





# S5720-SI Series Standard Gigabit Ethernet Switches










The S5720-SI series switches are standard Layer 3 Gigabit Ethernet switches that provide flexible full gigabit access and cost-effective fixed GE ports and 10GE uplink ports.








## Product Overview

The S5720-SI was developed based on next-generation high-performing hardware and the Huawei Versatile Routing Platform (VRP). The S5720-SI supports simplified operations and maintenance (O&M), intelligent stack (iStack), flexible Ethernet networking, and MACsec. It also provides enhanced Layer 3 features and mature IPv6 features. The S5720-SI can be used in various scenarios. For example, it can be used as an access or aggregation switch on a campus network or as an access switch in a data center.

## Models and Appearances

Models and Appearances	Description
 S5720-28P-SI-AC	<ul style="list-style-type: none"> <li>• 24 Ethernet 10/100/1000 ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 Gig SFP</li> <li>• Dual pluggable AC or DC power supplies, one AC power supply equipped by default</li> <li>• Forwarding performance: 42 Mpps</li> <li>• Switching capacity: 336 Gbit/s</li> </ul>
 S5720-28X-SI-AC	<ul style="list-style-type: none"> <li>• 24 Ethernet 10/100/1000 ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+</li> <li>• Dual pluggable AC or DC power supplies, one AC power supply equipped by default</li> <li>• Forwarding performance: 96 Mpps</li> <li>• Switching capacity: 336 Gbit/s</li> </ul>
 S5720-28X-SI-DC	<ul style="list-style-type: none"> <li>• 24 Ethernet 10/100/1000 ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+</li> <li>• Dual pluggable AC or DC power supplies, one DC power supply equipped by default</li> <li>• Forwarding performance: 96 Mpps</li> <li>• Switching capacity: 336 Gbit/s</li> </ul>
	<ul style="list-style-type: none"> <li>• 24 Ethernet 10/100/1000 PoE+ ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+</li> <li>• Dual pluggable AC or DC power supplies, one 500 W AC power supply</li> </ul>

Models and Appearances	Description
<p style="text-align: center;">S5720-28X-PWR-SI-AC</p> 	<p>equipped by default</p> <ul style="list-style-type: none"> <li>• PoE+</li> <li>• Forwarding performance: 96Mpps</li> <li>• Switching capacity: 336 Gbit/s</li> </ul>
 <p style="text-align: center;">S5720-28X-PWR-SI-DC</p>	<ul style="list-style-type: none"> <li>• 24 Ethernet 10/100/1000 PoE+ ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+</li> <li>• Dual pluggable AC or DC power supplies, one 650 W DC power supply equipped by default</li> <li>• PoE+</li> <li>• Forwarding performance: 96Mpps</li> <li>• Switching capacity: 336 Gbit/s</li> </ul>
 <p style="text-align: center;">S5720-28X-SI-24S-AC</p>	<ul style="list-style-type: none"> <li>• 24 Gig SFP, 8 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+</li> <li>• AC power supply, supporting RPS</li> <li>• Forwarding performance: 96 Mpps</li> <li>• Switching capacity: 336 Gbit/s</li> </ul>
 <p style="text-align: center;">S5720-28X-SI-24S-DC</p>	<ul style="list-style-type: none"> <li>• 24 Gig SFP, 8 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+</li> <li>• DC power supply, supporting RPS</li> <li>• Forwarding performance: 96 Mpps</li> <li>• Switching capacity: 336 Gbit/s</li> </ul>
 <p style="text-align: center;">S5721-28X-SI-24S-AC</p>	<ul style="list-style-type: none"> <li>• 24 Gig SFP, 8 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+</li> <li>• Dual pluggable AC or DC power supplies, one 60 W AC power supply equipped by default</li> <li>• Forwarding performance: 96 Mpps</li> <li>• Switching capacity: 336 Gbit/s</li> </ul>
 <p style="text-align: center;">S5720-52P-SI-AC</p>	<ul style="list-style-type: none"> <li>• 48 Ethernet 10/100/1000 ports, 4 Gig SFP</li> <li>• Dual pluggable AC or DC power supplies, one AC power supply equipped by default</li> <li>• Forwarding performance: 78 Mpps</li> <li>• Switching capacity: 336 Gbit/s</li> </ul>
 <p style="text-align: center;">S5720-52X-SI-AC</p>	<ul style="list-style-type: none"> <li>• 48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+</li> <li>• Dual pluggable AC or DC power supplies, one AC power supply equipped by default</li> <li>• Forwarding performance: 132 Mpps</li> <li>• Switching capacity: 336 Gbit/s</li> </ul>
 <p style="text-align: center;">S5720-52X-SI-DC</p>	<ul style="list-style-type: none"> <li>• 48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+</li> <li>• Dual pluggable AC or DC power supplies, one DC power supply equipped by default</li> <li>• Forwarding performance: 132 Mpps</li> <li>• Switching capacity: 336 Gbit/s</li> </ul>
	<ul style="list-style-type: none"> <li>• 48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+</li> <li>• Dual pluggable AC or DC power supplies, one 500 W AC power supply equipped by default</li> </ul>

