S5720-LI Datasheet
(Detailed Version)

S5720-LI Datasheet (Detailed Version)

1 Introduction

The S5720-LI is a next-generation energy-saving gigabit Ethernet switch that provides flexible GE access ports and 10GE uplink ports. Building on next-generation, high-performance hardware and the Huawei Versatile Routing Platform (VRP), the S5720-LI supports intelligent stack (iStack), flexible Ethernet networking, and diversified security control. It provides customers with a green, easy-to-manage, easy-to-expand, and cost-effective gigabit to the desktop solution.

2 Product Overview

S5720-12TP-LI-AC

- 8 × Ethernet 10/100/1000 Base-T ports, 4 × Gig SFP ports, 2 × combo 10/100/1000Base-T Ethernet ports
- AC power supply
- Forwarding performance: 27 Mpps
- Switching capacity: 336 Gbit/s

S5720-12TP-PWR-LI-AC

- 8 × Ethernet 10/100/1000 Base-T ports, 4 × Gig SFP ports, 2 × combo 10/100/1000Base-T Ethernet ports
- AC power supply
- PoE+
- Forwarding performance: 27 Mpps
- Switching capacity: 336 Gbit/s

S5720-28P-LI-AC

- 24 × Ethernet 10/100/1000 Base-T ports, 4 × Gig SFP ports
- AC power supply
- Forwarding performance: 51 Mpps
- Switching capacity: 336 Gbit/s

S5720-28P-PWR-LI-AC

- 24 × Ethernet 10/100/1000 Base-T ports, 4 × Gig SFP ports
- AC power supply
- PoE+
- Forwarding performance: 51 Mpps
- Switching capacity: 336 Gbit/s

S5720-52P-LI-AC

- 48 × Ethernet 10/100/1000 Base-T ports, 4 × Gig SFP ports
- AC power supply
- Forwarding performance: 87 Mpps
- Switching capacity: 336 Gbit/s

S5720-52P-PWR-LI-AC

- 48 × Ethernet 10/100/1000 Base-T ports, 4 × Gig SFP ports
- AC power supply
- PoE+
- Forwarding performance: 87 Mpps
- Switching capacity: 336 Gbit/s

S5720-28X-LI-AC
S5720-28X-LI-DC

- 24 × Ethernet 10/100/1000 Base-T ports, 4 × 10 Gig SFP+ ports
- Two models: AC model and DC model, supporting RPS (redundant power supply)
- Forwarding performance: 108 Mpps
- Switching capacity: 336 Gbit/s

S5720-28X-PWR-LI-AC

- 24 × Ethernet 10/100/1000 Base-T ports, 4 × 10 Gig SFP+ ports
- AC power supply, supporting RPS (redundant power supply)
- PoE+
- Forwarding performance: 108 Mpps
- Switching capacity: 336 Gbit/s

S5720-28X-LI-24S-AC

S5720-28X-LI-24S-DC

- 24 × Gig SFP ports, 8 × combo 10/100/1000Base-T Ethernet ports, 4 × 10 Gig SFP+ ports
- Two models: AC model and DC model, supporting RPS (redundant power supply)
- Forwarding performance: 108 Mpps
- Switching capacity: 336 Gbit/s

S5720-52X-LI-AC
S5720-52X-LI-DC

- 48 × Ethernet 10/100/1000 Base-T ports, 4 × 10 Gig SFP+ ports
- Two models: AC model and DC model, supporting RPS (redundant power supply)
- Forwarding performance: 144 Mpps
- Switching capacity: 336 Gbit/s

S5720-52X-PWR-LI-AC

- 48 × Ethernet 10/100/1000 Base-T ports, 4 × 10 Gig SFP+ ports
- AC power supply, supporting RPS (redundant power supply)
- PoE+
- Forwarding performance: 144 Mpps
- Switching capacity: 336 Gbit/s

S5720-28TP-LI-AC

- 24 × Ethernet 10/100/1000 Base-T ports, 4 × Gig SFP ports, 2 × combo 10/100/1000Base-T Ethernet ports
- AC power supply
- Forwarding performance: 51 Mpps
- Switching capacity: 336 Gbit/s

