Function and Feature		Description	S5720-P-LI series S5720-P-PWR-LI series	S5720-TP-LI series S5720-TP-PWR-LI series	S5720-X-LI series	S5720-X-PWR-LI series S5720-X-PWH-LI series
		Default VLAN	Yes	Yes	Yes	Yes
		VLAN assignment based on interfaces	Yes	Yes	Yes	Yes
		VLAN assignment based on protocols	Yes	Yes	Yes	Yes
		VLAN assignment based on IP subnets	Yes	Yes	Yes	Yes
		VLAN assignment based on MAC addresses	Yes	Yes	Yes	Yes
		VLAN assignment based on MAC address + IP address	Yes	Yes	Yes	Yes
		VLAN assignment based on MAC address + IP address + interface number	Yes	Yes	Yes	Yes
		Adding double VLAN tags to packets based on interfaces	Yes	Yes	Yes	Yes
		VLAN mapping	Yes	Yes	Yes	Yes
		Selective QinQ	Yes	Yes	Yes	Yes
		MUX VLAN	Yes	Yes	Yes	Yes
		Voice VLAN	Yes	Yes	Yes	Yes
		Guest VLAN	Yes	Yes	Yes	Yes
		GVRP	GARP	Yes	Yes	Yes
GVRP	Yes		Yes	Yes	Yes	
VCMP	VCMP	Yes	Yes	Yes	Yes	
MAC	MAC address	16K	16K	16K	16K	
	Automatic learning of MAC addresses	Yes	Yes	Yes	Yes	
	Automatic aging of MAC addresses	Yes	Yes	Yes	Yes	
	Static, dynamic, and blackhole MAC address entries	Yes	Yes	Yes	Yes	
	Interface-based MAC address learning limiting	Yes	Yes	Yes	Yes	
	Sticky MAC	Yes	Yes	Yes	Yes	
	MAC address flapping	Yes	Yes	Yes	Yes	

Function and Feature		Description	S5720-P-LI series S5720-P-PWR-LI series	S5720-TP-LI series S5720-TP-PWR-LI series	S5720-X-LI series	S5720-X-PWR-LI series S5720-X-PWH-LI series
		detection				
		MAC address spoofing defense	Yes	Yes	Yes	Yes
		Port bridge	Yes	Yes	Yes	Yes
	ARP	Static ARP	Yes	Yes	Yes	Yes
		Dynamic ARP	Yes	Yes	Yes	Yes
		ARP entry	2048	2048	2048	2048
		ARP aging detection	Yes	Yes	Yes	Yes
		Intra-VLAN proxy ARP	Yes	Yes	Yes	Yes
		Routed proxy ARP	Yes	Yes	Yes	Yes
Ethernet loop protection	MSTP	STP	Yes	Yes	Yes	Yes
		RSTP	Yes	Yes	Yes	Yes
		MSTP	Yes	Yes	Yes	Yes
		VBST	Yes	Yes	Yes	Yes
		BPDU protection	Yes	Yes	Yes	Yes
		Root protection	Yes	Yes	Yes	Yes
		Loop protection	Yes	Yes	Yes	Yes
		Defense against TC BPDU attacks	Yes	Yes	Yes	Yes
	Loopback detection	Loop detection on an interface	Yes	Yes	Yes	Yes
	SEP	SEP	Yes	Yes	Yes	Yes
	Smart Link	Smart Link	Yes	Yes	Yes	Yes
		Smart Link multi-instance	Yes	Yes	Yes	Yes
		Monitor Link	Yes	Yes	Yes	Yes
	RRPP	RRPP	Yes	Yes	Yes	Yes
		Single RRPP ring	Yes	Yes	Yes	Yes
		Tangent RRPP ring	Yes	Yes	Yes	Yes
		Intersecting RRPP ring	Yes	Yes	Yes	Yes
		Hybrid networking of RRPP rings and other ring networks	Yes	Yes	Yes	Yes
	ERPS	G.8032 v1	Yes	Yes	Yes	Yes

Function and Feature		Description	S5720-P-LI series S5720-P-PWR-LI series	S5720-TP-LI series S5720-TP-PWR-LI series	S5720-X-LI series	S5720-X-PWR-LI series S5720-X-PWH-LI series
		G.8032 v2	Yes	Yes	Yes	Yes
		ERPS semi-ring topology	Yes	Yes	Yes	Yes
		ERPS closed-ring topology	Yes	Yes	Yes	Yes
IPv4/IPv6 forwarding	IPv4 and unicast routing	IPv4 static routing	Yes	Yes	Yes	Yes
		VRF	Yes	Yes	Yes	Yes
		DHCP client	Yes	Yes	Yes	Yes
		DHCP server	Yes	Yes	Yes	Yes
		DHCP relay	Yes	Yes	Yes	Yes
		Routing policies	Yes	Yes	Yes	Yes
		IPv4 routes	4000	4000	4000	4000
		RIPv1	Yes	Yes	Yes	Yes
		RIPv2	Yes	Yes	Yes	Yes
		OSPF	Yes	Yes	Yes	Yes
		Policy-based routing (PBR)	Yes	Yes	Yes	Yes
		Multicast routing features	IGMPv1/v2/v3	Yes	Yes	Yes
	PIM-DM		Yes	Yes	Yes	Yes
	PIM-SM		Yes	Yes	Yes	Yes
	MSDP		Yes	Yes	Yes	Yes
	IPv4 multicast routes		1022	1022	1022	1022
	IPv6 multicast routes		496	496	496	496
	Multicast routing policies		Yes	Yes	Yes	Yes
	RPF		Yes	Yes	Yes	Yes
	IPv6 features	IPv6 protocol stack	Yes	Yes	Yes	Yes
		ND	Yes	Yes	Yes	Yes
		ND entry	1000	1000	1000	1000
		ND snooping	Yes	Yes	Yes	Yes
		DHCPv6 snooping	Yes	Yes	Yes	Yes
RIPng		Yes	Yes	Yes	Yes	
DHCPv6 server		Yes	Yes	Yes	Yes	
DHCPv6 relay		Yes	Yes	Yes	Yes	
OSPFv3		Yes	Yes	Yes	Yes	

Function and Feature		Description	S5720-P-LI series S5720-P-PWR-LI series	S5720-TP-LI series S5720-TP-PWR-LI series	S5720-X-LI series	S5720-X-PWR-LI series S5720-X-PWH-LI series
		IPv6 routes	1000	1000	1000	1000
		VRRP6	Yes	Yes	Yes	Yes
		MLDv1/v2	Yes	Yes	Yes	Yes
		PIM-DM for IPv6	Yes	Yes	Yes	Yes
		PIM-SM for IPv6	Yes	Yes	Yes	Yes
Layer 2 multicast features	-	IGMPv1/v2/v3 snooping	Yes	Yes	Yes	Yes
		IGMP snooping proxy	Yes	Yes	Yes	Yes
		MLD snooping	Yes	Yes	Yes	Yes
		Multicast traffic suppression	Yes	Yes	Yes	Yes
		Inter-VLAN multicast replication	Yes	Yes	Yes	Yes
Device reliability	Stacking	Service interface-based stacking	Yes	Yes	Yes	Yes
		Maximum number of stacked devices	9	9	9	9
		Stack bandwidth (Unidirectional)	Up to 10 Gbit/s	Up to 10 Gbit/s	Up to 48 Gbit/s	Up to 48 Gbit/s
	VRRP	VRRP standard protocol	Yes	Yes	Yes	Yes
Ethernet OAM	EFM (802.3ah)	Automatic discovery of links	Yes	Yes	Yes	Yes
		Link fault detection	Yes	Yes	Yes	Yes
		Link troubleshooting	Yes	Yes	Yes	Yes
		Remote loopback	Yes	Yes	Yes	Yes
	CFM (802.1ag)	Software-level CCM	Yes	Yes	Yes	Yes
		802.1ag MAC ping	Yes	Yes	Yes	Yes
		802.1ag MAC trace	Yes	Yes	Yes	Yes
	OAM association	Association between 802.1ag and 802.3ah	Yes	Yes	Yes	Yes
	Y.1731	Unidirectional delay and jitter measurement	Yes	Yes	Yes	Yes
Bidirectional delay and jitter measurement		Yes	Yes	Yes	Yes	
QoS features	Traffic classification	Traffic classification based on ACLs	Yes	Yes	Yes	Yes
		Configuring traffic classification priorities	Yes	Yes	Yes	Yes