Models and Appearances	Description
S5720-52X-PWR-SI-AC	<ul style="list-style-type: none"> <li>PoE+</li> <li>Forwarding performance: 132 Mpps</li> <li>Switching capacity: 336 Gbit/s</li> </ul>
 S5720-52X-PWR-SI-DC	<ul style="list-style-type: none"> <li>48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+</li> <li>Dual pluggable AC or DC power supplies, one 650 W DC power supply equipped by default</li> <li>PoE+</li> <li>Forwarding performance: 132 Mpps</li> <li>Switching capacity: 336 Gbit/s</li> </ul>
 S5720-52X-PWR-SI-ACF	<ul style="list-style-type: none"> <li>48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+</li> <li>Dual pluggable AC power supplies, one 1150 W AC power supply equipped by default</li> <li>PoE+</li> <li>Forwarding performance: 132 Mpps</li> <li>Switching capacity: 336 Gbit/s</li> </ul>
 S5720S-28P-SI-AC	<ul style="list-style-type: none"> <li>24 Ethernet 10/100/1000 ports, 4 Gig SFP</li> <li>AC power supply, supporting RPS</li> <li>Forwarding performance: 42 Mpps</li> <li>Switching capacity: 336 Gbit/s</li> </ul>
 S5720S-28X-SI-AC	<ul style="list-style-type: none"> <li>24 Ethernet 10/100/1000 ports, 4 10 Gig SFP+</li> <li>AC power supply, supporting RPS</li> <li>Forwarding performance: 96Mpps</li> <li>Switching capacity: 336 Gbit/s</li> </ul>
 S5720S-52P-SI-AC	<ul style="list-style-type: none"> <li>48 Ethernet 10/100/1000 ports, 4 Gig SFP</li> <li>AC power supply, supporting RPS</li> <li>Forwarding performance: 78 Mpps</li> <li>Switching capacity: 336 Gbit/s</li> </ul>
 S5720S-52X-SI-AC	<ul style="list-style-type: none"> <li>48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+</li> <li>AC power supply, supporting RPS</li> <li>Forwarding performance: 132 Mpps</li> <li>Switching capacity: 336 Gbit/s</li> </ul>
 S5720-52X-SI-48S	<ul style="list-style-type: none"> <li>48 Gig SFP, 2 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+</li> <li>Dual pluggable AC or DC power supplies</li> <li>Forwarding performance: 132 Mpps</li> <li>Switching capacity: 336 Gbit/s</li> </ul>

## Features and Highlights

### Powerful Service Processing Capability and Multiple Security Control Mechanisms

- The S5720-SI supports many Layer 2/Layer 3 multicast protocols such as PIM SM, PIM DM, PIM SSM, MLD, and IGMP snooping, to support multi-terminal high-definition video surveillance and video conferencing services.

- The S5720-SI supports multiple Layer 3 features including OSPF, IS-IS, BGP, and VRRP, meeting enterprises' requirements on access and aggregation service bearing, and enabling a variety of voice, video, and data applications.
- The S5720-SI supports MAC address authentication, 802.1x authentication, and Portal authentication, and implements dynamic delivery of policies (VLAN, QoS, and ACL) to users.
- The S5720-SI 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-SI sets up and maintains a DHCP snooping binding table, and discards the packets that do not match the table entries. You can specify DHCP snooping trusted and untrusted ports to ensure that users connect only to the authorized DHCP server.
- The S5720-SI supports strict ARP learning, which protects a network against ARP spoofing attacks to ensure normal network access.