S5720-28TP-PWR-LI-AC

- 24 × Ethernet 10/100/1000 Base-T ports, 4 × Gig SFP ports, 2 × combo 10/100/1000Base-T Ethernet ports
- AC power supply
- PoE+
- Forwarding performance: 51 Mpps
- Switching capacity: 336 Gbit/s

S5720-28TP-PWR-LI-ACL

- 24 × Ethernet 10/100/1000 Base-T ports, 4 × Gig SFP ports, 2 × combo 10/100/1000Base-T Ethernet ports
- AC power supply
- 8-port PoE+
- Forwarding performance: 51 Mpps
- Switching capacity: 336 Gbit/s

3 Power Supply

3.1 S5720-LI

PoE Power Supply Configuration

- The S5720-LI series PoE switches, including S5720-12TP-PWR-LI-AC, S5720-28P-PWR-LI-AC, S5720-52P-PWR-LI-AC, S5720-28X-PWR-LI-AC, S5720-52X-PWR-LI-AC, S5720-28TP-PWR-LI-AC, S5720-28TP-PWR-LI-ACL, have built-in PoE power modules.

- The S5720-12TP-PWR-LI-AC and S5720-28TP-PWR-LI-ACL has a built-in power module and does not support pluggable power modules. The built-in power module can provide 124 W PoE power, which ensures full PoE power on 8 ports in compliance in 802.3af or on 4 ports in compliance with 802.3at. The switch cannot connect to an RPS power supply.

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

Non-PoE Power Supply Configuration

- The S5720-LI series non-PoE switches have a single internal power module and do not support pluggable power modules.

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

4 Product Characteristics and Advantages

Flexible Ethernet Networking

- In addition to traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), and Multiple Spanning Tree Protocol (MSTP), the S5720-LI supports Huawei-developed Smart Ethernet Protection (SEP) technology and the latest Ethernet Ring Protection Switching (ERPS) standard. SEP is a ring protection protocol specific to the Ethernet link layer, and applies to various ring network topologies, such as open ring topology, closed ring topology, and cascading ring topology. This protocol is reliable, easy to maintain, and implements fast protection switching within 50 ms. ERPS is defined in ITU-T G.8032. It implements millisecond-level protection switching based on traditional Ethernet MAC and bridging functions.

- The S5720-LI supports Smart Link, which implements backup of uplinks. One S5720-LI switch can connect to multiple aggregation switches through multiple links, significantly improving reliability of access devices.

- The S5720-LI supports Ethernet OAM (IEEE 802.3ah/802.1ag) to fast-detect link faults.

Diversified security control

- The S5720-LI supports 802.1x authentication, MAC address authentication, and combined authentication on a per port basis, as well as Portal authentication on a per VLANIF interface basis, and implements dynamic policy delivery (VLAN, QoS, and ACL) to users.

- The S5720-LI provides a series of mechanisms to defend against DoS attacks and user-targeted attacks. DoS attacks are targeted at switches and include SYN flood, Land, Smurf, and ICMP flood attacks. User-targeted attacks include bogus DHCP server attacks, IP/MAC address spoofing, DHCP request flood, and changing of the DHCP CHADDR value.

- The S5720-LI collects and maintains information about access users, such as IP addresses, MAC addresses, IP address leases, VLAN IDs, and interface numbers in a DHCP snooping binding table. In this way, IP addresses and access interfaces of DHCP users can be tracked. You can specify DHCP snooping trusted and untrusted ports to ensure that users connect only to the authorized DHCP server.

- The S5720-LI supports strict ARP learning. This feature prevents ARP spoofing attackers from exhausting ARP entries so that users can connect to the Internet normally.

Easy operation and maintenance

- The S5720-LI supports Huawei Easy Operation, a solution that provides zero-touch deployment, replacement of faulty devices without additional configuration, USB-based deployment, batch configuration, and batch remote upgrade. The Easy Operation solution facilitates device deployment, upgrade, service provisioning, and other management and maintenance operations, and also greatly reduces costs of operation and maintenance. The S5720-LI can be managed and maintained using Simple Network Management Protocol (SNMP) V1, V2, and V3, Command Line Interface (CLI), web-based network management system, or Secure Shell (SSH) V2.0. Additionally, it supports remote network monitoring (RMON), multiple log hosts, port traffic statistics collection, and network quality analysis that helps with network consolidation and reconstruction.

