S5720-EI Datasheet (Detailed Version)

HUAWEI TECHNOLOGIES CO., LTD.

HUAWEI

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1 Introduction

Huawei S5720 series Ethernet switches (S5720 for short) are next-generation energy-saving Gigabit Ethernet switches that function as the access devices to deliver high bandwidth or aggregation device for Ethernet multi-service networks. Built on next-generation high-performance processors and Huawei Versatile Routing Platform (VRP), the S5720 is available in four series: LI, SI, EI, and HI.

The S5720-EI series enhanced gigabit Ethernet switches (S5720-EI for short) are next-generation switches that provide flexible GE access ports (including optical, electrical, and combo ports) and 10GE uplink ports. Built on next-generation high-performing processors and the Huawei Versatile Routing Platform (VRP), the S5720-EI provides larger table sizes and higher hardware processing capabilities than equivalent switches. Besides, it provides wireless AC functions, comprehensive service processing capabilities, enhanced security control, and mature IPv6 features, and supports MACsec, intelligent stack (iStack), flexible Ethernet networking, and easy operations and maintenance (O&M). With all these advantages, the S5720-EI is widely used for access/aggregation in enterprise campus networks or gigabit access in data center networks.

2 Product Overview

2.1 Models and Appearance

S5720-32P-EI-AC

- 24 Ethernet 10/100/1000 ports, 4 100/1000 SFP, 4 Gig SFP, 2 QSFP+
- AC power supply, supporting Redundant Power Supply (RPS), power socket on the front panel
- Forwarding performance: 48 Mpps
- Switching capacity: 598 Gbit/s

S5720-32X-EI-AC
S5720-32X-EI-DC

- 24 Ethernet 10/100/1000 ports, 4 100/1000 SFP, 4 10 Gig SFP+, 2 QSFP+
- AC or DC power supply, supporting RPS, power socket on the front panel
- Forwarding performance: 102 Mpps
- Switching capacity: 598 Gbit/s

S5720-32X-EI-24S-AC
S5720-32X-EI-24S-DC

- 24 Gig SFP, 4 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, 2 QSFP+
- AC or DC power supply, supporting RPS, power socket on the front panel
- Forwarding performance: 102 Mpps
- Switching capacity: 598 Gbit/s

S5720-36C-EI-28S-AC
S5720-36C-EI-28S-DC

- 28 Gig SFP, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+
- One extended slot
- Double hot swappable AC or DC power supplies, one AC or DC power module equipped by default
- Forwarding performance: 132 Mpps
- Switching capacity: 598 Gbit/s

S5720-36C-EI-AC
S5720-36C-EI-DC

- 28 Ethernet 10/100/1000 ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+
- One extended slot
- Double hot swappable AC or DC power supplies, one AC or DC power module equipped by default
- Forwarding performance: 132 Mpps
- Switching capacity: 598 Gbit/s

S5720-36C-PWR-EI-AC
S5720-36C-PWR-EI-DC

- 28 Ethernet 10/100/1000 PoE+ ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+
- One extended slot
- PoE+
- Double hot swappable AC or DC power supplies, one AC or DC power module equipped by default
- Forwarding performance: 132 Mpps
- Switching capacity: 598 Gbit/s

S5720-36PC-EI-AC

- 28 Ethernet 10/100/1000 ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 Gig SFP
- One extended slot
- Double hot swappable AC or DC power supplies, one AC power module equipped by default
- Forwarding performance: 78 Mpps
- Switching capacity: 598 Gbit/s

S5720-50X-EI-AC
S5720-50X-EI-DC

- 46 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, 2 QSFP+
- AC or DC power supply, supporting RPS, power socket on the front panel
- Forwarding performance: 129 Mpps
- Switching capacity: 598 Gbit/s

S5720-50X-EI-46S-AC
S5720-50X-EI-46S-DC

- 46 Gig SFP, 4 10 Gig SFP+, 2 QSFP+
- AC or DC power supply, supporting RPS, power socket on the front panel
- Forwarding performance: 129 Mpps
- Switching capacity: 598 Gbit/s

S5720-52X-EI-AC

- 48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, 2 QSFP+
- AC power supply, supporting RPS
- Forwarding performance: 132 Mpps
- Switching capacity: 598 Gbit/s

S5720-52P-EI-AC

- 48 Ethernet 10/100/1000 ports, 4 Gig SFP, 2 QSFP+
- AC power supply, supporting RPS
- Forwarding performance: 78 Mpps
- Switching capacity: 598 Gbit/s

S5720-56C-EI-48S-AC
S5720-56C-EI-48S-DC

- 48 Gig SFP, 4 10 Gig SFP+
- One extended slot
- Double hot swappable AC or DC power supplies, one AC or DC power module equipped by default
- Forwarding performance: 162 Mpps
- Switching capacity: 598 Gbit/s

S5720-56C-EI-AC
S5720-56C-EI-DC

- 48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+
- One extended slot
- Double hot swappable AC or DC power supplies, one AC or DC power module equipped by default
- Forwarding performance: 162 Mpps
- Switching capacity: 598 Gbit/s

S5720-56C-PWR-EI-AC
S5720-56C-PWR-EI-AC1
S5720-56C-PWR-EI-DC

- 48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+
- One extended slot
- PoE+
- Double hot swappable AC or DC power supplies, one AC or DC power module equipped by default
- Forwarding performance: 162 Mpps
- Switching capacity: 598 Gbit/s

S5720-56PC-EI-AC

- 48 Ethernet 10/100/1000 ports, 4 Gig SFP
- One extended slot
- Double hot swappable AC or DC power supplies, one AC power module equipped by default
- Forwarding performance: 108 Mpps
- Switching capacity: 598 Gbit/s

2.2 Subcard Types

The S5720-EI provides four 10GE SFP+ ports (X series) or four 1000BASE-X ports (P series) for upstream connections. Other, The S5720-EI (C series and PC series) privates one extended slot that supports an uplink interface card or privates stack card,Supports two 10GE SFP+ ports or two 10GE RJ45.

2.3 Fan Tray

The S5720-EI has a built-in heat dissipation system. Customers do not need to purchase fan trays.

3 Power Supply

Table 3-1 lists the power supplies on the S5720-EI.