## Easy O&M

- The S5720-SI supports Super Virtual Fabric (SVF), which virtualizes the "Core/aggregation + Access switch + AP" structure into a logical device. The S5720-SI provides the innovative network management solution in the industry to simplify device management. It allows plug-and-play access switches and APs. In addition, the S5720-SI supports service configuration templates. The templates are configured on core devices and automatically delivered to access devices, enabling centralized control, simplified service configuration, and flexible configuration modification. The S5720-SI functions as a client in an SVF system.
- The S5720-SI supports zero-touch deployment, replacement of faulty devices without additional configuration, USB-based deployment, batch configuration, and batch remote upgrade. The capabilities facilitate device deployment, upgrade, service provisioning, and other management and maintenance operations, and also greatly reduce O&M costs. The S5720-SI can be managed using SNMP v1/v2c/v3, CLI, web-based network management system, or SSH v2.0. Additionally, it supports RMON, multiple log hosts, port traffic statistics collection, and network quality analysis, which facilitate network optimization and reconstruction.
- The S5720-SI supports the Sampled Flow (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.

## Intelligent O&M

- The S5720-SI 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-SI supports a variety of intelligent O&M features for audio and video services, including the enhanced Media Delivery Index (eMDI). With this eMDI 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.

## Multiple Reliability Mechanisms

- The S5720-SI supports iStack. This technology can virtualize up to nine physical switches into one logical switch. Downlink electrical ports support iStack. 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 a stack's ports, bandwidth, and processing capacity by simply adding member switches. 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-SI is equipped with two removable power modules that can work in 1+1 redundancy backup mode. Mixed installation of AC and DC power modules is supported, allowing for flexible configuration of AC or DC power modules according to service requirements.
- In addition to traditional STP, RSTP, and MSTP, the S5720-SI 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 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-SI supports Smart Link. One S5720-SI switch can connect to multiple aggregation switches through multiple links, implementing backup of uplinks and significantly improving reliability of access devices.
- The S5720-SI supports Ethernet OAM (IEEE 802.3ah/802.1ag) to detect link faults quickly.

## Mature IPv6 Technologies

- The S5720-SI uses the mature, stable VRP platform and supports IPv4/IPv6 dual stack, IPv6 RIPng, and IPv6 over IPv4 tunnels (including manual, 6-to-4, and ISATAP tunnels). With these IPv6 features, the S5720-SI can be deployed on a pure IPv4 network, a pure IPv6 network, or a shared IPv4/IPv6 network, helping achieve IPv4-to-IPv6 transition.

## 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)

- 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.

## Perpetual PoE

- 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.

## Product Specifications

Item	S5720-28P-SI-AC	S5720-28X-SI-AC S5720-28X-SI-DC	S5720-28X-PWR-SI-AC S5720-28X-PWR-SI-DC	S5720-28X-SI-24S-AC S5720-28X-SI-24S-DC S5721-28X-SI-24S-AC	S5721-28X-SI-24S-AC
Fixed ports	24 10/100/1000Base-T, 4 Combo (10/100/1000Base-T or 100/1000Base-X), 4 Gig SFP	24 10/100/1000Base-T, 4 Combo (10/100/1000Base-T or 100/1000Base-X), 4 10 Gig SFP+	24 10/100/1000Base-T, 4 Combo (10/100/1000Base-T or 100/1000Base-X), 4 10 Gig SFP+	24 Gig SFP, 8 Combo (10/100/1000Base-T or 100/1000Base-X), 4 10 Gig SFP+	24 Gig SFP, 8 Combo (10/100/1000Base-T or 100/1000Base-X), 4 10 Gig SFP+
Dimensions (W x D x H)	442 mm × 420 mm × 44.4 mm	442 mm × 420 mm × 44.4 mm	442 mm × 420 mm × 44.4 mm	442 mm × 220 mm × 43.6 mm	442 mm × 420 mm × 44.4 mm
Input voltage	AC: ● Rated AC voltage: 100-	AC: ● Rated AC voltage: 100-	AC: ● Rated AC voltage: 100-	AC: ● Rated AC voltage: 100-	AC: ● Rated AC voltage: 100-