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

- The S5720-LI can use the GARP VLAN Registration Protocol (GVRP) to implement dynamic distribution, registration, and propagation of VLAN attributes. GVRP reduces manual configuration workload and ensures correct configuration. Additionally, the S5720-LI supports MUX VLAN, which involves a principal VLAN and multiple subordinate VLANs. Subordinate VLANs are classified into group VLANs and separate VLANs. Ports in the principal VLAN can communicate with ports in subordinate VLANs. Ports in a subordinate group VLAN can communicate with each other, whereas ports in a subordinate separate VLAN can communicate only with ports in the principal VLAN. The S5720-LI also supports VLAN Central Management Protocol (VCMP) and VLAN-Based Spanning Tree (VBST) protocol.

iStack

- The S5720-LI supports intelligent stack (iStack). This technology combines multiple switches into a logical switch. Member switches in a stack implement redundancy backup to improve device reliability and use inter-device link aggregation to improve link reliability. The iStack stacking architecture is designed for rapid failover capability with n-1 master redundancy, distributed Layer 2 and Layer 3 switching, link aggregation across the stack, and within 200 millisecond failover for path failure and hitless master/backup failover. iStack provides high network scalability. You can increase ports, bandwidth, and processing capacity of a stack by simply adding member switches to the stack. iStack also simplifies device configuration and management. After a stack is set up, multiple physical switches are virtualized into one logical device. You can log in to any member switch in the stack to manage all the member switches in the stack. The S5720-LI support stacking through electrical ports.

Excellent network traffic analysis

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

Easy O&M with front panel

- The models with front power sockets can be installed in a 300 mm deep cabinet, and can be maintained through the front panel. This simplifies operation and maintenance. The cabinets can be placed against the wall or back to back, and is well-suited for shallow cabinets and limited equipment room space.

5 Product Specifications

5.1 Functions and Features

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

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

Feature	Description
MAC address table	16K MAC address entries MAC address learning and aging Static, dynamic, and blackhole MAC address entries Packet filtering based on source MAC addresses Interface-based MAC learning limiting
VLAN	4K active VLANs Guest VLAN and voice VLAN GVRP MUX VLAN VLAN assignment based on MAC addresses, protocols, IP subnets, policies, and interfaces 1:1 and N:1 VLAN mapping
Jumbo frame	10K
Ethernet loop protection	RRPP ring topology and RRPP multi-instance Smart Link tree topology and Smart Link multi-instance, providing millisecond-level protection switchover SEP ERPS (G.8032) STP(IEEE 802.1d), RSTP(IEEE 802.1w), and MSTP(IEEE 802.1s) BPDU protection, root protection, and loop protection BPDU tunnel
Reliability	EFM OAM (802.3ah) CFM OAM (802.1ag) ITU-Y.1731 DLDP LACP
IP routing	Static route, RIP, RIPng, OSPF
IPv6	Neighbor Discovery (ND) Path MTU (PMTU) IPv6 ping, IPv6 tracert, and IPv6 Telnet ACLs based on the source IPv6 address, destination IPv6 address, Layer 4 ports, and protocol type MLDv1/v2 snooping
Multicast	IGMPv1/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 Interface-based multicast traffic statistics

