S5720-LI Series Simplified Gigabit Ethernet Switches

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

Product Overview

Building on next-generation, high-performance hardware and the Huawei Versatile Routing Platform (VRP), the S5720-LI series switches support intelligent stack (iStack), flexible Ethernet networking, and diversified security control. They support multiple Layer 3 routing protocols and provide high performance and service processing capabilities. The S5720-LI series switches are ideal for multiple scenarios such as enterprise campus network access and gigabit to the desktop.

Models and Appearances

Models and Appearances	Description
 S5720-12TP-LI-AC	• 8 Ethernet 10/100/1000 Base-T ports, 4 Gig 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	• 8 Ethernet 10/100/1000 Base-T ports, 4 Gig 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
 S5720-16X-PWH-LI-AC	• 12 Ethernet 10/100/1000 PoE++ ports, 2 Ethernet 10/100/1000 Base-T ports, 2 10 Gig SFP+ ports • AC power supply • PoE++ • Forwarding performance: 51 Mpps • Switching capacity: 336 Gbit/s
 S5720-28P-LI-AC	• 24 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP ports • AC power supply, supporting RPS (redundant power supply) • Forwarding performance: 51 Mpps/108 Mpps **NOTE**

Models and Appearances	Description
	The specifications, which are to the right of the slash (/), can be achieved by loading the GE to 10G electronic RTU license. • Switching capacity: 336 Gbit/s
 S5720-28P-PWR-LI-AC	• 24 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP ports • AC power supply, supporting RPS (redundant power supply) • PoE+ • Forforwarding performance: 51 Mpps/108 Mpps **NOTE** The specifications, which are to the right of the slash (/), can be achieved by loading the GE to 10G electronic RTU license. • Switching capacity: 336 Gbit/s
 S5720-28TP-LI-AC	• 24 Ethernet 10/100/1000 Base-T ports, 4 Gig 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
 S5720-28TP-PWR-LI-AC	• 24 Ethernet 10/100/1000 Base-T ports, 4 Gig 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
 S5720-28TP-PWR-LI-ACL	• 8 Ethernet 10/100/1000 PoE+ ports, 16 Ethernet 10/100/1000 Base-T ports, 4 Gig 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
 S5720-28X-LI-24S-AC	• 24 Gig SFP ports, 8 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: 108 Mpps • Switching capacity: 336 Gbit/s
 S5720-28X-LI-24S-DC	• 24 Gig SFP ports, 8 of which are dual-purpose 10/100/1000Base-T or SFP ports, 4 10 Gig SFP+ ports • DC power supply, supporting RPS (redundant power supply) • Forwarding performance: 108 Mpps • Switching capacity: 336 Gbit/s
 S5720-28X-LI-AC	• 24 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • Forwarding performance: 108 Mpps • Switching capacity: 336 Gbit/s

Models and Appearances	Description
 S5720-28X-LI-DC	• 24 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • DC power supply, supporting RPS (redundant power supply) • Forwarding performance: 108 Mpps • Switching capacity: 336 Gbit/s
 S5720-28X-PWR-LI-AC	• 24 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • PoE+ • Forwarding performance: 108 Mpps • Switching capacity: 336 Gbit/s
 S5720-28X-PWH-LI-AC	• 16 Ethernet 10/100/1000 Base-T ports, 8 PoE Ethernet 100/1000/2500 Base-T ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • PoE++ • Forwarding performance: 126 Mpps • Switching capacity: 336 Gbit/s
 S5720-52P-LI-AC	• 48 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP ports • AC power supply, supporting RPS (redundant power supply) • Forwarding performance: 87 Mpps/144 Mpps **NOTE** The specifications, which are to the right of the slash (/), can be achieved by loading the GE to 10G electronic RTU license. • Switching capacity: 336 Gbit/s
 S5720-52P-PWR-LI-AC	• 48 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP ports • AC power supply, supporting RPS (redundant power supply) • PoE+ • Forwarding performance: 87 Mpps/144 Mpps **NOTE** The specifications, which are to the right of the slash (/), can be achieved by loading the GE to 10G electronic RTU license. • Switching capacity: 336 Gbit/s
 S5720-52X-LI-AC	• 48 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • Forwarding performance: 144 Mpps • Switching capacity: 336 Gbit/s
 S5720-52X-PWR-LI-AC	• 48 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • PoE+ • Forwarding performance: 144 Mpps • Switching capacity: 336 Gbit/s
 S5720-52X-PWR-LI-ACF	• 48 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • PoE+ • Forwarding performance: 144 Mpps