Table 3-1 S5720-EI power supplies

Power Model	Name	Applied Switch Model (S5720-EI)
ES0W2PSA0150	150 W AC	S5720-36C-EI-AC、S5720-36C-EI-DC、S5720-56C-EI-AC、S5720-56C-EI-DC、S5720-36C-EI-28S-AC、S5720-36C-EI-28S-DC、S5720-56C-EI-48S-AC、S5720-56C-EI-48S-DC、S5720-36PC-EI-AC、S5720-56PC-EI-AC
ES0W2PSD0150	150 W DC	S5720-36C-EI-AC、S5720-36C-EI-DC、S5720-56C-EI-AC、S5720-56C-EI-DC、S5720-36C-EI-28S-AC、S5720-36C-EI-28S-DC、S5720-56C-EI-48S-AC、S5720-56C-EI-48S-DC、S5720-36PC-EI-AC、S5720-56PC-EI-AC
PAC-500WA-BE	500 W AC PoE	S5720-36C-PWR-EI-AC、S5720-36C-PWR-EI-DC、S5720-56C-PWR-EI-DC、S5720-56C-PWR-EI-AC
PDC-650WA-BE	650 W DC PoE	S5720-36C-PWR-EI-AC、S5720-36C-PWR-EI-DC、S5720-56C-PWR-EI-DC、S5720-56C-PWR-EI-AC
W2PSA1150	1150 W AC PoE	S5720-56C-PWR-EI-AC1
RPS1800	RPS1800	S5720-X-EI series、S5720-P-EI series

The S5720-EI uses built-in power supplies by default. If the switch supports pluggable power supplies, the customer can purchase the power supplies when or after purchasing the switch.

The S5720-EI supports multiple power supply options, including dual-power, PoE, and single-power.

Dual-Power (Non-PoE)

The dual-power model (non-PoE) uses pluggable power supplies and provides two power slots. By default, one AC power supply (ES0W2PSA0150) is equipped. When a switch has two power supplies installed, the power supplies work in 1+1 backup mode to power the switch itself. The switch supports dual AC, dual DC, as well as AC and DC mixing.

Table 3-2 lists the power supply options supported by S5720-EI.

Table 3-2 S5720-EI dual-power (non-PoE)

Model	Power 1	Power 2
S5720-36C-EI-AC(DC)	ES0W2PSA0150（150W-AC）or ES0W2PSD0150（150W-DC）	ES0W2PSA0150（150W-AC）or ES0W2PSD0150（150W-DC）
S5720-56C-EI-AC(DC)	ES0W2PSA0150（150W-AC）or ES0W2PSD0150（150W-DC）	ES0W2PSA0150（150W-AC）or ES0W2PSD0150（150W-DC）
S5720-36C-EI-28S-AC(DC)	ES0W2PSA0150（150W-AC）or ES0W2PSD0150（150W-DC）	ES0W2PSA0150（150W-AC）or ES0W2PSD0150（150W-DC）

Model	Power 1	Power 2
S5720-56C-EI-48S-AC(DC)	ES0W2PSA0150（150W-AC）or ES0W2PSD0150（150W-DC）	ES0W2PSA0150（150W-AC）or ES0W2PSD0150（150W-DC）
S5720-36PC-EI-AC	ES0W2PSA0150（150W-AC）or ES0W2PSD0150（150W-DC）	ES0W2PSA0150（150W-AC）or ES0W2PSD0150（150W-DC）
S5720-56PC-EI-AC	ES0W2PSA0150（150W-AC）or ES0W2PSD0150（150W-DC）	ES0W2PSA0150（150W-AC）or ES0W2PSD0150（150W-DC）

PoE/PoE+

PWR in the model name indicates a PoE-capable switch, which supports IEEE 802.3af-compliant PoE and 802.3at-compliant PoE+. Each port delivers 15.4 W PoE or 30 W PoE+ power capacity.

Each PoE-capable S5720-EI switch has two power slots for pluggable PoE power modules. Table 3-3 lists the power supply options supported by PoE-capable S5720-EI.

Table 3-3 S5720-EI dual-power (PoE)

Model	Power 1	Power 2	PoE Power	Number of PoE Ports
S5720-36C-PWR-EI-AC(DC)	500 W or 650 W	—	369.6 W	POE（15.4 W）：24 POE+（30 W）：12
	500 W or 650 W	500 W or 650 W	739.2 W	POE（15.4 W）：28 POE+（30 W）：24
S5720-56C-PWR-EI-AC(DC)	500 W or 650 W	—	369.6 W	POE（15.4 W）：24 POE+（30 W）：12
	500 W or 650 W	500 W or 650 W	739.2 W	POE（15.4 W）：48 POE+（30 W）：24
S5720-56C-PWR-EI-AC1	1150W(220V)	—	785.4W	POE（15.4 W）：48 POE+（30 W）：26
	1150W(220V)	1150W(220V)	1440W	POE（15.4 W）：48 POE+（30 W）：48
	1150W(110V)	—	446.6W	POE（15.4 W）：29 POE+（30 W）：14
	1150W(110V)	1150W(110V)	893.2W	POE（15.4 W）：48 POE+（30 W）：29

NOTE:

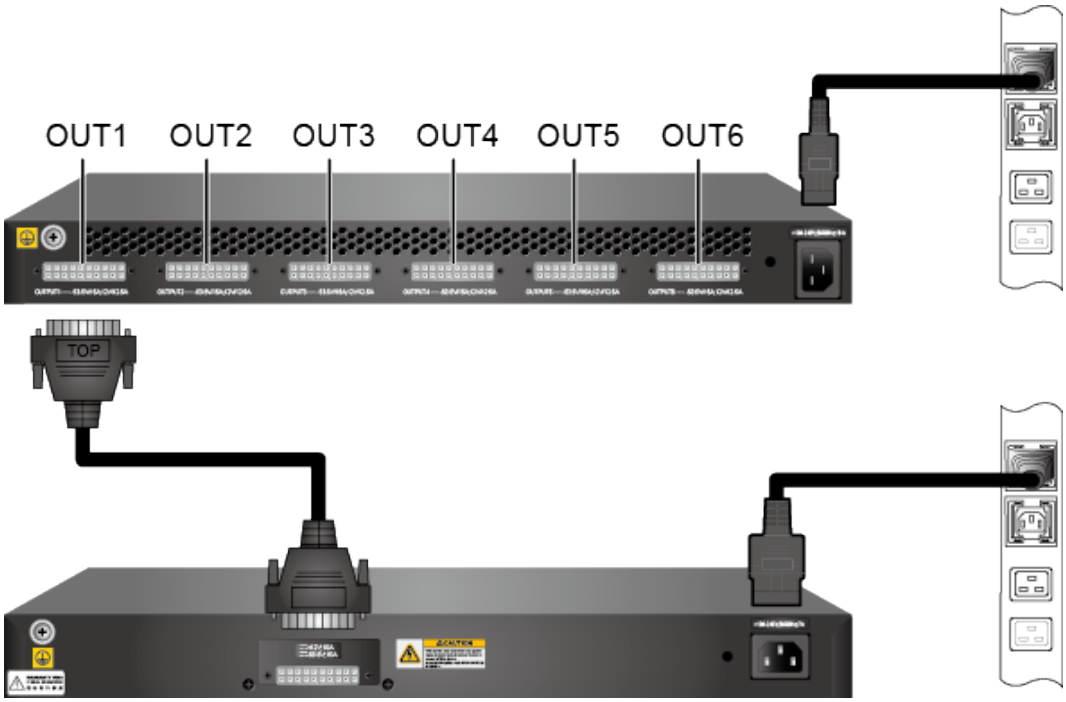
When a switch has two power supplies installed, the two power supplies work in redundancy mode to provide power for the switch itself and in load balancing mode to provide power for powered devices (PDs).