Function and Feature		Description	S5720-P-LI series S5720-P-PWR-LI series	S5720-TP-LI series S5720-TP-PWR-LI series	S5720-X-LI series	S5720-X-PWR-LI series S5720-X-PWH-LI series
		Matching the simple domains of packets	Yes	Yes	Yes	Yes
	Traffic behavior	Traffic filtering	Yes	Yes	Yes	Yes
		Traffic policing (CAR)	Yes	Yes	Yes	Yes
		Modifying the packet priorities	Yes	Yes	Yes	Yes
		Modifying the simple domains of packets	Yes	Yes	Yes	Yes
		Modifying the packet VLANs	Yes	Yes	Yes	Yes
	Traffic shaping	Traffic shaping on an egress interface	Yes	Yes	Yes	Yes
		Traffic shaping on queues on an interface	Yes	Yes	Yes	Yes
	Congestion avoidance	Tail drop	Yes	Yes	Yes	Yes
	Congestion management	Priority Queuing (PQ)	Yes	Yes	Yes	Yes
		Weighted Deficit Round Robin (WDRR)	Yes	Yes	Yes	Yes
		PQ+WDRR	Yes	Yes	Yes	Yes
		Weighted Round Robin (WRR)	Yes	Yes	Yes	Yes
		PQ+WRR	Yes	Yes	Yes	Yes
ACL	-	IPv4 ACL rule	2K	2K	2K	2K
		IPv6 ACL rule	2K	2K	2K	2K
		Basic IPv4 ACL	Yes	Yes	Yes	Yes
		Advanced IPv4 ACL	Yes	Yes	Yes	Yes
		Basic IPv6 ACL	Yes	Yes	Yes	Yes
		Advanced IPv6 ACL	Yes	Yes	Yes	Yes
		Layer 2 ACL	Yes	Yes	Yes	Yes
		User-defined ACL	Yes	Yes	Yes	Yes
Configuration and maintenance	Login and configuration management	Command line interface (CLI)-based configuration	Yes	Yes	Yes	Yes
		Console terminal service	Yes	Yes	Yes	Yes
		Telnet terminal service	Yes	Yes	Yes	Yes

Function and Feature		Description	S5720-P-LI series S5720-P-PWR-LI series	S5720-TP-LI series S5720-TP-PWR-LI series	S5720-X-LI series	S5720-X-PWR-LI series S5720-X-PWH-LI series
		SSH v1.5	Yes	Yes	Yes	Yes
		SSH v2.0	Yes	Yes	Yes	Yes
		SNMP-based NMS for unified configuration	Yes	Yes	Yes	Yes
		Web page-based configuration and management	Yes	Yes	Yes	Yes
		EasyDeploy (client)	Yes	Yes	Yes	Yes
		SVF	Yes	Yes	Yes	Yes
		Cloud management	Yes	Yes	Yes	Yes
		OPS	Yes	Yes	Yes	Yes
	File system	Directory and file management	Yes	Yes	Yes	Yes
		File upload and download	Yes	Yes	Yes	Yes
	Monitoring and maintenance	eMDI	Yes	Yes	Yes	Yes
		Hardware monitoring	Yes	Yes	Yes	Yes
		Log information output	Yes	Yes	Yes	Yes
		Alarm information output	Yes	Yes	Yes	Yes
		Debugging information output	Yes	Yes	Yes	Yes
		Port mirroring	Yes	Yes	Yes	Yes
		Flow mirroring	Yes	Yes	Yes	Yes
		Remote mirroring	Yes	Yes	Yes	Yes
	Version upgrade	Energy saving	Yes	Yes	Yes	Yes
		Version upgrade	Yes	Yes	Yes	Yes
	Security	ARP security	Version rollback	Yes	Yes	Yes
ARP packet rate limiting			Yes	Yes	Yes	Yes
ARP anti-spoofing			Yes	Yes	Yes	Yes
Association between ARP and STP			Yes	Yes	Yes	Yes
Dynamic ARP Inspection (DAI)			Yes	Yes	Yes	Yes
Static ARP Inspection (SAI)			Yes	Yes	Yes	Yes
Egress ARP Inspection (EAI)	Yes	Yes	Yes	Yes		

Function and Feature		Description	S5720-P-LI series S5720-P-PWR-LI series	S5720-TP-LI series S5720-TP-PWR-LI series	S5720-X-LI series	S5720-X-PWR-LI series S5720-X-PWH-LI series	
	IP security	ICMP attack defense	Yes	Yes	Yes	Yes	
		IPSG for IPv4	Yes	Yes	Yes	Yes	
		IPSG user capacity	1K	1K	1K	1K	
		IPSG for IPv6	Yes	Yes	Yes	Yes	
		IPSGv6 user capacity	512	512	512	512	
	Local attack defense	CPU attack defense	Yes	Yes	Yes	Yes	
	MFF	MFF	Yes	Yes	Yes	Yes	
	DHCP snooping	DHCP snooping	Yes	Yes	Yes	Yes	
		Option 82 function	Yes	Yes	Yes	Yes	
		Dynamic rate limiting for DHCP packets	Yes	Yes	Yes	Yes	
	Attack defense	Defense against malformed packet attacks	Yes	Yes	Yes	Yes	
		Defense against UDP flood attacks	Yes	Yes	Yes	Yes	
		Defense against TCP SYN flood attacks	Yes	Yes	Yes	Yes	
		Defense against ICMP flood attacks	Yes	Yes	Yes	Yes	
		Defense against packet fragment attacks	Yes	Yes	Yes	Yes	
		Local URPF	Yes	Yes	Yes	Yes	
	User access and authentication	AAA	Local authentication	Yes	Yes	Yes	Yes
			Local authorization	Yes	Yes	Yes	Yes
			RADIUS authentication	Yes	Yes	Yes	Yes
			RADIUS authorization	Yes	Yes	Yes	Yes
			RADIUS accounting	Yes	Yes	Yes	Yes
HWTACACS authentication			Yes	Yes	Yes	Yes	
HWTACACS authorization			Yes	Yes	Yes	Yes	
HWTACACS accounting			Yes	Yes	Yes	Yes	
NAC		802.1X authentication	Yes	Yes	Yes	Yes	
		MAC address authentication	Yes	Yes	Yes	Yes	
	Portal authentication	Yes	Yes	Yes	Yes		

Function and Feature		Description	S5720-P-LI series S5720-P-PWR-LI series	S5720-TP-LI series S5720-TP-PWR-LI series	S5720-X-LI series	S5720-X-PWR-LI series S5720-X-PWH-LI series
		Hybrid authentication	Yes	Yes	Yes	Yes
	Policy association	Functioning as the access device	Yes	Yes	Yes	Yes
Network management	-	Ping	Yes	Yes	Yes	Yes
		Tracert	Yes	Yes	Yes	Yes
		NQA	Yes	Yes	Yes	Yes
		NTP	Yes	Yes	Yes	Yes
		sFlow	Yes	Yes	Yes	Yes
		SNMP v1	Yes	Yes	Yes	Yes
		SNMP v2c	Yes	Yes	Yes	Yes
		SNMP v3	Yes	Yes	Yes	Yes
		HTTP	Yes	Yes	Yes	Yes
		HTTPS	Yes	Yes	Yes	Yes
		RMON	Yes	Yes	Yes	Yes
Interoperability	-	VLAN-based Spanning Tree (VBST)	Yes	Yes	Yes	Yes
		Link-type Negotiation Protocol (LNP)	Yes	Yes	Yes	Yes
		VLAN Central Management Protocol (VCMP)	Yes	Yes	Yes	Yes

NOTE

This content is applicable only to regions outside mainland China. Huawei reserves the right to interpret this content.