Models and Appearances	Description
	• Switching capacity: 336 Gbit/s
 S5720-52X-LI-48S-AC	• 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

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, easy to maintain, and implements fast protection switching within 50ms. 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 attacks 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 changing 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 Operation and Maintenance

- The S5720-LI supports Huawei Easy Operation, a solution that provides zero-touch deployment, replacement of faulty devices without additional configuration, USB-based deployment, batch configuration, and batch remote upgrade. The Easy Operation solution facilitates device deployment, upgrade, service provisioning, and other management and maintenance operations, and also greatly reduces costs of operation and maintenance. 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 that helps with network consolidation and reconstruction.
- EasyDeploy: The Commander collects information about the topology of the client connecting to the Commander and saves client startup information based on the topology. The client can be replaced without configuration. Configuration and scripts can be delivered to the client in batches. In addition, the configuration delivery result can be queried.
- The Commander can collect and display 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 a variety of intelligent O&M features for audio and video services, including the enhanced Media Delivery Index (eMDI). With this eDMI function, the switch can function as a monitored node to periodically conduct statistics and report audio and video service indicators to the CampusInsight platform. In this way, the CampusInsight platform can quickly demarcate audio and video service quality faults based on the results of multiple monitored nodes.

Intelligent Upgrade

- Switches support the intelligent upgrade feature. Specifically, switches obtain the version upgrade path and download the newest version for upgrade from the Huawei Online Upgrade Platform (HOUP). The entire upgrade process is highly automated and achieves one-click upgrade. In addition, preloading the version is supported, which greatly shortens the upgrade time and service interruption time.
- The intelligent upgrade feature greatly simplifies device upgrade operations and makes it possible for the customer to upgrade the version independently. This greatly reduces the customer's maintenance costs. In addition, the upgrade policies on the HOUP platform standardize the upgrade operations, which greatly reduces the risk of upgrade failures.

iStack

- The S5720-LI supports intelligent stack (iStack). This technology combines multiple switches into a 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 one 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 support 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 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 operation and maintenance. The cabinets can be placed against the wall or back to back, and is well-suited for shallow cabinets and limited equipment room space.

PoE Power Supply

- The S5720-16X/28X-PWH-LI can provide Ethernet power supply(PoE++) for APs and surveillance cameras.
- 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.
- S5720-28X-PWH-LI-AC and S5720-16X-PWH-LI-AC switches can supply power to PDs within 10s 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, these switches can provide 200-meter PoE power supply to Huawei specific APs, such as AP7052DN, AP7152DN, AP6052DN, AP8082DN, AP8182DN, AP7052DE, and AP7060DN.

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

- Open Programmability System (OPS) is an open programmable system 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.

Product Specifications

Item	S5720-12TP-LI-AC	S5720-12TP-PWR-LI-AC	S5720-16X-PWH-LI-AC	S5720-28P-LI-AC	S5720-28P-PWR-LI-AC
Fixed ports	8 10/100/1000 Base-T, 4 Gig SFP, 2 Combo (10/100/1000Base-T or 100/1000Base-X)	8 10/100/1000 Base-T (PoE+), 4 Gig SFP, 2 Combo (10/100/1000Base-T or 100/1000Base-X)	12 10/100/1000 Base-T (PoE++), 2 10/100/1000Base-T, 2 10 Gig SFP+	24 10/100/1000 Base-T, 4 Gig SFP	24 10/100/1000 Base-T (PoE+), 4 Gig SFP
Dimensions (W x D x H)	250 mm ×180 mm × 43.6 mm	320 mm × 220 mm × 43.6 mm	320 mm × 263 mm × 43.6 mm	442 mm × 220 mm × 43.6 mm	442 mm × 310 mm × 43.6 mm
Chassis height	1 U	1 U	1 U	1 U	1 U
Input voltage	• Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	• Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	• Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	• Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	• Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz
Maximum power consumption	12.85 W	• Without PoE power output: 15.61 W • With PoE power output: 160.5 W (PoE: 123.2 W)	• Without PoE power output: 31.5 W • With PoE power output: 437.5 W (PoE: 360 W)	27.9 W	• Without PoE power output: 42.7 W • With PoE power output: 448.5 W (PoE: 369.6 W)
Typical power consumption (Without PoE)	10.39 W	14.57 W	30.9 W	19.6 W	29.5 W
Long-term operating temperature	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by	• 0-1800 m: 0°C to 55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by	• 0-1800 m: 0°C to 50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by

