S5720-HI Datasheet
(Detailed Version)

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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.

Huawei S5720-HI series are advanced Gigabit Ethernet switches that provide rich agile features. The switches are developed based on Huawei Versatile Routing Platform (VRP), and use the fully programmable structure to implement software definition and service change on demand. With services and network convergence as the core, the switches provide the ubiquitous service function to ensure consistent user experience. The Super Virtual Fabric (SVF) function virtualizes the entire network into one device. In addition, the switches support flexible Ethernet networking, comprehensive VPN tunnel solutions, various security control methods, intelligent deployment, and simple operation & maintenance. The S5720-HI switches are the best choices for the branches of high-quality large- and middle-sized campus networks, the core layer of small-sized campus networks, and the access layer of data center networks.
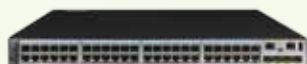
2 Product Overview

The following models are available in S5720-HI series

S5720-32C-HI-24S-AC

- 24 Gig SFP,8 of which are dual-purpose 10/100/1000 or SFP ports
- 4 10 Gig SFP+ ports
- 2 interface slots
- 600W AC power supply
- Forwarding performance: 168 Mpps
- Switching capacity:598 Gbit/s

S5720-56C-HI-AC

- 48 Ethernet 10/100/1000 ports
- 4 10 Gig SFP+ ports
- 2 interface slots
- 600W AC power supply
- Forwarding performance: 192 Mpps
- Switching capacity:598 Gbit/s

S5720-56C-PWR-HI-AC
S5720-56C-PWR-HI-AC1
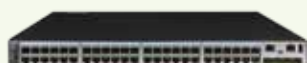
- 48 Ethernet 10/100/1000 POE+ ports
- 4 10 Gig SFP+ ports
- 2 interface slots
- 1150W/600W AC power supply
- Forwarding performance: 192 Mpps
- Switching capacity:598 Gbit/s

2.2 Subcard Types

The S5720-HI provides four 10GE SFP+ ports and four fixed 10GE SFP+ ports for upstream connections.One slot reserved for the stack card.

2.3 Fan Tray

The S5720-HI 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-HI.

Table 3-1 S5720-HI power supplies

Power Model	Name	Applied Switch Model (S5720-HI)
PAC-600WA-B	600 W AC	S5720-56C-HI-AC, S5720-32C-HI-24S-AC
PDC-350WA-B	350 W DC	S5720-56C-HI-AC, S5720-32C-HI-24S-AC
W2PSA1150	1150 W AC PoE	S5720-56C-PWR-HI-AC
W2PSA0580	580 W AC PoE	S5720-56C-PWR-HI-AC1
PDC-650WA-BE	650 W DC PoE	S5720-56C-PWR-HI-AC1

The S5720-HI uses built-in power AC 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-HI supports multiple power supply options, including dual-power and PoE.

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 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-HI.

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

Model	Power 1	Power 2
S5720-32C-HI-24S-AC	PAC-600WA-B（600W-AC）or PDC-350WA-B（350W-DC）	PAC-600WA-B（600W-AC）or PDC-350WA-B（350W-DC）
S5720-56C-HI-AC	PAC-600WA-B（600W-AC）or PDC-350WA-B（350W-DC）	PAC-600WA-B（600W-AC）or PDC-350WA-B（350W-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-HI switch has two power slots for pluggable PoE power modules. Table 3-3 lists the power supply options supported by PoE-capable S5720-HI.

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

Model	Power 1	Power 2	PoE Power	Number of PoE Ports
S5720-56C-PWR-HI-AC	1150 W (220V)	—	785.4 W	POE（15.4 W）：48 POE+（30 W）：26
	1150 W (220V)	1150 W (220V)	1140 W	POE（15.4 W）：48 POE+（30 W）：48
S5720-56C-PWR-HI-AC	1150 W (110V)	—	446.6 W	POE（15.4 W）：29 POE+（30 W）：14
	1150 W (110V)	1150 W (110V)	893.2 W	POE（15.4 W）：48 POE+（30 W）：29
S5720-56C-PWR-HI-AC1	580 W	—	369.6 W	POE（15.4 W）：24 POE+（30 W）：12
	580 W	580 W	739.2 W	POE（15.4 W）：48 POE+（30 W）：24

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).