Hardware Specifications

The following table lists the S5720-LI hardware specifications.

Hardware specifications of S5720-TP-LI and S5720-P-LI series non-PoE-capable models

Item		S5720-12TP-LI-AC	S5720-28P-LI-AC	S5720-28TP-LI-AC	S5720-52P-LI-AC
Physical specifications	Chassis dimensions (W x D x H, mm)	250 x 180 x 43.6	442 x 220 x 43.6	442 x 220 x 43.6	442 x 220 x 43.6
	Chassis height	1 U	1 U	1 U	1 U
	Chassis weight (full configuration)	1.8 kg	3.9 kg	4 kg	4.4 kg

Item		S5720-12TP-LI-AC	S5720-28P-LI-AC	S5720-28TP-LI-AC	S5720-52P-LI-AC
	weight, including weight of packaging materials)				
Fixed port	GE port	12	28	28	52
	10GE port	NA	4 NOTE The customer can buy a license to upgrade 4*1000Base-X (SFP) to 10G SFP+.	NA	4 NOTE The customer can buy a license to upgrade 4*1000Base-X (SFP) to 10G SFP+.
Management port	Console port (RJ45)	Supported	Supported	Supported	Supported
	USB port	NA	USB 2.0	NA	USB 2.0
CPU	Frequency	800 MHz	800 MHz	800 MHz	800 MHz
	Core	1	1	1	1
Storage	Memory (RAM)	512 MB	512 MB	512 MB	512 MB
	Flash memory	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users
Power supply system	Power supply type	Built-in AC	Built-in AC	Built-in AC	Built-in AC
	Power supply redundancy	NA	Built-in single power supply and RPS in 6:1 mode	NA	Built-in single power supply and RPS in 6:1 mode
	RPS	NA	Supported	NA	Supported
	Rated voltage range	100 V AC to 240 V AC; 50/60 Hz	100 V AC to 240 V AC; 50/60 Hz	100 V AC to 240 V AC; 50/60 Hz	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	90 V AC to 264 V AC; 47 Hz to 63 Hz	90 V AC to 264 V AC; 47 Hz to 63 Hz	90 V AC to 264 V AC; 47 Hz to 63 Hz
	Maximum input current	0.8 A	0.8 A	0.8 A	2 A
	Maximum power consumption of the device	12.85 W	27.9 W	22.1 W	50.3W
	Power consumption in the case of 30% traffic load ¹	10.39 W	19.6 W	16.2 W	31.6W

Item		S5720-12TP-LI-AC	S5720-28P-LI-AC	S5720-28TP-LI-AC	S5720-52P-LI-AC
	Power consumption in the case of 100% traffic load ¹	12.21 W	24.5 W	21.9324 W	39.868 W
Heat dissipation system	Heat dissipation mode	Natural heat dissipation	Natural heat dissipation	Natural heat dissipation	Air-cooled heat dissipation and intelligent fan speed adjustment
	Number of fan modules	NA	NA	NA	1
	Airflow	NA	NA	NA	Air flows in from the left side and exhausts from the right side
	Maximum heat dissipation of the device (BTU/hour)	43.9	95.2	75.4	171.7
Environment parameters	Long-term operating temperature	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.
	Short-term operating temperature	NA	<ul style="list-style-type: none"> 0-1800 m: -5 to 50°C 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.</p>	<ul style="list-style-type: none"> 0-1800 m: -5 to 50°C 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.</p>	<ul style="list-style-type: none"> 0-1800 m: -5 to 50°C 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.</p>
	Storage	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C

Item		S5720-12TP-LI-AC	S5720-28P-LI-AC	S5720-28TP-LI-AC	S5720-52P-LI-AC
	temperature				
	Relative humidity	5%-95%(non-condensing)	5%-95%(non-condensing)	5%-95%(non-condensing)	5%-95%(non-condensing)
	Operating altitude	5000 m	5000 m	5000 m	5000 m
	Noise under normal temperature (sound power)	Silent (fan-free)	Silent (fan-free)	Silent (fan-free)	44.5 dB(A)
	Noise under high temperature (sound power)	Silent (fan-free)	Silent (fan-free)	Silent (fan-free)	68.3 dB(A)
	Noise under normal temperature (sound pressure)	Silent (fan-free)	Silent (fan-free)	Silent (fan-free)	35.1 dB(A)
	Surge protection specification (RJ45 service port)	±7 kV in common mode	±7 kV in common mode	±7 kV in common mode	±7 kV in common mode
	Surge protection specification (power port)	±6 kV in differential or common mode	±6 kV in differential or common mode	±6 kV in differential or common mode	±6 kV in differential or common mode
Reliability	MTBF (year) ³	23.8	45	43	41
	MTTR (hour)	2	2	2	2
	Availability	> 0.99999	> 0.99999	> 0.99999	> 0.99999
Certification		<ul style="list-style-type: none"> • EMC certification • Safety certification • Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> • EMC certification • Safety certification • Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> • EMC certification • Safety certification • Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> • EMC certification • Safety certification • Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>

Hardware specifications of S5720-X-LI series non-PoE-capable models

Item		S5720-28X-LI-24S-AC S5720-28X-LI-24S-DC	S5720-28X-LI-AC S5720-28X-LI-DC	S5720-52X-LI-AC S5720-52X-LI-DC	S5720-52X-LI-48S-AC
Physical specifications	Chassis dimensions (W x D x H, mm)	250 x 180 x 43.6	442 x 220 x 43.6	442 x 220 x 43.6	442 x 220 x 43.6
	Chassis height	1 U	1 U	1 U	1 U
	Chassis weight (full configuration weight, including weight of packaging materials)	4.1 kg	3.9 kg	4.4 kg	5.25 kg
Fixed port	GE port	24	24	48	48
	10GE port	4	4	4	4
Management port	Console port (RJ45)	Supported	Supported	Supported	Supported
	USB port	NA	USB 2.0	NA	USB 2.0
CPU	Frequency	800 MHz	800 MHz	800 MHz	800 MHz
	Core	1	1	1	1
Storage	Memory (RAM)	512 MB	512 MB	512 MB	512 MB
	Flash memory	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users
Power supply system	Power supply type	<ul style="list-style-type: none"> S5720-28X-LI-24S-AC: Built-in AC S5720-28X-LI-24S-DC: Built-in DC 	<ul style="list-style-type: none"> S5720-28X-LI-AC: Built-in AC S5720-28X-LI-DC: Built-in DC 	<ul style="list-style-type: none"> S5720-52X-LI-AC: Built-in AC S5720-52X-LI-DC: Built-in DC 	Built-in AC
	Power supply redundancy	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode
	RPS	Supported	Supported	Supported	Supported
	Rated voltage range	<ul style="list-style-type: none"> S5720-28X-LI-24S-AC: 100 V AC to 240 V AC; 50/60 Hz S5720-28X-LI-24S-DC: -48 V DC to -60 V DC 	<ul style="list-style-type: none"> S5720-28X-LI-AC: 100 V AC to 240 V AC; 50/60 Hz S5720-28X-LI-DC: -48 V DC to -60 V DC 	<ul style="list-style-type: none"> S5720-52X-LI-AC: 100 V AC to 240 V AC; 50/60 Hz S5720-52X-LI-DC: -48 V DC to -60 V DC 	100 V AC to 240 V AC; 50/60 Hz