Item	S5720-12TP-LI-AC	S5720-12TP-PWR-LI-AC	S5720-16X-PWH-LI-AC	S5720-28P-LI-AC	S5720-28P-PWR-LI-AC
	220 m.	220 m.	220 m.	220 m.	220 m.
Short-term operating temperature[1]	NA	NA	NA	• 0-1800 m: -5°C to +50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.
Relative humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Heat dissipation	Natural heat dissipation without fans	Natural heat dissipation without fans	Natural heat dissipation without fans	Natural heat dissipation without fans	Heat dissipation with fan, intelligent fan speed adjustment
Physical security	One Kensington lock slot, can be used to lock the device to mouting bracket				

Item	S5720-28TP-LI-AC	S5720-28TP-PWR-LI-ACL	S5720-28TP-PWR-LI-AC	S5720-28X-LI-24S-AC S5720-28X-LI-24S-DC	S5720-28X-LI-AC S5720-28X-LI-DC	S5720-28X-PWR-LI-AC
Fixed ports	24 10/100/1000 Base-T, 4 Gig SFP, 2 Combo (10/100/1000Base-T or 100/1000Base-X)	8 10/100/1000 Base-T (PoE+), 16 10/100/1000 Base-T, 4 Gig SFP, 2 Combo (10/100/1000Base-T or 100/1000Base-X)	24 10/100/1000 Base-T (PoE+), 4 Gig SFP, 2 Combo (10/100/1000Base-T or 100/1000Base-X)	24 Gig SFP, 8 Combo (10/100/1000Base-T or 100/1000Base-X), 4 10 Gig SFP+	24 10/100/1000 Base-T, 4 10 Gig SFP+	24 10/100/1000 Base-T (PoE+), 4 10 Gig SFP+
Dimensions (W x D x H)	442 mm x 220 mm x 43.6 mm	442 mm x 220 mm x 43.6 mm	442 mm x 310 mm x 43.6 mm	442 mm x 220 mm x 43.6 mm	442 mm x 220 mm x 43.6 mm	442 mm x 310 mm x 43.6 mm
Chassis height	1 U	1 U	1 U	1 U	1 U	1 U
Input voltage	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz DC: • Rated	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz DC: • Rated	• Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz

Item	S5720-28TP-LI-AC	S5720-28TP-PWR-LI-ACL	S5720-28TP-PWR-LI-AC	S5720-28X-LI-24S-AC S5720-28X-LI-24S-DC	S5720-28X-LI-AC S5720-28X-LI-DC	S5720-28X-PWR-LI-AC
				voltage range: -48-60V DC • Maximum voltage range: -36-72V DC	voltage range: -48-60V DC • Maximum voltage range: -36-72V DC	
Maximum power consumption	22.1 W	• Without PoE power output: 24.4 W • With PoE power output: 165.6 W (PoE: 123.2 W)	• Without PoE power output: 38.8 W • With PoE power output: 444.8 W (PoE: 370 W)	• S5720-28X-LI-24S-AC: 41.7 W • S5720-28X-LI-24S-DC: 42.7 W	• S5720-28X-LI-AC: 29.5 W • S5720-28X-LI-DC: 31 W	• Without PoE power output: 42.7 W • With PoE power output: 448.5 W (PoE: 369.6 W)
Typical power consumption (Without PoE)	16.2 W	19.4 W	27.4 W	• S5720-28X-LI-24S-AC: 28.9 W • S5720-28X-LI-24S-DC: 30.3 W	• S5720-28X-LI-AC: 21.4 W • S5720-28X-LI-DC: 19.8 W	29.5 W
Long-term operating temperature	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.
Short-term operating temperature[1]	• 0-1800 m: -5°C to +50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	NA	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.
Relative	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%