Single-Power

The single-power model uses a built-in AC power supply and supports RPS1800. The single-power models include S5720-32P-EI-AC、S5720-32X-EI-AC、S5720-32X-EI-DC、S5720-32X-EI-24S-AC、S5720-32X-EI-24S-DC、S5720-50X-EI-AC、S5720-50X-EI-DC、S5720-50X-EI-46S-AC、S5720-50X-EI-46S-DC、S5720-52X-EI-AC、S5720-52P-EI-AC.

An RPS1800 is a redundant power supply system that provides power redundancy for the connected switches to ensure uninterrupted services. When the internal power supply of a switch fails, the RPS1800 provides power to the switch immediately, which improves system reliability. Figure 3-2 shows how to connect an RPS1800 to a switch.

Figure 3-2 Connecting an RPS1800 to an switch



The RPS1800 provides 1+6 cold backup for the switch:

- The RPS1800 can connect to a maximum of six switches and ensures seamless failover for at most one switch when the internal power supply of the switch fails.
- When the internal power supply of the switch powered by the RPS1800 recovers, the RPS1800 immediately restores to backup state.
- Among the 6 DC output ports, OUT1 has the highest priority, and the other 5 ports have the same priority. When the RPS1800 connects to six switches, the switch connected to OUT1 preferentially receives power from the RPS1800.

4 Product Characteristics and Advantages

Huawei S5720-EI series have the following characteristics.

Easy operation and maintenance

The S5720-EI models with power sockets on the front panel can be installed in a 300 mm deep cabinet and maintained from 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.

The S5720-EI allows management personnel to remotely switch on the SYS indicator on the front panel. After configuration commands are used, the SYS indicator quickly blinks within a certain period, helping the management personnel locate the device in the equipment room quickly and efficiently.

The S5720-EI supports Super Virtual Fabric (SVF), which virtualizes the "Core/aggregation + Access switch + AP" structure into a logical device. The S5720-EI enables the simplest network management solution in the industry. It allows plug-and-play access switches and APs. In addition, the S5720-EI 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-EI functions as a client in an SVF system.

The S5720-EI supports 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, greatly reducing O&M costs. The S5720-EI can be managed using Simple Network Management Protocol (SNMP) v1/v2c/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, which facilitate network optimization and reconstruction.

The S5720-EI supports Two-Way Active Measurement Protocol (TWAMP) to accurately check any IP link and obtain the entire network's IP performance. This protocol eliminates the need of using a dedicated probe or a proprietary protocol.

Multiple reliability mechanisms

The S5720-EI supports iStack. This technology can virtualize up to nine physical switches into one 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 strong network expansion capability, enables easy increase of ports, bandwidth, and processing capacity of a stack, and simplifies configuration and management.

The S5720-EI 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. The S5720-EI provides two removable fan modules. The fan speed can be adjusted according to working temperatures of the device, improving device reliability.

In addition to traditional STP, RSTP, and MSTP, the S5720-EI 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-EI supports Smart Link and Virtual Router Redundancy Protocol (VRRP), which implement backup of uplinks. One S5720-EI switch can connect to multiple aggregation switches through multiple links, significantly improving reliability of access devices.

In addition, the S5720-EI provides multiple connection fault detection mechanisms, including Ethernet OAM (IEEE 802.3ah/802.1ag/ITU Y.1731) and Bidirectional Forwarding Detection (BFD).

Enhanced service processing capability and comprehensive security control mechanisms

The S5720-EI supports the multi-VPN-instance CE (MCE) function, which allows users in different VPNs to connect. The switch supports large multi-instance routing tables to isolate users in different VPNs. Users in multiple VPNs connect to a provider edge (PE) device through the same physical port on the switch, which reduces the cost on VPN network deployment. The S5720-EI supports Multiprotocol Label Switching (MPLS) L3VPN, MPLS L2VPN (VPWS\VPLS), MPLS-TE, and MPLS QoS. It is one of a few cost-effective MPLS-capable fixed switches.

The S5720-EI provides excellent quality of service (QoS) capabilities and supports queue scheduling and congestion control algorithms. Additionally, it adopts innovative priority queuing and multi-level scheduling mechanisms to implement fine-grained scheduling of data flows, meeting service quality requirements of different user terminals and services.

With enhanced network admission control (NAC) functions, the S5720-EI supports 802.1x authentication, MAC address authentication, Portal authentication, and hybrid authentication, and can dynamically delivery user policies such as VLANs, QoS policies, and access control lists (ACL). It also supports user management based on user groups. You can specify authentication-free IP network segments and enable redirection of HTTP connection requests to realize fast deployment of clients. If clients do not support HTTP access, the S5720-EI can trigger Portal authentication for the clients.

The S5720-EI 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-EI 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-EI supports strict ARP learning, which protects a network against ARP spoofing attacks to ensure normal network access.

Mature IPv6 technologies

The S5720-EI uses the mature, stable VRP software platform and supports IPv4/IPv6 dual stack, IPv6 routing protocols (RIPng, OSPFv3, BGP4+, and IS-ISv6), and IPv6 over IPv4 tunnels (including manual, 6-to-4, and ISATAP tunnels). With these IPv6 features, the S5720-EI can be deployed on a pure IPv4 network, a pure IPv6 network, or a shared IPv4/IPv6 network, helping achieve IPv4-to-IPv6 transition.