Item		S5720-28X-LI-24S-AC S5720-28X-LI-24S-DC	S5720-28X-LI-AC S5720-28X-LI-DC	S5720-52X-LI-AC S5720-52X-LI-DC	S5720-52X-LI-48S-AC
	Maximum voltage range	<ul style="list-style-type: none"> S5720-28X-LI-24S-AC: 90 V AC to 264 V AC; 47 Hz to 63 Hz S5720-28X-LI-24S-DC: -36 V DC to -72 V DC 	<ul style="list-style-type: none"> S5720-28X-LI-AC: 90 V AC to 264 V AC; 47 Hz to 63 Hz S5720-28X-LI-DC: -36 V DC to -72 V DC 	<ul style="list-style-type: none"> S5720-52X-LI-AC: 90 V AC to 264 V AC; 47 Hz to 63 Hz S5720-52X-LI-DC: -36 V DC to -72 V DC 	90 V AC to 264 V AC; 47 Hz to 63 Hz
	Maximum input current	3 A	0.8 A	2 A	3 A
	Maximum power consumption of the device	<ul style="list-style-type: none"> S5720-28X-LI-24S-AC: 41.7 W S5720-28X-LI-24S-DC: 42.7 W 	<ul style="list-style-type: none"> S5720-28X-LI-AC: 29.5 W S5720-28X-LI-DC: 31 W 	<ul style="list-style-type: none"> S5720-52X-LI-AC: 50.3 W S5720-52X-LI-DC: 51.6 W 	82.8W
	Power consumption in the case of 30% traffic load ¹	<ul style="list-style-type: none"> S5720-28X-LI-24S-AC: 28.9 W S5720-28X-LI-24S-DC: 30.3 W 	<ul style="list-style-type: none"> S5720-28X-LI-AC: 21.4 W S5720-28X-LI-DC: 19.8 W 	<ul style="list-style-type: none"> S5720-52X-LI-AC: 31.6 W S5720-52X-LI-DC: 33.1 W 	68W
	Power consumption in the case of 100% traffic load ¹	<ul style="list-style-type: none"> S5720-28X-LI-24S-AC: 31.2 W S5720-28X-LI-24S-DC: 34.4 W 	<ul style="list-style-type: none"> S5720-28X-LI-AC: 27.8 W S5720-28X-LI-DC: 26.7 W 	<ul style="list-style-type: none"> S5720-52X-LI-AC: 39.868 W S5720-52X-LI-DC: 41.7 W 	75.2 W
Heat dissipation system	Heat dissipation mode	Air-cooled heat dissipation and intelligent fan speed adjustment	Heat dissipation using fans	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment
	Number of fan modules	1	1	1	3
	Airflow	Air flows in from the left side and front panel and exhausts from the right side	Air flows in from the left side and front panel and exhausts from the right side	Air flows in from the left side and exhausts from the right side	Air flows in from the left side and exhausts from the right side
	Maximum heat dissipation of the device (BTU/hour)	<ul style="list-style-type: none"> S5720-28X-LI-24S-AC: 142.3 S5720-28X-LI-24S-DC: 145.7 	100.7	<ul style="list-style-type: none"> S5720-52X-LI-AC: 171.7 S5720-52X-LI-DC: 176.1 	283
Environment parameters	Long-term operating temperature	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.
	Short-term	<ul style="list-style-type: none"> 0-1800 m: -5 to 	<ul style="list-style-type: none"> 0-1800 m: -5 to 	<ul style="list-style-type: none"> 0-1800 m: -5 to 	<ul style="list-style-type: none"> 0-1800 m: -5 to

Item		S5720-28X-LI-24S-AC S5720-28X-LI-24S-DC	S5720-28X-LI-AC S5720-28X-LI-DC	S5720-52X-LI-AC S5720-52X-LI-DC	S5720-52X-LI-48S-AC
	operating temperature	50°C <ul style="list-style-type: none"> 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.</p>	50°C <ul style="list-style-type: none"> 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.</p>	50°C <ul style="list-style-type: none"> 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.</p>	55°C <ul style="list-style-type: none"> 1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.</p>
	Storage temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
	Relative humidity	5%-95%(non-condensing)	5%-95%(non-condensing)	5%-95%(non-condensing)	5%-95%(non-condensing)
	Operating altitude	5000 m	<ul style="list-style-type: none"> S5720-28X-LI-AC: 5000 m S5720-28X-LI-DC: 2000 m 	5000 m	5000 m
	Noise under normal temperature (sound power)	43 dB(A)	47 dB(A)	44.5 dB(A)	49 dB(A)
	Noise under high temperature (sound power)	64.7 dB(A)	47 dB(A)	68.3 dB(A)	74 dB(A)
	Noise under normal temperature (sound pressure)	37.8 dB(A)	37.8 dB(A)	35.1 dB(A)	34 dB(A)
Surge protection specification (RJ45 service)	±7 kV in common mode	±7 kV in common mode	±7 kV in common mode	±7 kV in common mode	

Item		S5720-28X-LI-24S-AC S5720-28X-LI-24S-DC	S5720-28X-LI-AC S5720-28X-LI-DC	S5720-52X-LI-AC S5720-52X-LI-DC	S5720-52X-LI-48S-AC
	port)				
	Surge protection specification (power port)	<ul style="list-style-type: none"> S5720-28X-LI-24S-AC: ±6 kV in differential or common mode S5720-28X-LI-24S-DC: <ul style="list-style-type: none"> ±1 kV in differential mode ±2 kV in common mode 	<ul style="list-style-type: none"> S5720-28X-LI-AC: ±6 kV in differential or common mode S5720-28X-LI-DC: <ul style="list-style-type: none"> ±1 kV in differential mode ±2 kV in common mode 	±6 kV in differential or common mode	±6 kV in differential or common mode
Reliability	MTBF (year) ³	41	45	41	41
	MTTR (hour)	2	2	2	2
	Availability	> 0.99999	> 0.99999	> 0.99999	> 0.99999
Certification		<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>

Hardware specifications of S5720-TP-LI and S5720-P-LI series PoE-capable models

Item		S5720-12TP-PWR-LI-AC	S5720-28TP-PWR-LI-AC	S5720-28TP-PWR-LI-ACL	S5720-28P-PWR-LI-AC	S5720-52P-PWR-LI-AC
Physical specifications	Chassis dimensions (W x D x H, mm)	320 x 220 x 43.6	442 x 310 x 43.6	442 x 220 x 43.6 (front-access)	442 x 310 x 43.6	442 x 310 x 43.6
	Chassis height	1 U	1 U	1 U	1 U	1 U
	Chassis weight (full configuration weight, including weight of packaging materials)	3 kg	5.3 kg	4.5 kg	5.2 kg	5.6 kg
Fixed port	GE port	12	28	28	28	52
	10GE port	NA	NA	NA	4	4

Item		S5720-12TP-PWR-LI-AC	S5720-28TP-PWR-LI-AC	S5720-28TP-PWR-LI-ACL	S5720-28P-PWR-LI-AC	S5720-52P-PWR-LI-AC
					NOTE For S5720-28P-PWR-LI-AC, customer can buy a license to upgrade 4*1000Base-X (SFP) to 10G SFP+.	NOTE For S5720-52P-PWR-LI-AC, customer can buy a license to upgrade 4*1000Base-X (SFP) to 10G SFP+.
	Multi-GE port	NA	NA	NA	NA	NA
Management port	Console port (RJ45)	Supported	Supported	Supported	Supported	Supported
	USB port	NA	NA	NA	USB 2.0	USB 2.0
CPU	Frequency	800 MHz	800 MHz	800 MHz	800 MHz	800 MHz
	Cores	1	1	1	1	1
Storage	Memory (RAM)	512 MB	512 MB	512 MB	512 MB	512 MB
	Flash memory	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users
Power supply system	Power supply type	Built-in AC	Built-in AC	Built-in AC	Built-in AC	Built-in AC
	Power supply redundancy	NA	NA	NA	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode
	RPS	NA	NA	NA	Supported	Supported
	Rated voltage range	100-240V AC; 50/60Hz	100-240V AC; 50/60Hz	100-240V AC; 50/60Hz	100-240V AC; 50/60Hz	100-240V AC; 50/60Hz
	Maximum voltage range	90-264V AC; 47Hz-63Hz	90-264V AC; 47Hz-63Hz	90-264V AC; 47Hz-63Hz	90-264V AC; 47Hz-63Hz	90-264V AC; 47Hz-63Hz
	Maximum input current	2.5 A	7 A	2.5 A	7 A	7 A
	Maximum power consumption of the device	<ul style="list-style-type: none"> Without PDs: 15.61 W With PDs: 160.5 W (PDs: 123.2 W) 	<ul style="list-style-type: none"> Without PDs: 38.8 W With PDs: 444.8 W (PDs: 369.6 W) 	<ul style="list-style-type: none"> Without PDs: 24.4 W With PDs: 165.528 W (PDs: 123.2 W) 	<ul style="list-style-type: none"> Without PDs: 42.7 W With PDs: 448.5 W (PDs: 369.6 W) 	<ul style="list-style-type: none"> Without PDs: 63.5 W With PDs: 464.3 W (PDs: 369.6 W)
	Power consumption	14.57 W	27.4 W	19.4 W	29.5 W	42.2 W