Item	S5720-28TP-LI-AC	S5720-28TP-PWR-LI-ACL	S5720-28TP-PWR-LI-AC	S5720-28X-LI-24S-AC S5720-28X-LI-24S-DC	S5720-28X-LI-AC S5720-28X-LI-DC	S5720-28X-PWR-LI-AC
humidity	(non-condensing)	(non-condensing)	(non-condensing)	(non-condensing)	(non-condensing)	(non-condensing)
Heat dissipation	Natural heat dissipation without fans	Natural heat dissipation without fans	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment
Physical security	One Kensington lock slot, can be used to lock the device to mouting bracket					

Item	S5720-28X-PWH-LI-AC	S5720-52P-LI-AC	S5720-52P-PWR-LI-AC	S5720-52X-LI-AC S5720-52X-LI-48S-AC	S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-ACF
Fixed ports	16 10/100/1000 Base-T (PoE+), 8 100/1000/2500 Base-T (PoE++), 4 10 Gig SFP+	48 10/100/1000 Base-T, 4 Gig SFP	48 10/100/1000 Base-T (PoE+), 4 Gig SFP	• S5720-52X-LI-AC/DC: 48 10/100/1000 Base-T, 4 10 Gig SFP+ • S5720-52X-LI-48S-AC: 48 Gig SFP, 2 Combo (10/100/1000Base-T or 100/1000Base-X), 4 10 Gig SFP+	48 10/100/1000 Base-T (PoE+), 4 10 Gig SFP+	48 10/100/1000 Base-T (PoE+), 4 10 Gig SFP+
Dimensions (W x D x H)	442 mm x 310 mm x 43.6 mm	442 mm x 220 mm x 43.6 mm	442 mm x 310 mm x 43.6 mm	442 mm x 220 mm x 43.6 mm	442 mm x 310 mm x 43.6 mm	442 mm x 310 mm x 43.6 mm
Chassis height	1 U	1 U	1 U	1 U	1 U	1 U
Input voltage	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz DC:	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz

Item	S5720-28X-PWH-LI-AC	S5720-52P-LI-AC	S5720-52P-PWR-LI-AC	S5720-52X-LI-AC S5720-52X-LI-48S-AC	S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-ACF
				• Rated voltage range: -48-60V DC • Maximum voltage range: -36-72V DC		
Maximum power consumption	• Without PoE power output: 67.3 W • With PoE power output: 473 W (PoE: 360 W)	50.3 W	• Without PoE power output: 63.5 W • With PoE power output: 464.3 W (PoE: 369.6 W)	• S5720-52X-LI-AC: 50.3 W • S5720-52X-LI-48S-AC: 83 W	• Without PoE power output: 63.5 W • With PoE power output: 464.3 W (PoE: 369.6 W)	• Without PoE power output: 52.1 W
Typical power consumption (Without PoE)	51.6 W	31.6 W	42.2 W	• S5720-52X-LI-AC: 31.6 W • S5720-52X-LI-48S-AC: 68 W	42.2 W	42.9 W
Long-term operating temperature	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.
Short-term operating temperature[1]	• 0-1800 m: -5°C to +50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.
Relative	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%

Item	S5720-28X-PWH-LI-AC	S5720-52P-LI-AC	S5720-52P-PWR-LI-AC	S5720-52X-LI-AC S5720-52X-LI-48S-AC	S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-ACF
humidity	(non-condensing)	(non-condensing)	(non-condensing)	(non-condensing)	(non-condensing)	(non-condensing)
Heat dissipation	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment
Physical security	One Kensington lock slot, can be used to lock the device to mouting bracket					

NOTE

1: 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.