Item	S5720-28P-SI-AC	S5720-28X-SI-AC S5720-28X-SI-DC	S5720-28X-PWR-SI-AC S5720-28X-PWR-SI-DC	S5720-28X-SI-24S-AC S5720-28X-SI-24S-DC S5721-28X-SI-24S-AC	S5721-28X-SI-24S-AC
	240V AC; 50/60Hz <ul style="list-style-type: none"> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul> DC: <ul style="list-style-type: none"> <li>Rated DC power: -48- -60V DC</li> <li>Max DC voltage: -36- -72V DC</li> </ul>	240V AC; 50/60Hz <ul style="list-style-type: none"> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul> DC: <ul style="list-style-type: none"> <li>Rated DC power: -48- -60V DC</li> <li>Max DC voltage: -36- -72V DC</li> </ul>	240V AC; 50/60Hz <ul style="list-style-type: none"> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul> DC: <ul style="list-style-type: none"> <li>Rated DC power: -48- -60V DC</li> <li>Max DC voltage: -36- -72V DC</li> </ul>	240V AC; 50/60Hz <ul style="list-style-type: none"> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul> DC: <ul style="list-style-type: none"> <li>Rated DC power: -48- -60V DC</li> <li>Max DC voltage: -36- -72V DC</li> </ul>	240V AC; 50/60Hz <ul style="list-style-type: none"> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul> DC: <ul style="list-style-type: none"> <li>Rated DC power: -48- -60V DC</li> <li>Max DC voltage: -36- -72V DC</li> </ul>
Maximum power consumption	34.6 W	<ul style="list-style-type: none"> <li>S5720-28X-SI-AC: 37.5 W</li> <li>S5720-28X-SI-DC: 36.9 W</li> </ul>	<ul style="list-style-type: none"> <li>Without PoE output: 56.1 W/56.3 W</li> <li>With PoE output: 913 W/887 W (PoE: 740 W)</li> </ul>	<ul style="list-style-type: none"> <li>S5720-28X-SI-24S-AC: 41.7 W</li> <li>S5720-28X-SI-24S-DC: 42.7 W</li> </ul>	41 W
Typical power consumption (Without PoE)	21.2 W	<ul style="list-style-type: none"> <li>S5720-28X-SI-AC: 22.3 W</li> <li>S5720-28X-SI-DC: 22.5 W</li> </ul>	<ul style="list-style-type: none"> <li>S5720-28X-PWR-SI-AC: 31.8 W</li> <li>S5720-28X-PWR-SI-DC: 32.6 W</li> </ul>	<ul style="list-style-type: none"> <li>S5720-28X-SI-24S-AC: 28.9 W</li> <li>S5720-28X-SI-24S-DC: 30.3 W</li> </ul>	34.5 W
Long-term operating temperature	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>
Short-term operating temperature <sup>1</sup>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude</li> </ul>

Item	S5720-28P-SI-AC	S5720-28X-SI-AC S5720-28X-SI-DC	S5720-28X-PWR-SI-AC S5720-28X-PWR-SI-DC	S5720-28X-SI-24S-AC S5720-28X-SI-24S-DC S5721-28X-SI-24S-AC	S5721-28X-SI-24S-AC
	increases by 220 m.	increases by 220 m.	increases by 220 m.	increases by 220 m.	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	Heat dissipation using fans supporting intelligent speed adjustment	Heat dissipation using fans supporting intelligent speed adjustment	Heat dissipation using fans supporting intelligent speed adjustment	Heat dissipation using fans supporting intelligent speed adjustment	Heat dissipation using fans supporting intelligent speed adjustment
Surge Protection	Surge protection capability of service ports: $\pm 6$ kV	Surge protection capability of service ports: $\pm 6$ kV	Surge protection capability of service ports: $\pm 6$ kV	Surge protection capability of service ports: $\pm 6$ kV	Surge protection capability of service ports: $\pm 7$ kV