Item		S5720-12TP-PWR-LI-AC	S5720-28TP-PWR-LI-AC	S5720-28TP-PWR-LI-ACL	S5720-28P-PWR-LI-AC	S5720-52P-PWR-LI-AC
	in the case of 30% traffic load ¹					
	Power consumption in the case of 100% traffic load ¹	15.61 W	31.1 W	24 W	35.3 W	51.5 W
PoE specification	Maximum PoE power output	123.2 W	369.6 W	123.2 W	369.6 W	369.6 W
	Number of PoE+ ports ²	8	24	8	24	48
	Number of PoE++ ports ²	NA	NA	NA	NA	NA
	Maximum number of ports with maximum PoE power (15.4 W)	8	24	8	24	24
	Maximum number of ports with maximum PoE+ power (30 W)	4	12	4	12	12
	Maximum number of ports with maximum PoE++ power (60 W)	NA	NA	NA	NA	NA
Heat dissipation system	Heat dissipation mode	Natural heat dissipation	Air-cooled heat dissipation and intelligent fan speed adjustment	Natural heat dissipation	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment
	Number of fan modules	NA	2	NA	2	2
	Airflow	NA	Air flows in from the left side and exhausts from the right side	NA	Air flows in from the left side and exhausts from the right side	Air flows in from the left side and exhausts from the right side
	Maximum heat dissipation of the device	<ul style="list-style-type: none"> Without PDs: 53.3 With PDs: 547.8 	<ul style="list-style-type: none"> Without PDs: 132.4 With PDs: 1518 	<ul style="list-style-type: none"> Without PDs: 83.3 With PDs: 564.8 	<ul style="list-style-type: none"> Without PDs: 145.7 With PDs: 1530.7 	<ul style="list-style-type: none"> Without PDs: 216.7 With PDs: 1584.6

Item		S5720-12TP-PWR-LI-AC	S5720-28TP-PWR-LI-AC	S5720-28TP-PWR-LI-ACL	S5720-28P-PWR-LI-AC	S5720-52P-PWR-LI-AC
	(BTU/hour)					
Environment parameters	Long-term operating temperature	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.
	Short-term operating temperature	NA	<ul style="list-style-type: none"> 0-1800 m: -5 to 50°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.</p>	NA	<ul style="list-style-type: none"> 0-1800 m: -5 to 50°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.</p>	<ul style="list-style-type: none"> 0-1800 m: -5 to 50°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.</p>
	Storage temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
	Relative humidity	5%-95%(non-condensing)	5%-95%(non-condensing)	5%-95%(non-condensing)	5%-95%(non-condensing)	5%-95%(non-condensing)
	Operating altitude	5000 m	5000 m	5000 m	5000 m	5000 m
Noise under normal	Silent (fan-free)	48.6 dB(A)	Silent (fan-free)	49.1 dB(A)	48.3 dB(A)	

Item		S5720-12TP-PWR-LI-AC	S5720-28TP-PWR-LI-AC	S5720-28TP-PWR-LI-ACL	S5720-28P-PWR-LI-AC	S5720-52P-PWR-LI-AC
	temperature (sound power)					
	Noise under high temperature (sound power)	Silent (fan-free)	66.4 dB(A)	Silent (fan-free)	67.9 dB(A)	66.6 dB(A)
	Noise under normal temperature (sound pressure)	Silent (fan-free)	43.3 dB(A)	Silent (fan-free)	44.2 dB(A)	43.1 dB(A)
	Surge protection specification (RJ45 service port)	±7 kV in common mode	±7 kV in common mode	±7 kV in common mode	±7 kV in common mode	±7 kV in common mode
	Surge protection specification (power port)	±6 kV in differential or common mode	±6 kV in differential or common mode	±6 kV in differential or common mode	±6 kV in differential or common mode	±6 kV in differential or common mode
Reliability	MTBF (year) ³	23.8	40	42	41	38
	MTTR (hour)	2	2	2	2	2
	Availability	> 0.99999	> 0.99999	> 0.99999	> 0.99999	> 0.99999
Certification		<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>

Hardware specifications of S5720-X-LI series PoE-capable models

Item		S5720-16X-PWH-LI-AC	S5720-28X-PWH-LI-AC	S5720-28X-PWR-LI-AC	S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-ACF
Physical specifications	Chassis dimensions (W x D x H, mm)	320 x 263 x 43.6	442 x 310 x 43.6	442 x 310 x 43.6	442 x 310 x 43.6	442 x 310 x 43.6
	Chassis	1 U	1 U	1 U	1 U	1 U

Item		S5720-16X-PWH-LI-AC	S5720-28X-PWH-LI-AC	S5720-28X-PWR-LI-AC	S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-ACF
	height					
	Chassis weight (full configuration weight, including weight of packaging materials)	4.7 kg	5.85 kg	5.2 kg	5.6 kg	6.6 kg
Fixed port	GE port	14	16	28	52	48
	10GE port	2	4	4	4	4
	Multi-GE port	NA	8	NA	NA	NA
Management port	Console port (RJ45)	Supported	Supported	Supported	Supported	Supported
	USB port	NA	USB 2.0	USB 2.0	USB 2.0	USB 2.0
CPU	Frequency	800 MHz	800 MHz	800 MHz	800 MHz	800 MHz
	Cores	1	1	1	1	1
Storage	Memory (RAM)	512 MB	512 MB	512 MB	512 MB	512 MB
	Flash memory	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users
Power supply system	Power supply type	Built-in AC	Built-in AC	Built-in AC	Built-in AC	Built-in AC
	Power supply redundancy	NA	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode
	RPS	NA	Supported	Supported	Supported	Supported
	Rated voltage range	100-240V AC; 50/60Hz	100-240V AC; 50/60Hz	100-240V AC; 50/60Hz	100-240V AC; 50/60Hz	100-240V AC; 50/60Hz
	Maximum voltage range	90-264V AC; 47Hz-63Hz	90-264V AC; 47Hz-63Hz	90-264V AC; 47Hz-63Hz	90-264V AC; 47Hz-63Hz	90-264V AC; 47Hz-63Hz
	Maximum input current	6 A	7 A	7 A	7 A	11 A (110 V) to 6 A(220 V)
	Maximum power consumption of the device	<ul style="list-style-type: none"> Without PDs: 31.5 W With PDs: 437.5 W (PDs: 360) 	<ul style="list-style-type: none"> Without PDs: 67.3 W With PDs: 473 W (PDs: 360 W) 	<ul style="list-style-type: none"> Without PDs: 42.7 W With PDs: 448.5 W (PDs: 369.6) 	<ul style="list-style-type: none"> Without PDs: 63.5 W With PDs: 464.3 W (PDs: 369.6) 	<ul style="list-style-type: none"> Without PDs: 52.1 W With PDs: 977 W (PDs: 739.2 W)