Service Features

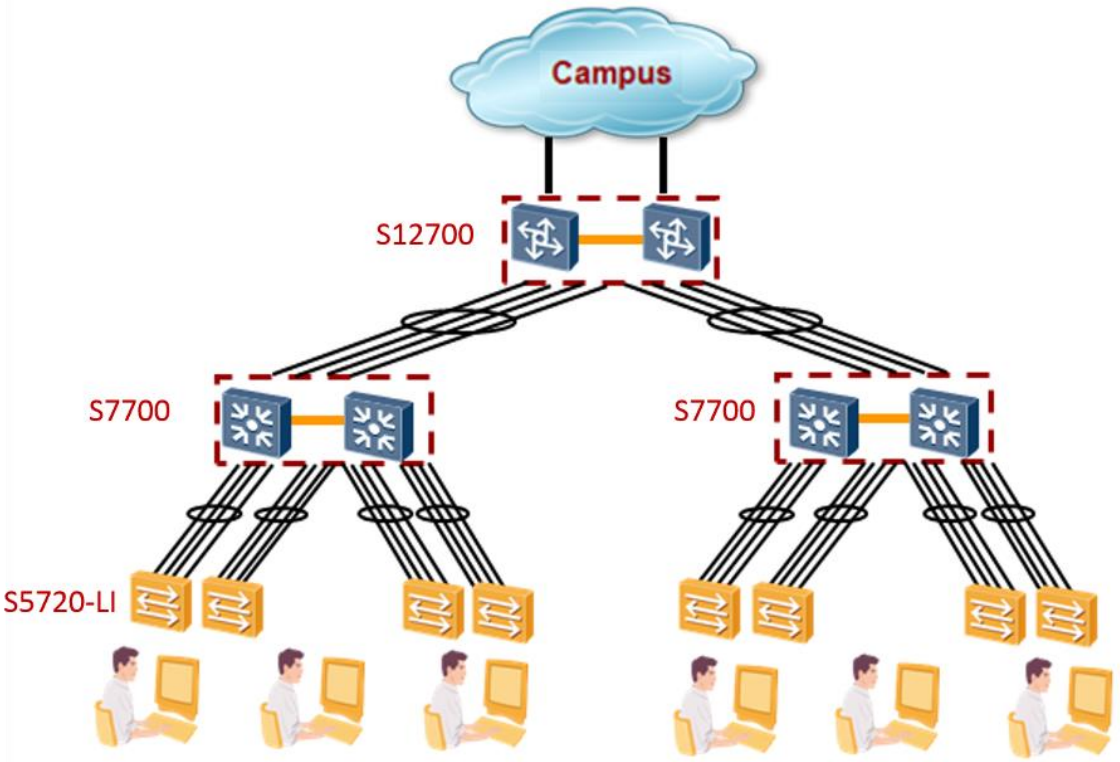
Item	Description
MAC address table	16K MAC address entries
	MAC address learning and aging
	Static, dynamic, and blackhole MAC address entries
	Packet filtering based on source MAC addresses
	Interface-based MAC learning limiting
VLAN features	4K VLANs
	Guest VLAN and voice VLAN
	GVRP
	MUX VLAN
	VLAN assignment based on MAC addresses, protocols, IP subnets, policies, and interfaces
	1: 1 and N: 1 VLAN mapping
Jumbo frame	10K
Ethernet loop protection	RRPP ring topology and RRPP multi-instance
	Smart Link tree topology and Smart Link multi-instance, providing millisecond-level protection switchover
	SEP
	ERPS (G.8032)
	STP (IEEE 802.1d), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s)
	BPDU protection, root protection, and loop protection
	BPDU tunnel