Item	S5720-52P-SI-AC	S5720-52X-SI-AC S5720-52X-SI-DC	S5720-52X-PWR-SI-AC S5720-52X-PWR-SI-DC	S5720-52X-PWR-SI-ACF	S5720-52X-SI-48S
Fixed ports	48 10/100/1000Base-T ports, 4 GE SFP ports	48 10/100/1000Base-T ports, 4 10GE SFP+ ports	48 10/100/1000Base-T ports, 4 10GE SFP+ ports	48 10/100/1000Base-T ports, 4 10GE SFP+ ports	48 GE SFP ports, 2 combo 10/100/1000Base-T Ethernet ports, 4 10GE SFP+ ports
Dimensions (W x D x H)	442 mm x 420 mm x 44.4 mm	442 mm x 420 mm x 44.4 mm	442 mm x 420 mm x 44.4 mm	442 mm x 507 mm x 44.4 mm	442 mm x 420 mm x 44.4 mm
Input voltage	AC: <ul style="list-style-type: none"> <li>Rated AC voltage: 100-240V AC; 50/60Hz</li> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul> DC: <ul style="list-style-type: none"> <li>Rated DC power: -48- -60V DC</li> <li>Max DC voltage: -36- -72V DC</li> </ul>	AC: <ul style="list-style-type: none"> <li>Rated AC voltage: 100-240V AC; 50/60Hz</li> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul> DC: <ul style="list-style-type: none"> <li>Rated DC power: -48- -60V DC</li> <li>Max DC voltage: -36- -72V DC</li> </ul>	AC: <ul style="list-style-type: none"> <li>Rated AC voltage: 100-240V AC; 50/60Hz</li> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul> DC: <ul style="list-style-type: none"> <li>Rated DC power: -48- -60V DC</li> <li>Max DC voltage: -36- -72V DC</li> </ul>	AC: <ul style="list-style-type: none"> <li>Rated AC voltage: 100-240V AC; 50/60Hz</li> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul> DC: <ul style="list-style-type: none"> <li>Rated DC power: -48- -60V DC</li> <li>Max DC voltage: -36- -72V DC</li> </ul>	AC: <ul style="list-style-type: none"> <li>Rated AC voltage: 100-240V AC; 50/60Hz</li> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul> DC: <ul style="list-style-type: none"> <li>Rated DC power: -48- -60V DC</li> <li>Max DC voltage: -36- -72V DC</li> </ul>
Maximum power consumption	53.6 W	<ul style="list-style-type: none"> <li>S5720-52X-SI-AC: 56.8 W</li> <li>S5720-52X-SI-</li> </ul>	<ul style="list-style-type: none"> <li>Without PoE output: 93.1 W</li> <li>With PoE</li> </ul>	<ul style="list-style-type: none"> <li>Without PoE output: 94.8 W</li> <li>With PoE</li> </ul>	85.4 W

Item	S5720-52P-SI-AC	S5720-52X-SI-AC S5720-52X-SI-DC	S5720-52X-PWR-SI-AC S5720-52X-PWR-SI-DC	S5720-52X-PWR-SI-ACF	S5720-52X-SI-48S
		DC: 57.9 W	output: 943.2 W (PoE: 740 W)	output: 1631.5 W (PoE: 1440 W)	
Typical power consumption (Without PoE)	32.2 W	<ul style="list-style-type: none"> <li>S5720-52X-SI-AC: 33.8 W</li> <li>S5720-52X-SI-DC: 34 W</li> </ul>	51 W	57 W	66.5 W
Long-term operating temperature	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>
Short-term operating temperature <sup>1</sup>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>
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	Heat dissipation using fans supporting intelligent speed adjustment	Heat dissipation using fans supporting intelligent speed adjustment	Heat dissipation using fans supporting intelligent speed adjustment	Heat dissipation using fans supporting intelligent speed adjustment	Heat dissipation using fans supporting intelligent speed adjustment
Surge Protection	Surge protection capability of service ports: ±6 kV	Surge protection capability of service ports: ±6 kV	Surge protection capability of service ports: ±6 kV	Surge protection capability of service ports: ±6 kV	Surge protection capability of service ports: ±7 kV