Item		S5720-16X-PWH-LI-AC	S5720-28X-PWH-LI-AC	S5720-28X-PWR-LI-AC	S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-ACF
		W)		W)	W)	
	Power consumption in the case of 30% traffic load ¹	30.9 W	51.6 W	29.5 W	42.2 W	42.9 W
	Power consumption in the case of 100% traffic load ¹	31.5 W	53.4 W	35.3 W	51.5 W	42.9 W
PoE specification	Maximum PoE power output	360 W	360 W	369.6 W	369.6 W	739.2 W
	Number of PoE+ ports ²	12	24	24	48	48
	Number of PoE++ ports ²	12	8	NA	NA	NA
	Maximum number of ports with maximum PoE power (15.4 W)	12	23	24	24	48
	Maximum number of ports with maximum PoE+ power (30 W)	12	12	12	12	24
	Maximum number of ports with maximum PoE++ power (60 W)	6	6	NA	NA	NA
Heat dissipation system	Heat dissipation mode	Natural heat dissipation	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment
	Number of fan modules	NA	2	2	2	2 NOTE An independent fan is provided for the internal power

Item		S5720-16X-PWH-LI-AC	S5720-28X-PWH-LI-AC	S5720-28X-PWR-LI-AC	S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-ACF
						supplies and one fan is provided for the device.
	Airflow	NA	Air flows in from the left side and exhausts from the right side	Air flows in from the left side and exhausts from the right side	Air flows in from the left side and exhausts from the right side	Air flows in from the left side and exhausts from the right side
	Maximum heat dissipation of the device (BTU/hour)	<ul style="list-style-type: none"> Without PDs: 107.5 With PDs: 1493 	<ul style="list-style-type: none"> Without PDs: 229.7 With PDs: 1614 	<ul style="list-style-type: none"> Without PDs: 145.7 With PDs: 1530.7 	<ul style="list-style-type: none"> Without PDs: 216.7 With PDs: 1584.6 	<ul style="list-style-type: none"> Without PDs: 177.8 With PDs: 3334
Environment parameters	Long-term operating temperature	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.
	Short-term operating temperature	NA	<ul style="list-style-type: none"> 0-1800 m: -5 to 50°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than</p>	<ul style="list-style-type: none"> 0-1800 m: -5 to 50°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than</p>	<ul style="list-style-type: none"> 0-1800 m: -5 to 50°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than</p>	<ul style="list-style-type: none"> 0-1800 m: -5 to 50°C 1800–5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude. <p>NOTE Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than</p>

Item		S5720-16X-PWH-LI-AC	S5720-28X-PWH-LI-AC	S5720-28X-PWR-LI-AC	S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-ACF
			15 in a year.	15 in a year.	15 in a year.	is no more than 15 in a year.
	Storage temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
	Relative humidity	5%-95%(non-condensing)	5%-95%(non-condensing)	5%-95%(non-condensing)	5%-95%(non-condensing)	5%-95%(non-condensing)
	Operating altitude	5000 m	5000 m	5000 m	5000 m	5000 m
	Noise under normal temperature (sound power)	Silent (fan-free)	55.2 dB(A)	49.1 dB(A)	48.3 dB(A)	53.9 dB(A)
	Noise under high temperature (sound power)	Silent (fan-free)	71.4 dB(A)	67.9 dB(A)	66.6 dB(A)	78 dB(A)
	Noise under normal temperature (sound pressure)	Silent (fan-free)	43.4 dB(A)	44.2 dB(A)	43.1 dB(A)	43.9 dB(A)
	Surge protection specification (RJ45 service port)	±7 kV in common mode	±7 kV in common mode	±7 kV in common mode	±7 kV in common mode	±7 kV in common mode
	Surge protection specification (power port)	±6 kV in differential or common mode	±6 kV in differential or common mode	±6 kV in differential or common mode	±6 kV in differential or common mode	±6 kV in differential or common mode
Reliability	MTBF (year) ³	9.3	50.6	41	38	45
	MTTR (hour)	2	2	2	2	2
	Availability	> 0.99999	> 0.99999	> 0.99999	> 0.99999	> 0.99999
Certification		<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and</p>

Item	S5720-16X-PWH-LI-AC	S5720-28X-PWH-LI-AC	S5720-28X-PWR-LI-AC	S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-ACF
	Compliance.	Compliance.	Compliance.	Compliance.	Regulatory Compliance.

NOTE

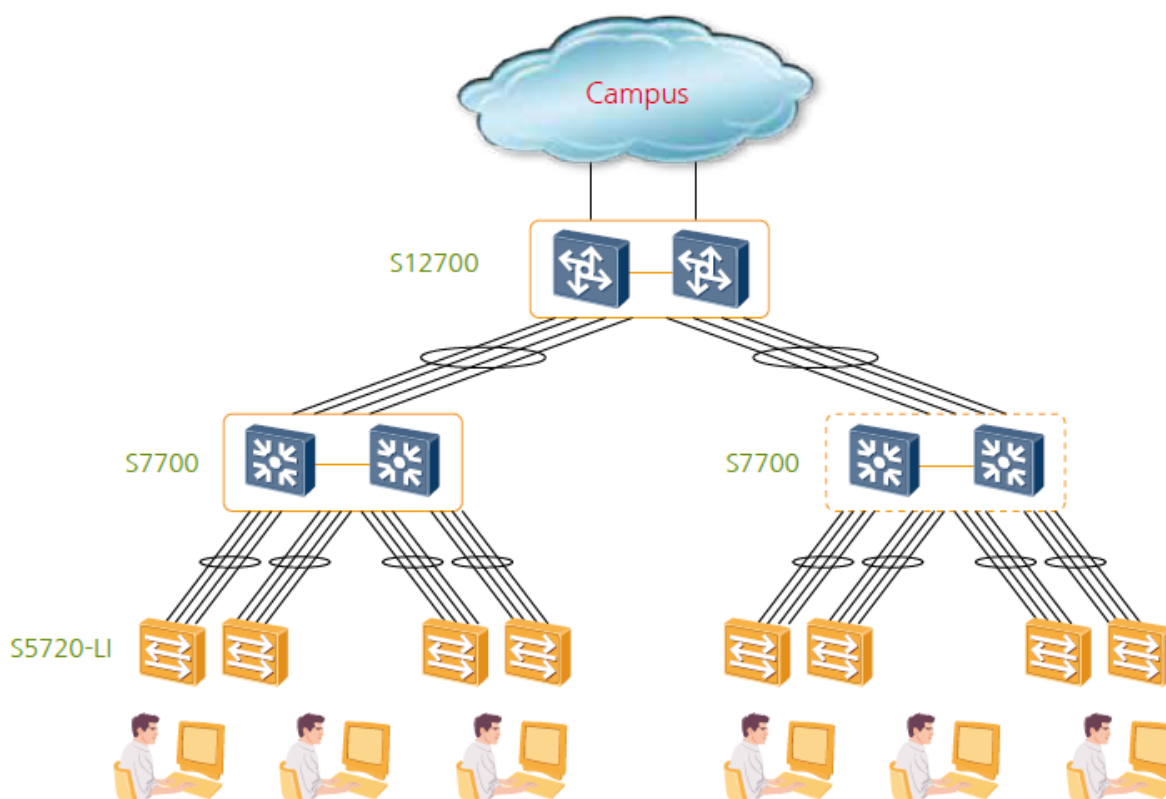
1: The power consumption under different load conditions is calculated according to the ATIS standard. Additionally, the EEE function is enabled and there is no PoE power output.

2: The number of working PoE+/PoE++ ports depends on the maximum PoE power provided by the device and the maximum power consumption of PDs.

3: The reliability parameter values are calculated based on the typical configuration of the device. The parameter values vary according to the modules configured by the customer.

Networking and Applications

The S5720-LI provides 1000M desktop access functions for a high-performance network, such as voice VLAN and NAC.



Product Accessories

Optical Modules and Fibers

The S5720-LI supports the following GE and 10GE optical modules:

- GE: 100 m electrical, 500 m optical multi-mode, 10/40/80/100 km optical single-mode, two pairs of bidirectional optical modules (10/40 km)
- 10GE: 100/220/300 m SFP+ multi-mode, 1.4/10/40/80 km optical SFP+

Optical fibers fall into single-mode and multi-mode fibers. Single-mode optical modules use single-mode fibers, and multi-mode optical modules use multi-mode fibers. For a non-BIDI optical module, each optical interface must be configured with a Tx optical fiber and an Rx optical fiber of the same type. For a BIDI optical module, only one optical fiber needs to be configured.