5 Product Specifications

5.1 Functions and Features

Table 5-1 lists the functions and features available on the S5720-EI.

Table 5-1 Functions and features available on the S5720-EI

Feature	Specification
MAC address table	IEEE 802.1d 64K MAC address entries 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 VLAN-based transparent transmission of protocol packets
Jumbo frame	12K
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
MPLS	MPLS L3VPN MPLS L2VPN (VPWS/VPLS) MPLS-TE MPLS QoS
IP routing	Static routing, RIPv1/2, RIPng, OSPF, OSPFv3, IS-IS, IS-ISv6, BGP, BGP4+, ECMP, and policy-based routing

Feature	Specification
IPv6 features	Neighbor Discovery (ND) Path MTU (PMTU) IPv6 ping, IPv6 tracert, and IPv6 Telnet 6to4 tunnel, ISATAP tunnel, and manually configured tunnel ACLs based on the source IPv6 address, destination IPv6 address, Layer 4 ports, or protocol type MLD v1/v2 snooping
Multicast	IGMP v1/v2/v3 snooping and IGMP fast leave 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 IGMP v1/v2/v3, PIM-SM, PIM-DM, and PIM-SSM MSDP MVPN
QoS/ACL	Rate limiting on packets sent and received by a port Packet redirection Port-based traffic policing and two-rate three-color CAR Eight queues on each port WRR, DRR, SP, WRR+SP, and DRR+SP queue scheduling algorithms WRED 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 1:1, N:1, N:4 port mirroring
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, and HWTACACS authentication NAC SSH v2.0 HTTPS CPU defense Blacklist and whitelist Attack source tracing and punishment for IPv6 packets such as ND, DHCPv6, and MLD packets
Reliability	Ethernet OAM (IEEE 802.3ah and IEEE 802.1ag) ITU-Y.1731 BFD for BGP, BFD for IS-IS, BFD for OSPF, BFD for static route VRRP4, VRRP6

Feature	Specification
Super Virtual Fabric (SVF)	Plug-and-play SVF client Automatic software and patch loading to clients One-click and automatic delivery of service configurations Independent client running
TWAMP	Two-way IP link performance measurement Measurement on two-way packet delay, one-way packet loss rate, and one-way packet jitter
Management and maintenance	iStack Virtual cable test SNMP v1/v2c/v3 RMON/RMON2 Web-based NMS System logs and alarms of different levels sFlow 802.3az Energy Efficient Ethernet (EEE)
Interoperability	VLAN-Based Spanning Tree (VBST), working with PVST, PVST+, and RPVST Link-type Negotiation Protocol (LNP), similar to DTP VLAN Central Management Protocol (VCMP), similar to VTP

5.2 hardware specifications

Table 5-2 lists the S5720-EI hardware specifications.

Table 5-2 S5720-EI hardware specifications

Item	Specification
Memory (RAM)	2GB
Flash memory	340 MB
Mean Time Between Failures (MTBF), years	• S5720-36C-EI-AC: 80.05 years without card; 73.65 years when a 2x10GE SFP+ card is configured; 71.58 years when a 2x10GE RJ45 card is configured; 71.74 years when a stack card is configured • S5720-36C-EI-DC: 80.05 years without card; 73.65 years when a 2x10GE SFP+ card is configured; 71.58 years when a 2x10GE RJ45 card is configured; 71.74 years when a stack card is configured • S5720-56C-EI-AC: 71.18 years without card; 66.07 years when a 2x10GE SFP+ card is configured; 66.40 years when a 2x10GE RJ45 card is configured; 64.53 years when a stack card is configured • S5720-56C-EI-DC: 71.18 years without card; 66.07 years when a 2x10GE SFP+ card is configured; 66.40 years when a 2x10GE RJ45 card is configured; 64.53 years when a stack card is configured

Item	Specification
Mean Time Between Failures (MTBF), years	• S5720-36C-EI-28S-AC: 85.45 years without card; 78.2 years when a 2x10GE SFP+ card is configured; 75.87 years when a 2x10GE RJ45 card is configured; 76.05 years when a stack card is configured • S5720-36C-EI-28S-DC: 85.45 years without card; 78.2 years when a 2x10GE SFP+ card is configured; 75.87 years when a 2x10GE RJ45 card is configured; 76.05 years when a stack card is configured • S5720-56C-EI-48S-AC: 73.91 years without card; 68.42 years when a 2x10GE SFP+ card is configured; 66.63 years when a 2x10GE RJ45 card is configured; 66.77 years when a stack card is configured • S5720-56C-EI-48S-DC: 73.91 years without card; 68.42 years when a 2x10GE SFP+ card is configured; 66.63 years when a 2x10GE RJ45 card is configured; 66.77 years when a stack card is configured • S5720-36C-PWR-EI-AC: 60.72 years without card; 56.97 years when a 2x10GE SFP+ card is configured; 55.72 years when a 2x10GE RJ45 card is configured; 55.82 years when a stack card is configured • S5720-36C-PWR-EI-DC: 60.72 years without card; 56.97 years when a 2x10GE SFP+ card is configured; 55.72 years when a 2x10GE RJ45 card is configured; 55.82 years when a stack card is configured • S5720-56C-PWR-EI-AC: 51.34 years without card; 48.63 years when a 2x10GE SFP+ card is configured; 47.71 years when a 2x10GE RJ45 card is configured; 47.79 years when a stack card is configured • S5720-56C-PWR-EI-DC: 51.34 years without card; 48.63 years when a 2x10GE SFP+ card is configured; 47.71 years when a 2x10GE RJ45 card is configured; 47.79 years when a stack card is configured • S5720-56C-PWR-EI-AC1: 51.34 years without card; 48.63 years when a 2x10GE SFP+ card is configured; 47.71 years when a 2x10GE RJ45 card is configured; 47.79 years when a stack card is configured • S5720-36PC-EI-AC: 80.05 years without card; 73.65 years when a 2x10GE SFP+ card is configured; 71.58 years when a 2x10GE RJ45 card is configured; 71.74 years when a stack card is configured • S5720-56PC-EI-AC: 71.18 years without card; 66.07 years when a 2x10GE SFP+ card is configured; 66.40 years when a 2x10GE RJ45 card is configured; 64.53 years when a stack card is configured • S5720-32X-EI-AC: 80.32 years • S5720-32X-EI-DC: 80.32 years • S5720-52X-EI-AC: 73.12 years • S5720-50X-EI-AC: 74.31 years • S5720-50X-EI-DC: 74.31 years • S5720-32X-EI-24S-AC: 82.54 years • S5720-32X-EI-24S-DC: 82.54 years • S5720-50X-EI-46S-AC: 67.59 years • S5720-50X-EI-46S-DC: 67.59 years • S5720-32P-EI-AC: 80.32 years • S5720-52P-EI-AC: 73.12 years
Mean Time To Repair (MTTR), hours	2
Availability	> 0.99999