Item	Description
Multicast	PIM DM, PIM SM, PIM SSM
	IGMPv1/v2/v3 and IGMPv1/v2/v3 snooping
	MLD v1/v2 and MLDv1/v2 snooping
	Multicast forwarding in a VLAN and multicast replication between VLANs
	Multicast load balancing among member ports of a trunk
	Controllable multicast
	Interface-based multicast traffic statistics
IP routing	Static route, RIP, RIPng, OSPF, OSPFv3
IPv6 features	Neighbor Discovery (ND)
	Path MTU (PMTU)
	IPv6 ping, IPv6 tracert, and IPv6 Telnet
Reliability	EFM OAM (802.3ah)
	CFM OAM (802.1ag)
	ITU-Y.1731
	DLDP
	LACP
QoS/ACL	Rate limiting on packets sent and received by an interface
	Packet redirection
	Interface-based traffic policing and two-rate and three-color CAR
	Eight queues on each interface
	WRR, DRR, SP, WRR+SP, and DRR+SP queue scheduling algorithms
	Re-marking of the 802.1p priority and DSCP priority
	Packet filtering at Layer 2 to Layer 4, filtering out invalid frames based on the source MAC address, destination MAC address, source IP address, destination IP address, TCP/UDP port number, protocol type, and VLAN ID
	Rate limiting in each queue and traffic shaping on interfaces
Security	Hierarchical user management and password protection
	DoS attack defense, ARP attack defense, and ICMP attack defense
	Binding of the IP address, MAC address, interface number, and VLAN ID
	Port isolation, port security, and sticky MAC
	MFF
	Blackhole MAC address entries
	Limit on the number of learned MAC addresses
	IEEE 802.1x authentication and limit on the number of users on an interface
	AAA authentication, RADIUS authentication, HWTACACS authentication, and NAC

Item	Description
	SSH V2.0
	Hypertext Transfer Protocol Secure (HTTPS)
	CPU defense
	Blacklist and whitelist
	DHCP relay, DHCP server, DHCP snooping
	DHCPv6 relay, DHCPv6 server, DHCPv6 snooping Supports separation between user authentication and policy enforcement points
Lightning protection	Service interface: 7 kV
Super Virtual Fabric (SVF)	Working as an SVF client that is plug-and-play with zero configuration
	Automatically loading the system software package and patches of clients One-click
	and automatic delivery of service configurations
	Supports independent running client
Management and maintenance	iStack
	Virtual Cable Test (VCT)
	Remote configuration and maintenance using Telnet
	SNMPv1/v2c/v3
	RMON
	eSight and web-based NMS
	HTTPS
	LLDP/LLDP-MED
	System logs and multi-level alarms
	802.3az EEE
	Dying Gasp (S5720-X-LI series)
Interoperability	Supports VBST (Compatible with PVST/PVST+/RPVST)
	Supports LNP (Similar to DTP)
	Supports VCMP (Similar to VTP)

Networking and Applications

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



Ordering Information

Model	Product Description
S5720-12TP-LI-AC	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)
S5720-12TP-PWR-LI-AC	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)
S5720-16X-PWH-LI-AC	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)
S5720-28P-LI-AC	S5720-28P-LI-AC (24 Ethernet 10/100/1000 ports, 4 Gig SFP, AC 110/220 V)
S5720-28P-PWR-LI-AC	S5720-28P-PWR-LI-AC (24 Ethernet 10/100/1000 PoE+ ports, 4 Gig SFP, 370 W PoE AC 110/220 V)
S5720-28TP-PWR-LI-ACL	S5720-28TP-PWR-LI-ACL (8 Ethernet 10/100/1000 PoE+ ports, 16 Ethernet 10/100/1000, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, 124 W PoE AC)
S5720-28TP-PWR-LI-AC	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)
S5720-28TP-LI-AC	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)
S5720-28X-LI-AC	S5720-28X-LI-AC (24 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, AC 110/220 V)
S5720-28X-LI-DC	S5720-28X-LI-DC (24 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, DC -48 V)
S5720-28X-LI-24S-AC	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)
S5720-28X-LI-24S-DC	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)

Model	Product Description
S5720-28X-PWR-LI-AC	S5720-28X-PWR-LI-AC (24 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, 370 W PoE AC 110/220 V)
S5720-28X-PWH-LI-AC	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)
S5720-52P-LI-AC	S5720-52P-LI-AC (48 Ethernet 10/100/1000 ports, 4 Gig SFP, AC 110/220 V)
S5720-52X-LI-AC	S5720-52X-LI-AC (48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, AC 110/220 V)
S5720-52P-PWR-LI-AC	S5720-52P-PWR-LI-AC (48 Ethernet 10/100/1000 PoE+ ports, 4 Gig SFP, 370 W PoE AC 110/220 V)
S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-AC (48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, 370 W PoE AC 110/220 V)
S5720-52X-PWR-LI-ACF	S5720-52X-PWR-LI-ACF (48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, 740 W PoE AC 110/220 V)
S5720-52X-LI-48S-AC	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)
RPS1800	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

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