NOTE

The fibers and optical modules supported by Huawei switches are being updated. For the latest information, visit <http://support.huawei.com/enterprise/en/doc/EDOC1000013597?section=j07w&topicName=pluggable-modules-for-interfaces> or contact your local Huawei sales office.

Stack Cables

The S5720-LI series switches support service port stacking. The applicable stack cables are as follows:

- AOC cable

An active optical network (AOC) cable integrates an optical module and a fiber. The AOC cables are available in SFP-10G-AOC3M and SFP-10G-AOC10M.

- SFP+ high-speed cable

The SFP+ high-speed cable also integrates an optical module and a fiber. The SFP+ high-speed cables are available in SFP-10G-CU1M, SFP-10G-CU3M, SFP-10G-CU5M, and SFP-10G-AC10M.

The following table lists the stack cable types and connectors.

Stack cable types and connectors applicable to the S5720-LI series

Stack Cable	Model	Cable Length	Connector
AOC	SFP-10G-AOC3M	3 m	SFP+
	SFP-10G-AOC10M	10 m	SFP+
SFP+ high-speed	SFP-10G-CU1M	1 m	SFP+
	SFP-10G-CU3M	3 m	SFP+
	SFP-10G-CU5M	5 m	SFP+
	SFP-10G-AC10M	10 m	SFP+

NOTE

For more information about the stack cables applicable to the S5720-LI series, visit <http://support.huawei.com/enterprise/en/doc/EDOC1000013597?section=j07f&topicName=cables> or contact your local Huawei sales office.

Safety and Regulatory Compliance

The following table describes the safety and regulatory compliance of the S5720-LI.

Safety and regulatory compliance of the S5720-LI series

Certification Category	Description
Safety	<ul style="list-style-type: none">● IEC 60950-1● EN 60950-1/A11/A12● UL 60950-1● CSA C22.2 No 60950-1● AS/NZS 60950.1● CNS 14336-1
Laser safety	<ul style="list-style-type: none">● IEC60825-1● IEC60825-2● EN60825-1● EN60825-2

Certification Category	Description
Electromagnetic Compatibility (EMC)	<ul style="list-style-type: none"> • CISPR22 Class A • CISPR24 • EN55022 Class A • EN55024 • ETSI EN 300 386 Class A • CFR 47 FCC Part 15 Class A • ICES 003 Class A • AS/NZS CISPR22 Class A • VCCI Class A • EN61000-3-2 • EN61000-3-3 • IEC61000-4-2 • ITU-T K 20 • ITU-T K 21 • ITU-T K 44 • CNS13438
Environment	<ul style="list-style-type: none"> • RoHS • REACH • WEEE

NOTE

- EMC: electromagnetic compatibility
- CISPR: International Special Committee on Radio Interference
- EN: European Standard
- ETSI: European Telecommunications Standards Institute
- CFR: Code of Federal Regulations
- FCC: Federal Communication Commission
- IEC: International Electrotechnical Commission
- AS/NZS: Australian/New Zealand Standard
- VCCI: Voluntary Control Council for Interference
- UL: Underwriters Laboratories
- CSA: Canadian Standards Association
- IEEE: Institute of Electrical and Electronics Engineers
- RoHS: restriction of the use of certain hazardous substances
- REACH: Registration Evaluation Authorization and Restriction of Chemicals
- WEEE: Waste Electrical and Electronic Equipment

MIB and Standards Compliance

Supported MIBs

The following table lists the MIBs supported by the S5720-LI.

Supported MIBs by the S5720-LI series

Category	MIB
Public MIB	<ul style="list-style-type: none"> • BRIDGE-MIB

Category	MIB
	<ul style="list-style-type: none"> • DISMAN-NSLOOKUP-MIB • DISMAN-PING-MIB • DISMAN-TRACEROUTE-MIB • ENTITY-MIB • EtherLike-MIB • IF-MIB • IP-FORWARD-MIB • IPv6-MIB • LAG-MIB • LLDP-EXT-DOT1-MIB • LLDP-EXT-DOT3-MIB • LLDP-MIB • NOTIFICATION-LOG-MIB • NQA-MIB • P-BRIDGE-MIB • Q-BRIDGE-MIB • RFC1213-MIB • RMON-MIB • SAVI-MIB • SNMP-FRAMEWORK-MIB • SNMP-MPD-MIB • SNMP-NOTIFICATION-MIB • SNMP-TARGET-MIB • SNMP-USER-BASED-SM-MIB • SNMPv2-MIB • SNMP-VIEW-BASED-ACM-MIB • TCP-MIB • UDP-MIB
Huawei-proprietary MIB	<ul style="list-style-type: none"> • HUAWEI-AAA-MIB • HUAWEI-ACL-MIB • HUAWEI-ALARM-MIB • HUAWEI-ALARM-RELIABILITY-MIB • HUAWEI-BASE-TRAP-MIB • HUAWEI-BRAS-RADIUS-MIB • HUAWEI-BRAS-SRVCFG-EAP-MIB • HUAWEI-BRAS-SRVCFG-STATICUSER-MIB • HUAWEI-CBQOS-MIB • HUAWEI-CDP-COMPLIANCE-MIB • HUAWEI-CONFIG-MAN-MIB • HUAWEI-CPU-MIB • HUAWEI-DAD-TRAP-MIB • HUAWEI-DATASYNC-MIB • HUAWEI-DEVICE-MIB • HUAWEI-DHCPR-MIB

Category	MIB
	<ul style="list-style-type: none"> • HUAWEI-DHCPS-MIB • HUAWEI-DHCP-SNOOPING-MIB • HUAWEI-DIE-MIB • HUAWEI-DNS-MIB • HUAWEI-DLDP-MIB • HUAWEI-ERPS-MIB • HUAWEI-ERRORDOWN-MIB • HUAWEI-ENERGYMNGT-MIB • HUAWEI-EASY-OPERATION-MIB • HUAWEI-ENTITY-EXTENT-MIB • HUAWEI-ENTITY-TRAP-MIB • HUAWEI-ETHARP-MIB • HUAWEI-ETHOAM-MIB • HUAWEI-FLASH-MAN-MIB • HUAWEI-FWD-RES-TRAP-MIB • HUAWEI-GARP-APP-MIB • HUAWEI-GTL-MIB • HUAWEI-HGMP-MIB • HUAWEI-HWTACACS-MIB • HUAWEI-IF-EXT-MIB • HUAWEI-INFOCENTER-MIB • HUAWEI-IPPOOL-MIB • HUAWEI-IPV6-MIB • HUAWEI-ISOLATE-MIB • HUAWEI-L2IF-MIB • HUAWEI-L2MAM-MIB • HUAWEI-L2VLAN-MIB • HUAWEI_LDT-MIB • HUAWEI-LLDP-MIB • HUAWEI-MAC-AUTHEN-MIB • HUAWEI-MEMORY-MIB • HUAWEI-MFF-MIB • HUAWEI-MFLP-MIB • HUAWEI-MSTP-MIB • HUAWEI-MULTICAST-MIB • HUAWEI-NTPV3-MIB • HUAWEI-PERFORMANCE-MIB • HUAWEI-PERFMGMT-MIB • HUAWEI-PORT-MIB • HUAWEI-PORTAL-MIB • HUAWEI-QINQ-MIB • HUAWEI-RM-EXT-MIB • HUAWEI-RRPP-MIB • HUAWEI-SECURITY-MIB • HUAWEI-SEP-MIB

Category	MIB
	<ul style="list-style-type: none"> • HUAWEI-SNMP-EXT-MIB • HUAWEI-SSH-MIB • HUAWEI-STACK-MIB • HUAWEI-SWITCH-L2MAM-EXT-MIB • HUAWEI-SWITCH-SRV-TRAP-MIB • HUAWEI-SYS-MAN-MIB • HUAWEI-TCP-MIB • HUAWEI-TFTPC-MIB • HUAWEI-TRNG-MIB • HUAWEI-UNIMNG-MIB • HUAWEI-USA-MIB • HUAWEI-XQOS-MIB

 **NOTE**

For more detailed information of MIBs supported by S5720-LI series, visit <https://support.huawei.com/enterprise/en/switches/s5700-pid-6691579?category=reference-guides&subcategory=mib-reference>.