4 Product Characteristics and Advantages

Huawei S5720-HI series have the following characteristics.

Enabling networks to be more agile for services

The high-speed Ethernet Network Processor (ENP) embedded in the S5720-HI is tailored for Ethernet. The chip's flexible packet processing and traffic control capabilities can meet current and future service requirements, helping build a highly scalable network.

In addition to capabilities of traditional switches, the S5720-HI series provide fully programmable open interfaces and supports user-defined forwarding behaviors. Enterprises can use the open interfaces to develop new protocols and functions independently or jointly with equipment vendors to build campus networks meeting their own needs.

The ENP has a fully programmable architecture, on which enterprises can define their own forwarding models, forwarding behaviors, and lookup algorithms. Microcode programmability makes it possible to provide new services within six months, without the need of replacing the hardware. In contrast, traditional ASIC chips use a fixed forwarding architecture and follow a fixed forwarding process. For this reason, new services cannot be provisioned until new hardware is developed to support the services 1 to 3 years later.

Delivering abundant services more agilely

The S5720-HI series integrate the AC function with 80 Gbps of wireless throughput, so customers do not need to buy independent AC devices or hardware components. An S5720-HI switch can manage 1K APs and 16K users, coping with the fast growth of wireless services.

With the unified user management function, the S5720-HI authenticates both wired and wireless users, ensuring a consistent user experience no matter whether they are connected to the network through wired or wireless access devices. The unified user management function supports various authentication methods, including 802.1x, MAC address, and Portal authentication, and is capable of managing users based on user groups, domains, and time ranges. These functions visualize user and service management and boost the transformation from device-centered management to user-centered management.

Providing fine granular network management more agilely

The S5720-HI series use the Packet Conservation Algorithm for Internet (iPCA) technology that changes the traditional method of using simulated traffic for fault location. iPCA technology can monitor network quality for any service flow anywhere and anytime, without extra costs. It can detect temporary service interruptions in a very short time and can identify faulty ports accurately. This cutting-edge fault detection technology turns "extensive management" to "fine granular management."

The S5720-HI supports the Super Virtual Fabric (SVF) and functions as a parent switch. With this virtualization technology, a physical network with the "Small-sized core/aggregation switches + Access switches + APs" structure can be virtualized into a "super switch", offering the industry's simplest network management solution.

With the Easy Deploy function, the S5720-HI series manage access switches in a similar way an AC manages APs. In deployment, access switches and APs can go online with zero-touch configuration. In the Easy Deploy solution, the Commander collects topology information about the connected clients and stores the clients' startup information based on the topology. Clients can be replaced with zero-touch configuration. The Commander can deliver configurations and scripts to clients in batches and query the delivery results. In addition, the Commander can collect and display information about power consumption on the entire network.

Complete VPN Tunnels

S5720-HI series switches support the MPLS function and can work as access devices for high-quality enterprise leased lines. The S5720-HI series can connect users in different VPNs and isolate users through multi-instance routing. Users in multiple VPNs connect to a PE through the same physical uplink port on the switch, which lowers a single user's Capital Expenditure (CAPEX) for network deployment.

Flexible Ethernet networking

In addition to traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), and Multiple Spanning Tree Protocol (MSTP), the S5720-HI 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. ERPS is defined in ITU-T G.8032. It implements millisecond-level protection switching based on traditional Ethernet MAC and bridging functions.

The S5720-HI supports Smart Link and Virtual Router Redundancy Protocol (VRRP), which implement backup of upstream links. One S5720-HI switch can connect to multiple aggregation switches through multiple links, significantly improving reliability of access devices.

The S5720-HI series have large tables, coping with the fast growth of data volume in the big data era. With the support for 128K MAC addresses, 1M FIB entries, the S5720-HI series switch meets the requirements of educational networks and metro area networks and allows the access of a large number of terminals. The S5720-HI is the best choice in cloud computing era.

Various security control methods

The S5720-HI series support MAC address authentication and 802.1x authentication and implement dynamic delivery of VLAN, QoS, and ACL policies to users. They support port-based 802.1x, MAC address, and hybrid authentications and VLANIF interface-based portal authentication.