Feature	Description
QoS/ACL	Rate limiting on packets sent and received by an interface Packet redirection Interface-based traffic policing and two-rate and three-color CAR Eight queues on each interface WRR, DRR, SP, WRR+SP, and DRR+SP queue scheduling algorithms Re-marking of the 802.1p priority and DSCP priority Packet filtering at Layer 2 to Layer 4, filtering out invalid frames based on the source MAC address, destination MAC address, source IP address, destination IP address, TCP/UDP port number, protocol type, and VLAN ID Rate limiting in each queue and traffic shaping on interfaces
Security	Hierarchical user management and password protection DoS attack defense, ARP attack defense, and ICMP attack defense Binding of the IP address, MAC address, interface number, and VLAN ID Port isolation, port security, and sticky MAC MFF Blackhole MAC address entries Limit on the number of learned MAC addresses IEEE 802.1x authentication and limit on the number of users on an interface AAA authentication, RADIUS authentication, HWTACACS+ authentication, and NAC SSH V2.0 Hypertext Transfer Protocol Secure (HTTPS) CPU defense Blacklist and whitelist DHCP relay, DHCP server, DHCP snooping DHCPv6 relay, DHCPv6 server, DHCPv6 snooping
Super Virtual Fabric (SVF)	Working as an SVF client that is plug-and-play with zero configuration Automatically loading the system software package and patches of clients One-click and automatic delivery of service configurations Supports independent running client
Management and maintenance	iStack Virtual Cable Test (VCT) Remote configuration and maintenance using Telnet SNMPv1/v2c/v3 RMON eSight and web-based NMS HTTPS LLDP/LLDP-MED System logs and multi-level alarms 802.3az EEE Dying Gasp (S5720-X-LI series)
Interoperability	Supports VBST (Compatible with PVST/PVST+/RPVST) Supports LNP (Similar to DTP) Supports VCMP (Similar to VTP)

5.2 Hardware Specifications

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

Table 5-2 S5720-LI hardware specifications

Item	Specification
Memory (RAM)	512 MB
Flash memory	240 MB
Switching capacity	336 Gbps
Forwarding performance	S5720-12TP-LI-AC: 27Mpps S5720-12TP-PWR-LI-AC: 27Mpps S5720-28TP-LI-AC: 51Mpps S5720-28TP-PWR-LI-AC: 51Mpps S5720-28TP-PWR-LI-ACL: 51Mpps S5720-28P-LI-AC: 51Mpps S5720-28P-PWR-LI-AC: 51Mpps S5720-52P-LI-AC: 87Mpps S5720-52P-PWR-LI-AC: 87Mpps S5720-28X-LI-AC: 108Mpps S5720-28X-LI-DC: 108Mpps S5720-28X-LI-24S-AC: 108Mpps S5720-28X-LI-24S-DC: 108Mpps S5720-28X-PWR-LI-AC: 108Mpps S5720-52X-LI-AC: 144Mpps S5720-52X-LI-DC: 144Mpps S5720-52X-PWR-LI-AC: 144Mpps
Mean Time Between Failures (MTBF), years	S5720-12TP-LI-AC: 23.8 years S5720-12TP-PWR-LI-AC: 23.8 years S5720-28TP-LI-AC: 43 years S5720-28TP-PWR-LI-AC: 40 years S5720-28TP-PWR-LI-ACL: 42 years S5720-28P-LI-AC: 45 years S5720-28P-PWR-LI-AC: 41 years S5720-52P-LI-AC: 41 years S5720-52P-PWR-LI-AC: 38 years S5720-28X-LI-AC: 45 years S5720-28X-LI-DC: 45 years S5720-28X-LI-24S-AC: 41 years S5720-28X-LI-24S-DC: 41 years S5720-28X-PWR-LI-AC: 41 years S5720-52X-LI-AC: 41 years S5720-52X-LI-DC: 41 years S5720-52X-PWR-LI-AC: 38 years
Mean Time To Repair (MTTR), hours	2
Availability	> 0.99999