Item	S5720S-28P-SI-AC	S5720S-28X-SI-AC	S5720S-52P-SI-AC	S5720S-52X-SI-AC
Fixed ports	24 10/100/1000Base-T, 4 Gig SFP	24 10/100/1000Base-T, 4 10 Gig SFP+	48 10/100/1000Base-T, 4 Gig SFP	48 10/100/1000Base-T, 4 10 Gig SFP+
Dimensions (W)	442 mm x 220 mm x	442 mm x 220 mm x	442 mm x 220 mm x	442 mm x 220 mm x



Item	S5720S-28P-SI-AC	S5720S-28X-SI-AC	S5720S-52P-SI-AC	S5720S-52X-SI-AC
x D x H)	43.6 mm	43.6 mm	43.6 mm	43.6 mm
Input voltage	AC: <ul style="list-style-type: none"> <li>Rated AC voltage: 100-240V AC; 50/60Hz</li> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul>	AC: <ul style="list-style-type: none"> <li>Rated AC voltage: 100-240V AC; 50/60Hz</li> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul>	AC: <ul style="list-style-type: none"> <li>Rated AC voltage: 100-240V AC; 50/60Hz</li> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul>	AC: <ul style="list-style-type: none"> <li>Rated AC voltage: 100-240V AC; 50/60Hz</li> <li>Max AC voltage: 90-264V AC; 47-63Hz</li> </ul>
Maximum power consumption	29.1 W	<ul style="list-style-type: none"> <li>S5720S-28X-SI-AC: 32 W</li> <li>S5720S-28X-SI-DC: 33 W</li> </ul>	51.5 W	<ul style="list-style-type: none"> <li>S5720S-52X-SI-AC: 54.7 W</li> <li>S5720S-52X-SI-DC: 59.7 W</li> </ul>
Typical power consumption (Without PoE)	20.2 W	<ul style="list-style-type: none"> <li>S5720S-28X-SI-AC: 22 W</li> <li>S5720S-28X-SI-DC: 21.9 W</li> </ul>	33 W	<ul style="list-style-type: none"> <li>S5720S-52X-SI-AC: 34.4 W</li> <li>S5720S-52X-SI-DC: 35.5 W</li> </ul>
Long-term operating temperature	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: 0°C to 45°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>
Short-term operating temperature <sup>1</sup>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>	<ul style="list-style-type: none"> <li>0 -1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul>
Relative humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Heat dissipation	Heat dissipation using fans	Heat dissipation using fans	Heat dissipation using fans supporting intelligent speed adjustment	Heat dissipation using fans supporting intelligent speed adjustment
Surge Protection	Surge protection capability of service ports: ±6 kV	Surge protection capability of service ports: ±6 kV	Surge protection capability of service ports: ±6 kV	Surge protection capability of service ports: ±6 kV

 **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	IEEE 802.1d compliance
	MAC address learning and aging
	Static, dynamic, and blackhole MAC address entries
	Packet filtering based on source MAC addresses
VLAN	4K VLANs
	Guest VLAN and voice VLAN
	GVRP
	MUX VLAN
	VLAN assignment based on MAC addresses, protocols, IP subnets, policies, and ports
	1: 1 and N: 1 VLAN mapping
Reliability	RRPP ring topology and RRPP multi-instance
	Smart Link tree topology and Smart Link multi-instance, providing millisecond-level protection switchover
	SEP
	STP (IEEE 802.1d), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s)
	ERPS (G.8032)
	BPDU protection, root protection, and loop protection
IP routing	Static route, RIPv1/v2, RIPng, OSPF, OSPFv3, ECMP, IS-IS, IS-ISv6, BGP, BGP4+, VRRP, and VRRP6
IPv6 features	Neighbor Discovery (ND)
	Path MTU (PMTU)
	IPv6 ping, IPv6 tracer, and IPv6 Telnet
	6to4 tunnel, ISATAP tunnel, and manually configured tunnel
Multicast	PIM DM, PIM SM, PIM SSM
	IGMP v1/v2/v3, IGMP v1/v2/v3 snooping and IGMP fast leave
	MLD v1/v2 and MLD v1/v2 snooping
	Multicast forwarding in a VLAN and multicast replication between VLANs
	Multicast load balancing among member ports of a trunk
	Controllable multicast
	Port-based multicast traffic statistics
QoS/ACL	Rate limiting on packets sent and received by a port
	Packet redirection
	Port-based traffic policing and two-rate three-color CAR