The S5720-HI 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 change of the DHCP CHADDR value.

The S5720-HI series set up and maintain the DHCP snooping binding tables, and discard the packets that do not match the table entries. Users can specify DHCP snooping trusted ports to ensure that users connect only to the authorized DHCP server.

The S5720-HI supports strict ARP learning, which prevents ARP spoofing attackers from exhausting ARP entries.

The S5720-HI supports MAC security (MACSec) that enables hop-by-hop secure data transmission. Therefore, the S5720-HI can be applied to scenarios that pose high requirements on data confidentiality, such as government and finance sectors.

Mature IPv6 features

The S5720-HI is developed based on the mature, stable VRP and supports IPv4/IPv6 dual stacks, IPv6 routing protocols (RIPng, OSPFv3, BGP4+, and IS-IS for IPv6). With these IPv6 features, the S5720-HI can be deployed on a pure IPv4 network, a pure IPv6 network, or a shared IPv4/IPv6 network, helping realize IPv4-to-IPv6 transition.

Intelligent stack (iStack)

The S5720-HI supports the iStack function that 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.

5 Product Specifications

5.1 Functions and Features

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

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

Item	Specification
MAC address table	IEEE 802.1d standards compliance 128K 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, Voice VLAN GVRP MUX VLAN VLAN assignment based on MAC addresses, protocols, IP subnets, policies, and ports VLAN mapping
Wireless AC	AP access control, AP domain management, and AP configuration template management Radio management, unified static configuration, and dynamic centralized management WLAN basic services, QoS, security, and user management CAPWAP, Tag/terminal location, and spectrum analysis
Reliability	RRPP ring topology and RRPP multi-instance Smart Link tree topology and Smart Link multi-instance, providing the millisecond-level protection switchover SEP G.8032 Ethernet Ring Protection Switching (ERPS) BFD for OSPF, BFD for IS-IS, BFD for VRRP, and BFD for PIM STP (IEEE 802.1d), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s) BPDU protection, root protection, and loop protection
MPLS	MPLS L3VPN MPLS L2VPN(VPWS/VPLS) MPLS-TE MPLS QOS
IP routing	Static routes, RIP v1/2, RIPng, OSPF, OSPFv3, IS-IS, IS-ISv6, BGP, BGP4+, ECMP, routing policy
Interoperability	VLAN-Based Spanning Tree (VBST), working with PVST, PVST+, and RPVST Link-type Negotiation Protocol (LNP), similar with DTP VLAN Central Management Protocol (VCMP), similar with VTP
IPv6 features	Neighbor Discover (ND) PMTU IPv6 Ping, IPv6 Tracert, IPv6 Telnet ACLs based on source IPv6 addresses, destination IPv6 addresses, Layer 4 ports, or protocol types Multicast Listener Discovery snooping (MLDv1/v2)
Multicast	IGMPv1/v2/v3 snooping and IGMP prompt 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 collection IGMP v1/v2/v3, PIM-SM, PIM-DM, PIM-SSM MSDP

Item	Specification
QoS/ACL	Rate limitation in the inbound and outbound directions of a port Packet redirection Port-based traffic policing and two-rate and three-color CAR Eight queues on each port DRR, SP and DRR+SP queue scheduling algorithms WRED HQoS Re-marking of the 802.1p and DSCP fields of packets Packet filtering on 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 source/destination port number, protocol number, or VLAN Queue-based rate limitation and 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, interface number, and VLAN ID Port isolation, port security, and sticky MAC MAC Forced Forwarding (MFF)Blackhole MAC address entries Limitation on the number of learned MAC addresses IEEE 802.1x authentication and limitation on the number of users on a port AAA authentication, RADIUS authentication, HWTACACS authentication, and NAC SSH V2.0 HTTPS CPU protection Blacklist and whitelist DHCP relay/server/snooping/client/security MACSec
OAM	EFM OAM CFM OAM Y.1731 performance monitoring
Super Virtual Fabric (SVF)	Working as the parent node to vertically virtualize downlink switches and APs as one device for management Supports a two-layer client architecture
iPCA	Directly coloring service packets to collect real-time statistics on the number of lost packets and packet loss ratio Collection of statistics on the number of lost packets and packet loss ratio at network and device levels
Management and maintenance	iStack Virtual Cable Test SNMPv1/v2c/v3 RMON Network management system (NMS) and Web management System logs and multi-level alarms GVRP MUX VLAN 802.3az Energy Efficient Ethernet (EEE) NetStream Dying Gasp upon power-off