Item		Specification
Surge protection	Service port protection	± 6kV in common mode
	Power supply port protection	• Non-PoE switch: – DC: ± 1 kV in differential mode; ± 2 kV in common mode – AC: ± 6 kV in differential mode; ± 6 kV in common mode • PoE switch: – S5720-36C-PWR-EI-AC (using 500 W AC power modules): ± 6 kV in differential mode; ± 6 kV in common mode – S5720-36C-PWR-EI-AC (using 650 W DC power modules): ± 2 kV in differential mode; ± 4 kV in common mode – S5720-36C-PWR-EI-DC (using 500 W AC power modules): ± 6 kV in differential mode; ± 6 kV in common mode – S5720-36C-PWR-EI-DC (using 650 W DC power modules): ± 2 kV in differential mode; ± 4 kV in common mode – S5720-56C-PWR-EI-AC (using 500 W AC power modules): ± 6 kV in differential mode; ± 6 kV in common mode – S5720-56C-PWR-EI-AC (using 650 W DC power modules): ± 2 kV in differential mode; ± 4 kV in common mode – S5720-56C-PWR-EI-DC (using 500 W AC power modules): ± 6 kV in differential mode; ± 6 kV in common mode – S5720-56C-PWR-EI-DC (using 650 W DC power – modules): ± 2 kV in differential mode; ± 4 kV in common mode – S5720-56C-PWR-EI-AC1: ± 2 kV in differential mode; ± 4 kV in common mode
Dimensions (W x D x H)		• S5720-36C-EI-AC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) • S5720-36C-EI-DC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) • S5720-56C-EI-AC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) • S5720-56C-EI-DC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) • S5720-36C-EI-28S-AC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) • S5720-36C-EI-28S-DC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) • S5720-56C-EI-48S-AC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) • S5720-56C-EI-48S-DC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) • S5720-36C-PWR-EI-AC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) • S5720-36C-PWR-EI-DC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) • S5720-56C-PWR-EI-AC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.)

Item		Specification
Dimensions (W x D x H)		• S5720-56C-PWR-EI-DC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) • S5720-56C-PWR-EI-AC1: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) (When a 1150 W power module is used, it extrudes out from the chassis, increasing the chassis depth to 507.3 mm or 19.97 in.) • S5720-36PC-EI-AC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) • S5720-56PC-EI-AC: 442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.74 in.) • S5720-32X-EI-AC: 442.0 mm x 220.0 mm x 44.4 mm (17.4 in. x 8.7 in. x 1.72 in.) • S5720-32X-EI-DC: 442.0 mm x 220.0 mm x 44.4 mm (17.4 in. x 8.7 in. x 1.72 in.) • S5720-52X-EI-AC: 442.0 mm x 220.0 mm x 44.4 mm (17.4 in. x 8.7 in. x 1.72 in.) • S5720-50X-EI-AC: 442.0 mm x 220.0 mm x 44.4 mm (17.4 in. x 8.7 in. x 1.72 in.) • S5720-50X-EI-DC: 442.0 mm x 220.0 mm x 44.4 mm (17.4 in. x 8.7 in. x 1.72 in.) • S5720-32X-EI-24S-AC: 442.0 mm x 220.0 mm x 44.4 mm (17.4 in. x 8.7 in. x 1.72 in.) • S5720-32X-EI-24S-DC: 442.0 mm x 220.0 mm x 44.4 mm (17.4 in. x 8.7 in. x 1.72 in.) • S5720-50X-EI-46S-AC: 442.0 mm x 220.0 mm x 44.4 mm (17.4 in. x 8.7 in. x 1.72 in.) • S5720-50X-EI-46S-DC: 442.0 mm x 220.0 mm x 44.4 mm (17.4 in. x 8.7 in. x 1.72 in.) • S5720-32P-EI-AC: 442.0 mm x 220.0 mm x 44.4 mm (17.4 in. x 8.7 in. x 1.72 in.) • S5720-52P-EI-AC: 442.0 mm x 220.0 mm x 44.4 mm (17.4 in. x 8.7 in. x 1.72 in.)
Weight (full configuration)	Fully loaded	≤ 12 kg (26.46 lb)
	Empty chassis	≤ 8 kg (17.64 lb)
Stack port		• S5720-C-EI: – Ports on the 2x10GE SFP+ interface rear card – Ports on the 2x10GE RJ45 interface rear card – Ports on the 2xQSFP+ dedicated stack card • S5720-PC-EI: – Ports on the 2x10GE SFP+ interface rear card – Ports on the 2x10GE RJ45 interface rear card – Ports on the 2xQSFP+ dedicated stack card • S5720-X-EI: two fixed QSFP+ dedicated stack ports on the rear panel • S5720-P-EI: two fixed QSFP+ dedicated stack ports on the rear panel
RPS		Supported by the S5720-X-EI and S5720-P-EI series switches

Item		Specification
PoE		Supported by PWR series
DC input voltage	Rated voltage range	-48V DC to -60V DC
	Maximum voltage range	-36V DC to -72V DC
AC input voltage	Rated voltage range	100V AC to 240V AC; 50/60 Hz
	Maximum voltage range	90V AC to 264V AC; 47 Hz to 63 Hz
Maximum power consumption (100% throughput, full speed of fans)		• S5720-36C-EI-AC: 75.8 W • S5720-36C-EI-DC: 75.8 W • S5720-56C-EI-AC: 86.9 W • S5720-56C-EI-DC: 86.9 W • S5720-36C-EI-28S-AC: 83.9 W • S5720-36C-EI-28S-DC: 83.9 W • S5720-56C-EI-48S-AC: 104 W • S5720-56C-EI-48S-DC: 104 W • S5720-36C-PWR-EI-AC: – Without PoE: 78 W – 100% PoE loads: 864.3 W (system power consumption: 124.3 W, PoE: 740 W) • S5720-36C-PWR-EI-DC: – Without PoE: 78 W – 100% PoE loads: 864.3 W (system power consumption: 124.3 W, PoE: 740 W) • S5720-56C-PWR-EI-AC: – Without PoE: 91.6 W – 100% PoE loads: 889.4 W (system power consumption: 149.4 W, PoE: 740 W) • S5720-56C-PWR-EI-DC: – Without PoE: 98 W – 100% PoE loads: 913 W (system power consumption: 173 W, PoE: 740 W) • S5720-56C-PWR-EI-AC1: – Without PoE: 91.6 W – 100% PoE loads: 1564.8 W (system power consumption: 124.8 W, PoE: 1440 W)