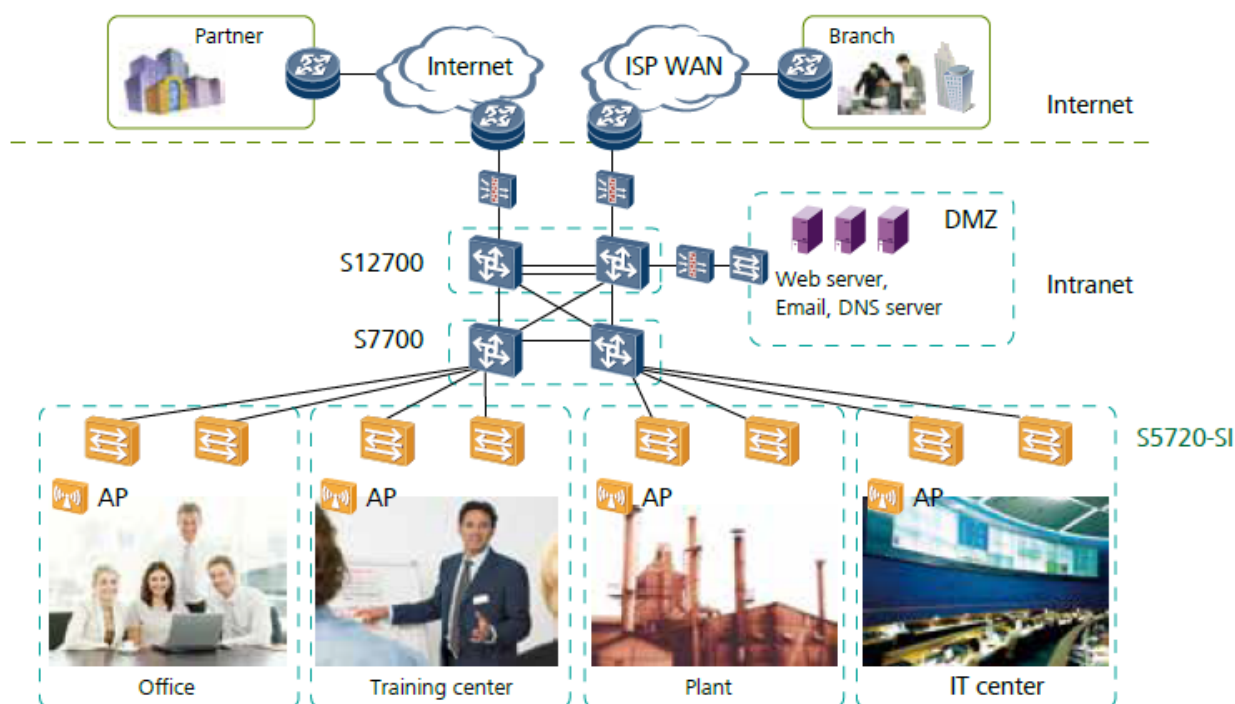
Item	Description
	Eight queues on each port
	WRR, DRR, SP, WRR+SP, and DRR+SP queue scheduling algorithms
	Re-marking of the 802.1p priority and DSCP priority
	Packet filtering at Layer 2 to Layer 4, filtering out invalid frames based on the source MAC address, destination MAC address, source IP address, destination IP address, TCP/UDP port number, protocol type, and VLAN ID
	Rate limiting in each queue and traffic shaping on ports
Security	Hierarchical user management and password protection
	DoS attack defense, ARP attack defense, and ICMP attack defense
	Binding of the IP address, MAC address, port 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 a port
	AAA authentication, RADIUS authentication, HWTACACS authentication, and NAC
	SSH v2.0
	HTTPS
	CPU defense
	Blacklist and whitelist
	IEEE 802.1x authentication, MAC address authentication, and Portal authentication
	DHCPv4/v6 client/relay/server/snooping
Attack source tracing and punishment for IPv6 packets such as ND, DHCPv6, and MLD packets Supports separation between user authentication and policy enforcement points IPSec	
SVF	Plug-and-play SVF client
	Automatic software and patch loading to clients
	One-click and automatic delivery of service configurations
	Independent client running
OAM	Software OAM:
	EFM OAM
	CFM OAM
	Y.1731 performance test
Management and maintenance	iStack (using service ports as stack ports)
	Virtual cable test
	SNMP v1/v2c/v3