Standard Compliance

The following table lists the standards that the S5720-LI complies with.

Standard compliance list of the S5720-LI series

Standard Organization	Standard or Protocol
IETF	<ul style="list-style-type: none"> • RFC 768 User Datagram Protocol (UDP) • RFC 792 Internet Control Message Protocol (ICMP) • RFC 793 Transmission Control Protocol (TCP) • RFC 826 Ethernet Address Resolution Protocol (ARP) • RFC 854 Telnet Protocol Specification • RFC 951 Bootstrap Protocol (BOOTP) • RFC 959 File Transfer Protocol (FTP) • RFC 1058 Routing Information Protocol (RIP) • RFC 1112 Host extensions for IP multicasting • RFC 1157 A Simple Network Management Protocol (SNMP) • RFC 1256 ICMP Router Discovery • RFC 1305 Network Time Protocol Version 3 (NTP) • RFC 1349 Internet Protocol (IP) • RFC 1493 Definitions of Managed Objects for Bridges • RFC 1542 Clarifications and Extensions for the Bootstrap Protocol • RFC 1643 Ethernet Interface MIB • RFC 1757 Remote Network Monitoring (RMON) • RFC 1901 Introduction to Community-based SNMPv2 • RFC 1902-1907 SNMP v2 • RFC 1981 Path MTU Discovery for IP version 6 • RFC 2131 Dynamic Host Configuration Protocol (DHCP) • RFC 2460 Internet Protocol, Version 6 Specification (IPv6) • RFC 2461 Neighbor Discovery for IP Version 6 (IPv6) • RFC 2462 IPv6 Stateless Address Auto configuration

Standard Organization	Standard or Protocol
	<ul style="list-style-type: none"> • RFC 2463 Internet Control Message Protocol for IPv6 (ICMPv6) • RFC 2474 Differentiated Services Field (DS Field) • RFC 2863 The Interfaces Group MIB • RFC 2597 Assured Forwarding PHB Group • RFC 2598 An Expedited Forwarding PHB • RFC 2571 SNMP Management Frameworks • RFC 2865 Remote Authentication Dial In User Service (RADIUS) • RFC 3046 DHCP Option82 • RFC 3513 IP Version 6 Addressing Architecture • RFC 3579 RADIUS Support For EAP • draft-grant-tacacs-02 TACACS+
IEEE	<ul style="list-style-type: none"> • IEEE 802.1D Media Access Control (MAC) Bridges • IEEE 802.1p Virtual Bridged Local Area Networks • IEEE 802.1Q Virtual Bridged Local Area Networks • IEEE 802.1ad Provider Bridges • IEEE 802.2 Logical Link Control • IEEE Std 802.3 CSMA/CD • IEEE Std 802.3ab 1000BASE-T specification • IEEE Std 802.3ad Aggregation of Multiple Link Segments • IEEE Std 802.3ae 10GE WEN/LAN Standard • IEEE Std 802.3x Full Duplex and flow control • IEEE Std 802.3z Gigabit Ethernet Standard • IEEE802.1ax/IEEE802.3ad Link Aggregation • IEEE 802.3ah Ethernet in the First Mile • IEEE 802.1ag Connectivity Fault Management • IEEE 802.1ab Link Layer Discovery Protocol • IEEE 802.1D Spanning Tree Protocol • IEEE 802.1w Rapid Spanning Tree Protocol • IEEE 802.1s Multiple Spanning Tree Protocol • IEEE802.1x Port based network access control protocol • IEEE802.3af DTE Power via MIDI • IEEE802.3at DTE Power via the MDI Enhancements
ITU	<ul style="list-style-type: none"> • ITU SG13 Y.17ethoam • ITU SG13 QoS control Ethernet-Based IP Access • ITU-T Y.1731 ETH OAM performance monitor
MEF	<ul style="list-style-type: none"> • MEF 2 Requirements and Framework for Ethernet Service Protection • MEF 9 Abstract Test Suite for Ethernet Services at the UNI • MEF 11 UNI Requirements and Framework • MEF 15 Requirements for Management of Metro Ethernet Phase 1 Network Elements • MEF 17 Service OAM Framework and Requirements • MEF 20 UNI Type 2 Implementation Agreement • MEF 23 Class of Service Phase 1 Implementation Agreement • Xmodem XMODEM/YMODEM Protocol Reference

NOTE

The listed standards and protocols are fully or partially supported by Huawei switches. For details, visit <http://e.huawei.com/en> or contact your local Huawei sales office.

Ordering Information

Ordering information of the S5720-LI series

Item	Product Description
1	S5720-12TP-LI-AC (8 Ethernet 10/100/1000 ports, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, AC 110/220 V)
2	S5720-12TP-PWR-LI-AC (8 Ethernet 10/100/1000 PoE+ ports, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, 124 W PoE AC 110/220 V)
3	S5720-16X-PWH-LI-AC (12 Ethernet 10/100/1000 PoE++ ports, 2 Ethernet 10/100/1000 ports, 2 10 Gig SFP+, 360 W PoE AC 110/220 V)
4	S5720-28P-LI-AC (24 Ethernet 10/100/1000 ports, 4 Gig SFP, AC 110/220 V)
5	S5720-28P-PWR-LI-AC (24 Ethernet 10/100/1000 PoE+ ports, 4 Gig SFP, 370 W PoE AC 110/220 V)
6	S5720-28TP-PWR-LI-ACL (8 Ethernet 10/100/1000 PoE+, 16 Ethernet 10/100/1000, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, 124 W PoE AC)
7	S5720-28TP-PWR-LI-AC (24 Ethernet 10/100/1000 PoE+ ports, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, 370 W PoE AC 110/220 V)
8	S5720-28TP-LI-AC (24 Ethernet 10/100/1000 ports, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, AC 110/220 V)
9	S5720-28X-LI-24S-AC (24 Gig SFP, 8 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, AC 110/220 V)
10	S5720-28X-LI-24S-DC (24 Gig SFP, 8 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, DC -48 V)
11	S5720-28X-LI-AC (24 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, AC 110/220 V)
12	S5720-28X-LI-DC (24 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, DC -48 V)
13	S5720-28X-PWR-LI-AC (24 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, 370 W PoE AC 110/220 V)
14	S5720-28X-PWH-LI-AC (16 Ethernet 10/100/1000 PoE+ ports, 8 Ethernet 100/1000/2500 PoE++ ports, 4 10 Gig SFP+, 360 W PoE AC 110/220 V)
15	S5720-52P-LI-AC (48 Ethernet 10/100/1000 ports, 4 Gig SFP, AC 110/220 V)
16	S5720-52X-LI-AC (48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, AC 110/220 V)
17	S5720-52X-LI-DC (48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, DC -48 V)
18	S5720-52P-PWR-LI-AC (48 Ethernet 10/100/1000 PoE+ ports, 4 Gig SFP, 370W POE AC 110/220 V)
19	S5720-52X-PWR-LI-AC (48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, 370 W PoE AC 110/220 V)
20	S5720-52X-PWR-LI-ACF (48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, 740 W PoE AC 110/220 V)
21	S5720-52X-LI-48S-AC (48 Gig SFP, 2 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, AC 110/220 V)
22	RPS1800 Redundant Power System

More Information


For more information about Huawei Campus Switches, visit <http://e.huawei.com> or contact us in the following ways:

- Global service hotline: <http://e.huawei.com/en/service-hotline>
- Logging in to the Huawei Enterprise technical support website: <http://support.huawei.com/enterprise/>
- Sending an email to the customer service mailbox: support_e@huawei.com

Copyright © Huawei Technologies Co., Ltd. 2018. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademarks and Permissions

 HUAWEI and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Huawei Technologies Co., Ltd.

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

Website: e.huawei.com