Item		Specification
Maximum power consumption (100% throughput, full speed of fans)		• S5720-36PC-EI-AC: 74.6 W • S5720-56PC-EI-AC: 85.7 W • S5720-32X-EI-AC: 51.9 W • S5720-32X-EI-DC: 51.9 W • S5720-52X-EI-AC: 61.5 W • S5720-50X-EI-AC: 55.3 W • S5720-50X-EI-DC: 55.3 W • S5720-32X-EI-24S-AC: 58.9 W • S5720-32X-EI-24S-DC: 58.9 W • S5720-50X-EI-46S-AC: 81.5 W • S5720-50X-EI-46S-DC: 81.5 W • S5720-32P-EI-AC: 50.7 W • S5720-52P-EI-AC: 60.3 W
Temperature	Operating temperature	0°C to 45°C (0 m-1800 m altitude) Note: When the altitude is between 1800 m and 5000 m, the operating temperature reduces by 1°C every time the altitude increases by 220 m.
	Storage temperature	-40°C to +70°C
Noise under normal temperature (sound power)		• S5720-36C-EI-AC: less than 51.2 dBA • S5720-36C-EI-DC: less than 51.2 dBA • S5720-56C-EI-AC: less than 51.2 dBA • S5720-56C-EI-DC: less than 51.2 dBA • S5720-36C-EI-28S-AC: less than 51.2 dBA • S5720-36C-EI-28S-DC: less than 51.2 dBA • S5720-56C-EI-48S-AC: less than 51.2 dBA • S5720-56C-EI-48S-DC: less than 51.2 dBA • S5720-36C-PWR-EI-AC: less than 53.7 dBA • S5720-36C-PWR-EI-DC: less than 53.7 dBA • S5720-56C-PWR-EI-AC: less than 53.7 dBA • S5720-56C-PWR-EI-DC: less than 53.7 dBA • S5720-56C-PWR-EI-AC1: less than 61.7 dBA • S5720-36PC-EI-AC: less than 51.2 dBA • S5720-56PC-EI-AC: less than 51.2 dBA • S5720-32X-EI-AC: less than 49.3 dBA • S5720-32X-EI-DC: less than 49.3 dBA • S5720-52X-EI-AC: less than 49.3 dBA • S5720-50X-EI-AC: less than 49.3 dBA • S5720-50X-EI-DC: less than 49.3 dBA • S5720-32X-EI-24S-AC: less than 49.3 dBA • S5720-32X-EI-24S-DC: less than 49.3 dBA • S5720-50X-EI-46S-AC: less than 51.1 dBA • S5720-50X-EI-46S-DC: less than 51.1 dBA • S5720-32P-EI-AC: less than 49.3 dBA • S5720-52P-EI-AC: less than 49.3 dBA

Item	Specification
Relative humidity	5%RH to 95%RH, noncondensing
Operating altitude	• Non-PoE: – DC power equipped: 0 m to 2000 m – AC power equipped: 0 m to 5000 m • PoE: 0 m to 5000 m

NOTE:

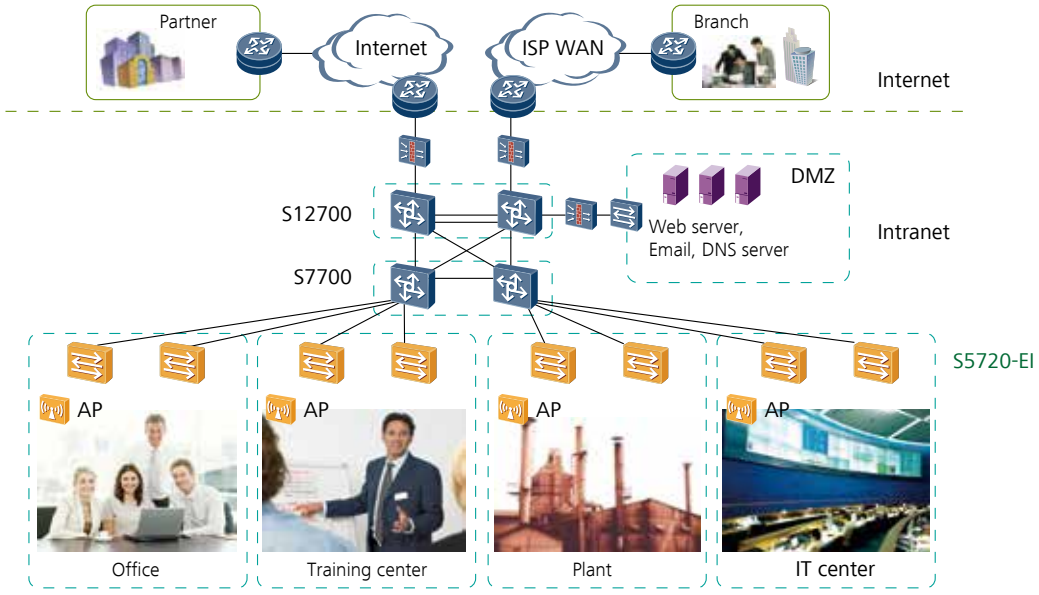
- Switching capacity: also called switching bandwidth. It refers to the maximum volume of bidirectional traffic that can be transferred between the switching chip and data bus. This index indicates the data transferring capability of a switch.
- Forwarding performance: This index indicates the wire-speed forwarding capability of a switch when the switch processes 64-byte packets (plus an 8-byte preamble and a 12-byte IFG). It represents the packet header processing capability.