Item	Description
	RMON
	Web-based NMS
	System logs and alarms of different levels
	802.3az EEE
	sFlow
Interoperability	Supports VBST (Compatible with PVST/PVST+/RPVST)
	Supports LNP (Similar to DTP)
	Supports VCMP (Similar to VTP)

## Networking and Applications

### Large-sized Enterprise Networks

The S5720-SI can function as an access device on a large-sized or medium-sized enterprise network or an aggregation device on a small-sized campus network. It supports link aggregation and dual-homing to improve network reliability.



## Ordering Information

The following table lists ordering information of the S5720-SI series switches.

Model	Product Description
S5720-28P-SI-AC	S5720-28P-SI bundle (24 Ethernet 10/100/1000 ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 Gig SFP, with 60 W AC power supply)
S5720-28X-SI-AC	S5720-28X-SI bundle (24 Ethernet 10/100/1000 ports, 4 of which are dual-purpose 10/100/1000 or

Model	Product Description
	SFP, 4 10 Gig SFP+, with 60 W AC power supply)
S5720-28X-SI-DC	S5720-28X-SI bundle (24 Ethernet 10/100/1000 ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, with 150 W DC power supply)
S5720-28X-SI-24S-AC	S5720-28X-SI-24S bundle (24 Gig SFP, 8 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, with 150 W AC power supply)
S5720-28X-SI-24S-DC	S5720-28X-SI-24S bundle (24 Gig SFP, 8 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, with 150 W DC power supply)
S5720-28X-PWR-SI-AC	S5720-28X-PWR-SI bundle (24 Ethernet 10/100/1000 PoE+ ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, with 500 W AC power)
S5720-28X-PWR-SI-DC	S5720-28X-PWR-SI bundle (24 Ethernet 10/100/1000 PoE+ ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, with 650 W DC power)
S5721-28X-SI-24S-AC	S5721-28X-SI-24S bundle (24 Gig SFP, 8 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, with 60 W AC power)
S5720-52P-SI-AC	S5720-52P-SI bundle (48 Ethernet 10/100/1000 ports, 4 Gig SFP, with 60 W AC power supply)
S5720-52X-SI-AC	S5720-52X-SI bundle (48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, with 60 W AC power supply)
S5720-52X-SI-DC	S5720-52X-SI bundle (48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, with 150 W DC power supply)
S5720-52X-PWR-SI-AC	S5720-52X-PWR-SI bundle (48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, with 500 W AC power)
S5720-52X-PWR-SI-DC	S5720-52X-PWR-SI bundle (48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, with 650 W DC power)
S5720-52X-PWR-SI-ACF	S5720-52X-PWR-SI bundle (48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, with 1150 W AC power supply)
S5720S-28P-SI-AC	S5720S-28P-SI-AC(24 Ethernet 10/100/1000 ports, 4 Gig SFP, AC 110/220 V)
S5720S-28X-SI-AC	S5720S-28X-SI-AC(24 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, AC 110/220 V)
S5720S-52P-SI-AC	S5720S-52P-SI-AC(48 Ethernet 10/100/1000 ports, 4 Gig SFP, AC 110/220 V)
S5720S-52X-SI-AC	S5720S-52X-SI-AC(48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, AC 110/220 V)
S5720-52X-SI-48S	S5720-52X-SI-48S(48 Gig SFP, 2 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+)
PAC-60WA-L	60 W AC Power Module
ES0W2PSA0150	150 W AC Power Module (Black)
ES0W2PSD0150	150 W DC Power Module (Black)
PAC1000D5412	1000 W AC PoE Power Module
PAC-500WA-BE	500 W AC PoE Power Module (Black, Power panel side exhaust)
PDC-650WA-BE	650 W DC PoE Power Module (Black, Power panel side exhaust)
W2PSA1150	1150 W AC PoE Power Module
RPS1800	RPS1800 Redundant Power Supply (6 DC Output Ports, 12 V Total Output Power 140 W, 48 V Total Output Power 1600 W)

# 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](mailto:support_e@huawei.com)

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

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

Website: [e.huawei.com](http://e.huawei.com)