5.2 Hardware Specifications

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

Table 5-2 S5720-HI hardware specifications

Item		Specification
Memory (RAM)		4GB
Flash memory		400 MB
Mean Time Between Failures (MTBF), years		S5720-56C-HI-AC: 53.05 years when no card is configured; 49.85 years when a 4x10GE card is configured S5720-56C-PWR-HI-AC: 39.31 years when no card is configured; 37.53 years when a 4x10GE card is configured S5720-56C-PWR-HI-AC1: 39.31 years when no card is configured; 37.53 years when a 4x10GE card is configured S5720-32C-HI-24S-AC: 56.21 years when no card is configured; 52.63 years when a 4x10GE card is configured
Mean Time To Repair (MTTR), hours		2
Availability		> 0.99999
Surge protection	Service port protection	PoE switch: ± 1 kV in common mode Non-PoE switch: ± 2 kV in common mode
	Power supply port protection	DC: ± 1 kV in differential mode; ± 2 kV in common mode AC: S5720-56C-HI-AC: ± 6 kV in differential mode; ± 6 kV in common mode S5720-32C-HI-24S-AC: ± 6 kV in differential mode; ± 6 kV in common mode S5720-56C-PWR-HI-AC: ± 2 kV in differential mode; ± 4 kV in common mode S5720-56C-PWR-HI-AC1: ± 6 kV in differential mode; ± 6 kV in common mode
Dimensions (W x D x H)		442.0 mm x 420.0 mm x 44.4 mm (17.4 in. x 16.5 in. x 1.75 in.) When a 1150 W power module is installed, it extrudes out from the chassis. Therefore, the total depth of the switch changes to 507 mm (19.97 in.).
Weight (full configuration)	Fully loaded	≤ 10 kg (22.05 lb)
	Empty chassis	≤ 6 kg (13.23 lb)
Stack port		Four 10GE SFP+ ports or four 10GE SFP+ rear card ports
RPS		Not supported
PoE		Supported by the PWR models
DC input voltage	Rated voltage range	-48V DC to -60V DC
	Maximum voltage range	-38.4V DC to -72V DC

Item		Specification
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)		S5720-56C-HI-AC: 183.3 W S5720-56C-PWR-HI-AC: 1739 W (system power consumption: 299 W; PoE: 1440 W) S5720-56C-PWR-HI-AC1: - Without PoE: 188.74 W - 100% PoE loads: 1036 W (system power consumption: 296W, PoE: 740 W) S5720-32C-HI-24S-AC: 172.7 W
Temperature	Operating temperature	Altitude of 0-1800 m (0-5096 ft.): 0°C to 45°C (32°F to 113°F) NOTE: When the altitude is between 1800 m (5096 ft.) and 5000 m (16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.).
	Storage temperature	-40°C to +70°C (-40°F to +158°F)
Noise under normal temperature (sound power)		S5720-56C-HI-AC: less than 60.1 dBA S5720-56C-PWR-HI-AC: less than 69.8 dBA S5720-56C-PWR-HI-AC1: less than 64.6 dBA S5720-32C-HI-24S-AC: less than 60.0 dBA
Relative humidity		5%RH to 95%RH, noncondensing
Operating altitude		0-5000 m (0-16404 ft.)
Certification		EMC certification Safety certification Manufacturing certification

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

Application on enterprise campus networks

As shown in Figure 6-1, the S5720-HI switches are located at the access layer to build a high-performance, reliable enterprise campus network.