6 Networking and Applications

6.1 Large-scale enterprise network

The S5720-EI can be used as an access switch in a large-sized enterprise network or as an aggregation device in a small- or medium-sized campus network. It supports link aggregation and dual-homing to improve network reliability.

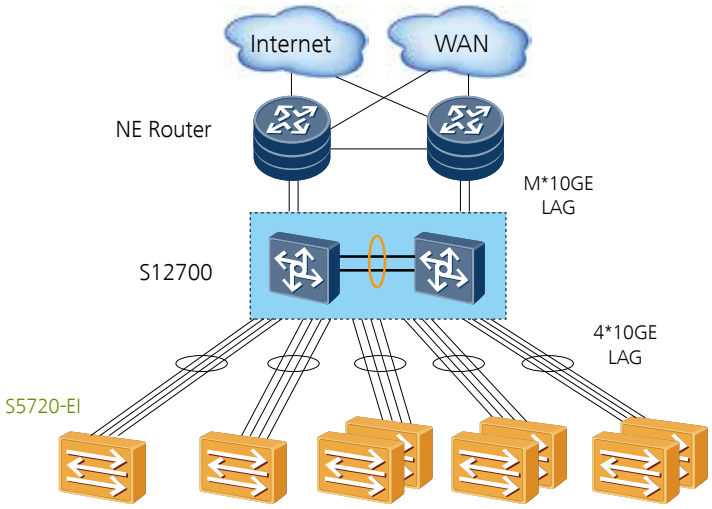
Figure 6-1 Position of the S5720-EI on a large-scale enterprise network



6.2 Data center network

As shown in Figure 6-2, The S5720-EI can be used in a data center to connect to gigabit servers. In a data center, S5720-EI switches connect to upstream aggregation switches through bundled links. If many servers are deployed in a rack, multiple S5720-EI switches can set up a stack system to simplify management and improve network reliability.

Figure 6-2 Position of the S5720-EI on a data center network



7 Product Accessories

7.1 Optical Modules and Fibers

The S5720-EI supports the following GE 、10GE and 40GE optical modules:

- GE: 100 m electrical, 500 m optical multimode, 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 multimode 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.

The fibers and optical modules supported by Huawei switches are updating. For the latest information, visit http://e.huawei.com or contact your local Huawei sales office.

7.2 Stack Cables

The S5720-EI switches support service port stacking and a card stacking. The applicable stack cables are as follows:

- AOC cable

An active optical network (AOC) cable integrates an optical module and 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 cable. The SFP+ high-speed cables are available in SFP-10G-CU1M, SFP-10G-CU3M, SFP-10G-CU5M, and SFP-10G-CU10M.

- Stack card

The stack card that provides two QSFP+ optical ports for stack connection,and can be installed in the rear card slot of the S5720-C-EI and S5720-PC-EI series chassis.

Table 7-1 lists the stack cable types and connectors.

Table 7-1 Stack cables and connectors

Stack Cable	Model	Description
AOC	SFP-10G-AOC3M	Cable length: 3 m; connector: SFP+
	SFP-10G-AOC10M	Cable length: 5 m; connector: SFP+
SFP+ high-speed	SFP-10G-CU1M	Cable length: 1 m; connector: SFP+
	SFP-10G-CU3M	Cable length: 3 m; connector: SFP+
	SFP-10G-CU5M	Cable length: 5 m; connector: SFP+
	SFP-10G-CU10M	Cable length: 10 m; connector: SFP+

8 Safety and Regulatory Compliance

Table 8-1 lists the safety and regulatory compliance of S5720-EI.

Table 8-1 S5720-EI safety and regulatory compliance

Certification Category	Description
Safety	IEC 60950-1 EN 60950-1/A11/A12 UL 60950-1 CSA C22.2 No 60950-1 AS/NZS 60950.1 CNS 14336-1 IEC60825-1 IEC60825-2 EN60825-1 EN60825-2

Certification Category	Description
Electromagnetic Compatibility (EMC)	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 IEC61000-4-2 ITU-T K 20 ITU-T K 21 ITU-T K 44 CNS13438
Environment	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

9 MIB and Standards Compliance

9.1 Supported MIBs

Table 9-1 lists the MIBs supported by S5720-EI.

Table 9-1 S5720-EI MIBs

Category	MIB
Public MIB	BRIDGE-MIB 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 MPLS-FTN-STD-MIB MPLS-L3VPN-STD-MIB MPLS-LDP-GENERIC-STD-MIB MPLS-LDP-STD-MIB MPLS-LSR-STD-MIB MPLS-TE-STD-MIB NOTIFICATION-LOG-MIB NQA-MIB OSPF-TRAP-MIB P-BRIDGE-MIB Q-BRIDGE-MIB RFC1213-MIB RIPv2-MIB RMON2-MIB RMON-MIB SAVI-MIB SNMP-FRAMEWORK-MIB SNMP-MPD-MIB SNMP-NOTIFICATION-MIB SNMP-TARGET-MIB SNMP-USER-BASED-SM-MIB SNMPv2-MIB TCP-MIB UDP-MIB

Category	MIB
Huawei-proprietary MIB	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-DC-MIB HUAWEI-DATASYNC-MIB HUAWEI-DEVICE-MIB HUAWEI-DHCPR-MIB HUAWEI-DHCPS-MIB HUAWEI-DHCP-SNOOPING-MIB HUAWEI-DIE-MIB HUAWEI-DNS-MIB HUAWEI-DLDP-MIB HUAWEI-ELMI-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-GTSM-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

Category	MIB
Huawei-proprietary 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-NAP-MIB HUAWEI-NTPV3-MIB HUAWEI-PERFORMANCE-MIB HUAWEI-PORT-MIB HUAWEI-PORTAL-MIB HUAWEI-QINQ-MIB HUAWEI-RIPv2-EXT-MIB HUAWEI-RM-EXT-MIB HUAWEI-RRPP-MIB HUAWEI-SECURITY-MIB HUAWEI-SEP-MIB 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-XQOS-MIB

9.2 Standard Compliance

Table 9-2 lists the standards the S5720-EI complies with.