Item		Specification
Surge protection	Service port protection	Common mode: ± 7 kV
	Power supply port protection	DC: ± 1 kV in differential mode; ± 2 kV in common mode AC: ± 6 kV in differential mode; ± 6 kV in common mode
Dimensions (W x D x H)		S5720-12TP-LI-AC: 250mm x 180mm x 43.6mm S5720-12TP-PWR-LI-AC: 320mm x 220mm x 43.6mm S5720-28P-LI-AC/S5720-52P-LI-AC/S5720-28X-LI-AC/S5720-28X-LI-DC /S5720-28X-LI-24S-AC/S5720-28X-LI-24S-DC/S5720-52X-LI-AC/S5720-52X-LI-DC/S5720-28TP-LI-AC/S5720-28TP-PWR-LI-ACL: 442mm x 220mm x 43.6mm S5720-28P-PWR-LI-AC/S5720-28X-PWR-LI-AC/S5720-52P-PWR-LI-AC/ S5720-52X-PWR-LI-AC/S5720-28TP-PWR-LI-AC: 442mm x 310mm x 43.6mm
Weight		S5720-12TP-LI-AC: ≤ 2 kg Others: ≤ 5 kg
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)		S5720-12TP-LI-AC: 12.85W S5720-12TP-PWR-LI-AC: without PD: 15.61W; with PD: 160.5W (PoE: 123.2W) S5720-28P-LI-AC: 20.2W S5720-28P-PWR-LI-AC: without PD: 40.4W; with PD: 446.7W (PoE: 369.6W) S5720-52P-LI-AC: 47.3W S5720-52P-PWR-LI-AC: without PD: 61.7W; with PD: 461.8W (PoE: 369.6W) S5720-28X-LI-AC/S5720-28X-LI-DC: 29.5W S5720-28X-PWR-LI-AC: without PD: 42.7W; with PD: 448.5W (PoE: 369.6W) S5720-28X-LI-24S-AC: 41.7W S5720-28X-LI-24S-DC: 42.7W S5720-52X-LI-AC: 50.3W S5720-52X-LI-DC: 51.6W S5720-52X-PWR-LI-AC: without PD: 63.5W; with PD: 464.3W (PoE: 369.6W) S5720-28TP-LI-AC: 22.1W S5720-28TP-PWR-LI-AC: without PD: 38.8W; with PD: 444.8W (PoE: 369.6W) S5720-28TP-PWR-LI-ACL: without PD: 24.4W; with PD: 165.528W (PoE: 123.2W)

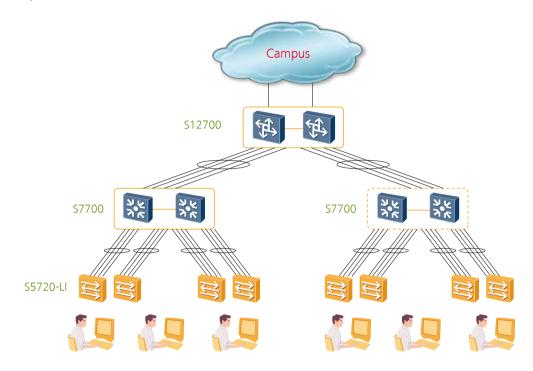| Item		Specification
Temperature	Operating temperature	0°C to 55°C
	Storage temperature	-40°C to +70°C
Noise under normal temperature (27°C, sound power)		S5720-12TP-LI-AC: Noise-free (no fans) S5720-12TP-PWR-LI-AC: Noise-free (no fans) S5720-28TP-LI-AC: Noise-free (no fans) S5720-28TP-PWR-LI-AC: less than 48.6 dBA S5720-28TP-PWR-LI-ACL: Noise-free (no fans) S5720-28P-LI-AC: Noise-free (no fans) S5720-28P-PWR-LI-AC: less than 49.1 dBA S5720-52P-LI-AC: less than 44.5 dBA S5720-52P-PWR-LI-AC: less than 48.3 dBA S5720-28X-LI-AC: less than 47 dBA S5720-28X-LI-DC: less than 47 dBA S5720-28X-LI-24S-AC: less than 43 dBA S5720-28X-LI-24S-DC: less than 43 dBA S5720-28X-PWR-LI-AC: less than 49.1 dBA S5720-52X-LI-AC: less than 44.5 dBA S5720-52X-LI-DC: less than 44.5 dBA S5720-52X-PWR-LI-AC: less than 48.3 dBA
Relative humidity		5%RH to 95%RH, noncondensing
Operating altitude		S5720-28X-LI-DC: 0 m to 2000 m Others: 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

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

7 Product Accessories

7.1 Optical Modules and Fibers

The S5720-LI 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/en or contact your local Huawei sales office.

7.2 Stack Cables

The S5720-LI 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-AC10M.

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: 10 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-AC10M	Cable length: 10 m; connector: SFP+

8 Safety and Regulatory Compliance

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

Table 8-1 S5720-LI 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
Laser safety	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 EN61000-3-2 EN61000-3-3 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-LI.