Figure 6-1 Position of the S5720-HI on a large-sized enterprise campus network
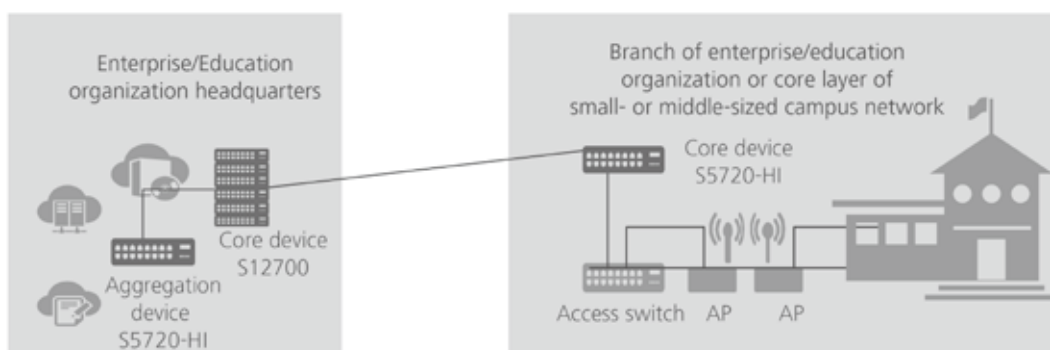
Huawei S5720-HI is the industry's first fixed-configuration agile switch. The S5720-HI has large tables and buffers, avoiding packet loss in burst traffic. It supports in-depth wired and wireless convergence and unified management on devices, users, and services. The S5720-HI can be used as the core device in an enterprise branch network or a small- or middle-sized campus network or as the aggregation device in a large-sized campus network, to achieve a manageable and reliable enterprise campus network with scalable services.

7 Product Accessories

7.1 Optical Modules and Fibers

The S5720-HI supports the following GE and 10GE 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-HI switches support service port stacking. The applicable stack cables are as follows:

- AOC cable

An active optical network (AOC) cable integrates an optical module and 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.

8 Safety and Regulatory Compliance

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

Table 8-1 S5720-HI 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
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-HI.

Table 9-1 S5720-HI 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 HUAWEI_LDT-MIB HUAWEI-LLDP-MIB HUAWEI-MAC-AUTHEN-MIB HUAWEI-MEMORY-MIB HUAWEI-MFF-MIB HUAWEI-MFLP-MIB HUAWEI-MSTP-MIB HUAWEI-BGP-VPN-MIB HUAWEI-CCC-MIB HUAWEI-MULTICAST-MIB

Category	MIB
Huawei-proprietary 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-HI complies with.

Table 9-2 S5720-HI 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) 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

Standard Organization	Standard or Protocol
IETF	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 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-HI series Ethernet switches

Product Description
S5720-32C-HI-24S-AC(24 Gig SFP,8 of which are dual-purpose 10/100/1000 or SFP,4 10 Gig SFP+,with 2 interface slots,with 600W AC power supply)
S5720-56C-HI-AC(48 Ethernet 10/100/1000 ports,4 10 Gig SFP+,with 2 interface slots,with 600W AC power supply)
S5720-56C-PWR-HI-AC(48 Ethernet 10/100/1000 POE+ ports,4 10 Gig SFP+,with 2 interface slots,with 1150W AC power supply)
S5720-56C-PWR-HI-AC1(48 Ethernet 10/100/1000 POE+ ports,4 10 Gig SFP+,with 2 inte rface slots,with
600W AC power supply)
4 10 Gig SFP+ Interface Card (used in S5720-HI series)
350W DC Power Module
600W AC Power Module
1150W AC POE Power Module
Resource-ES1SWL512AP0-WLAN Access Controller AP Resource License-512AP (used in S5720HI series)
Resource-ES1SWL128AP0-WLAN Access Controller AP Resource License-128AP (used in S5720HI series)
Resource-ES1SWL64AP00-WLAN Access Controller AP Resource License-64AP (used in S5720HI series)
Resource-ES1SWL16AP00-WLAN Access Controller AP Resource License-16AP (used in S5720HI series)
Resource-ES5SF4512K00-FIBv4 Resource License-128K (used in S5720HI series)
Resource-ES5SF4128K00-FIBv4 Resource License-512K (used in S5720HI series)
Function-S5700-ES5FEA1-ES5SSVFF0000-SVF Function License (used in S5720HI series)

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

11 Others

The latest version of S5720-HI is V2R9.