Table 9-2 S5720-EI standards compliance

Standard Organization	Standard or Protocol
IETF	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)

Standard Organization	Standard or Protocol
IETF	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 2328 OSPF Version 2 RFC 2453 RIP Version 2 RFC 2460 Internet Protocol, Version 6 Specification (IPv6) RFC 2461 Neighbor Discovery for IP Version 6 (IPv6) RFC 2462 IPv6 Stateless Address Auto configuration RFC 2463 Internet Control Message Protocol for IPv6 (ICMPv6) RFC 2474 Differentiated Services Field (DS Field) RFC 2740 OSPF for IPv6 (OSPFv3) 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 3376 Internet Group Management Protocol, Version 3 (IGMPv3) RFC 3513 IP Version 6 Addressing Architecture RFC 3579 RADIUS Support For EAP RFC 4271 A Border Gateway Protocol 4 (BGP-4) RFC 4760 Multiprotocol Extensions for BGP-4 draft-grant-tacacs-02 TACACS+
IEEE	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

Standard Organization	Standard or Protocol
IEEE	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	ITU SG13 Y.17ethoam ITU SG13 QoS control Ethernet-Based IP Access ITU-T Y.1731 ETH OAM performance monitor
ISO	ISO 10589 IS-IS Routing Protocol
MEF	MEF 2 Requirements and Framework for Ethernet Service Protection MEF 9 Abstract Test Suite for Ethernet Services at the UNI MEF 10.2 Ethernet Services Attributes Phase 2 MEF 11 UNI Requirements and Framework MEF 13 UNI Type 1 Implementation Agreement 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 or contact your local Huawei sales office.

10 Ordering Information

Table 10-1 Ordering list of S5720-EI series Ethernet switches

Product Description
S5720-32P-EI-AC(24 Ethernet 10/100/1000 ports,8 Gig SFP,AC 110/220V,front access)
S5720-32X-EI-AC(24 Ethernet 10/100/1000 ports,4 Gig SFP,4 10 Gig SFP+,AC 110/220V,front access)
S5720-32X-EI-DC(24 Ethernet 10/100/1000 ports,4 Gig SFP,4 10 Gig SFP+,DC,front access)
S5720-32X-EI-24S-AC(24 Gig SFP,4 Ethernet 10/100/1000 ports,4 10 Gig SFP+,AC 110/220V,front access)
S5720-32X-EI-24S-DC(24 Gig SFP,4 Ethernet 10/100/1000 ports,4 10 Gig SFP+,DC,front access)
S5720-36C-EI-AC(28 Ethernet 10/100/1000 ports,4 of which are dual-purpose 10/100/1000 or SFP,4 10 Gig SFP+, 1 interface slot, with 150W AC)
S5720-36C-EI-DC(28 Ethernet 10/100/1000 ports,4 of which ar e dual-purpose 10/100/1000 or SFP,4 10 Gig SFP+, 1 interface slot, with 150W DC)
S5720-36C-PWR-EI-AC(28 Ethernet 10/100/1000 PoE+ ports,4 of which are dual-purpose 10/100/1000 or SFP,4 10 Gig SFP+,with 500W AC power)

Product Description
S5720-36C-PWR-EI-DC(28 Ethernet 10/100/1000 PoE+ ports,4 of which are dual-purpose 10/100/1000 or SFP,4 10 Gig SFP+, with 650W DC power)
S5720-36PC-EI-AC(28 Ethernet 10/100/1000 ports,4 of which are dual-purpose 10/100/1000 or SFP,4 Gig SFP, 1 interface slot, with 150W AC)
S5720-36C-EI-28S-AC(28 Gig SFP,4 of which are dual-purpose 10/100/1000 or SFP,4 10 Gig SFP+,with 1 interface slot,with 150W AC power supply)
SS5720-36C-EI-28S-DC(28 Gig SFP,4 of which are dual-purpose 10/100/1000 or SFP,4 10 Gig SFP+,with 1 interface slot, with 150W DC power supply)
S5720-50X-EI-AC(46 Ethernet 10/100/1000 ports,4 10 Gig SFP+,AC 110/220V,front access)
S5720-50X-EI-DC(46 Ethernet 10/100/1000 ports,4 10 Gig SFP+,DC,front access)
S5720-50X-EI-46S-AC(46 Gig SFP,4 10 Gig SFP+,AC 110/220V,front access)
S5720-50X-EI-46S-DC(46 Gig SFP,4 10 Gig SFP+,DC,front access)
S5720-52X-EI-AC(48 Ethernet 10/100/1000 ports,4 10 Gig SFP+,AC 110/220V)
S5720-52P-EI-AC(48 Ethernet 10/100/1000 ports,4 Gig SFP,AC 110/220V)
S5720-56C-EI-48S-AC(48 Gig SFP,4 10 Gig SFP+,with 1 interface slot,with 150W AC power supply)
S5720-56C-EI-48S-DC(48 Gig SFP,4 10 Gig SFP+,with 1 interface slot,with 150W DC power supply)
S5720-56C-EI-AC(48 Ethernet 10/100/1000 ports,4 10 Gig SFP+,with 1 interface slot,with 150W AC power supply)
S5720-56C-EI-DC(48 Ethernet 10/100/1000 ports,4 10 Gig SFP+,with 1 interface slot,with 150W DC power supply)
S5720-56PC-EI-AC(48 Ethernet 10/100/1000 ports,4 Gig SFP,with 1 interface slot,with 150W AC power supply)
S5720-56C-PWR-EI-AC(48 Ethernet 10/100/1000 PoE+ ports,4 10 Gig SFP+,with 1 interface slot,with 500W AC power supply)
S5720-56C-PWR-EI-DC(48 Ethernet 10/100/1000 PoE+ ports,4 10 Gig SFP+,with 1 interface slot,with 650W DC power supply)
S5720-56C-PWR-EI-AC1(48 Ethernet 10/100/1000 PoE+ ports,4 10 Gig SFP+,with 1 interface slot,with 1150W AC power supply)
2 10 Gig SFP+ Interface Card(used in S5720EI series)
2 10 Gig RJ45 Interface Card(used in S5720EI series)
Dedicated stack card with 2*QSFP+ interface(Including one PCS of 1M QSFP+ cable ,Used in S5720EI series)
RPS1800 redundant power supply
S5720-EI Fan box(F,FAN panel side intake)
150 W AC power module
150 W DC power module
500 W AC PoE power module
650 W DC PoE power module
1150 W AC power module

For more information, visit http://e.huawei.com or contact your local Huawei sales office.

11 Others

The latest version of S5720-EI is V2R9.

HUAWEI TECHNOLOGIES CO.,LTD.
Huawei Industrial Base
Bantian Longgang
Shenzhen 518129,P.R.China
Tel: +86 755 28780808

www.huawei.com