Table 9-1 S5720-LI 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 NOTIFICATION-LOG-MIB NQA-MIB P-BRIDGE-MIB Q-BRIDGE-MIB RFC1213-MIB RMON-MIB SAVI-MIB SNMP-FRAMEWORK-MIB SNMP-MPD-MIB SNMP-NOTIFICATION-MIB SNMP-TARGET-MIB SNMP-USER-BASED-SM-MIB SNMPv2-MIB SNMP-VIEW-BASED-ACM-MIB TCP-MIB UDP-MIB
Huawei-proprietary MIB	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

Category	MIB
Huawei-proprietary MIB	HUAWEI-CPU-MIB
	HUAWEI-DAD-TRAP-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-ERPS-MIB
	HUAWEI-ERRORDOWN-MIB
	HUAWEI-ENERGYMNGT-MIB
	HUAWEI-EASY-OPERATION-MIB
	HUAWEI-ENTITY-EXTENT-MIB
	HUAWEI-ENTITY-TRAP-MIB
	HUAWEI-ETHARP-MIB
	HUAWEI-ETHOAM-MIB
	HUAWEI-FLASH-MAN-MIB
	HUAWEI-FWD-RES-TRAP-MIB
	HUAWEI-GARP-APP-MIB
	HUAWEI-GTL-MIB
	HUAWEI-HGMP-MIB
	HUAWEI-HWTACACS-MIB
	HUAWEI-IF-EXT-MIB
	HUAWEI-INFOCENTER-MIB
	HUAWEI-IPPOOL-MIB
	HUAWEI-IPV6-MIB
	HUAWEI-ISOLATE-MIB
	HUAWEI-L2IF-MIB
	HUAWEI-L2MAM-MIB
	HUAWEI-L2VLAN-MIB
	HUAWEI_LDT-MIB
	HUAWEI-LLDP-MIB
	HUAWEI-MAC-AUTHEN-MIB
	HUAWEI-MEMORY-MIB
	HUAWEI-MFF-MIB
	HUAWEI-MFLP-MIB
	HUAWEI-MSTP-MIB
	HUAWEI-MULTICAST-MIB
	HUAWEI-NTPV3-MIB
	HUAWEI-PERFORMANCE-MIB
	HUAWEI-PERFMGMT-MIB
	HUAWEI-PORT-MIB
	HUAWEI-PORTAL-MIB
	HUAWEI-QINQ-MIB
	HUAWEI-RM-EXT-MIB
	HUAWEI-RRPP-MIB

Category	MIB
Huawei-proprietary 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-UNIMNG-MIB HUAWEI-USA-MIB HUAWEI-XQOS-MIB

9.2 Standard Compliance

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

Table 9-2 S5720-LI 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 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)

Standard Organization	Standard or Protocol
IETF	RFC 2474 Differentiated Services Field (DS Field) RFC 2863 The Interfaces Group MIB RFC 2597 Assured Forwarding PHB Group RFC 2598 An Expedited Forwarding PHB RFC 2571 SNMP Management Frameworks RFC 2865 Remote Authentication Dial In User Service (RADIUS) RFC 3046 DHCP Option82 RFC 3513 IP Version 6 Addressing Architecture RFC 3579 RADIUS Support For EAP draft-grant-tacacs-02 TACACS+
IEEE	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
MEF	MEF 2 Requirements and Framework for Ethernet Service Protection MEF 9 Abstract Test Suite for Ethernet Services at the UNI MEF 11 UNI Requirements and Framework MEF 15 Requirements for Management of Metro Ethernet Phase 1 Network Elements MEF 17 Service OAM Framework and Requirements MEF 20 UNI Type 2 Implementation Agreement MEF 23 Class of Service Phase 1 Implementation Agreement Xmodem XMODEM/YMODEM Protocol Reference

NOTE:

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

10 Ordering Information

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

Product Description
S5720-12TP-LI-AC(8 Ethernet 10/100/1000 ports, 4 Gig SFP and 2 combo 10/100/1000 Base-T Ethernet ports, AC 110/220V)
S5720-12TP-PWR-LI-AC(8 Ethernet 10/100/1000 ports, 4 Gig SFP and 2 combo 10/100/1000 Base-T Ethernet ports, AC 110/220V)
S5720-28P-LI-AC(24 Ethernet 10/100/1000 ports,4 Gig SFP,AC 110/220V)
S5720-28X-LI-AC(24 Ethernet 10/100/1000 ports,4 10 Gig SFP+,AC 110/220V)
S5720-28X-LI-DC(24 Ethernet 10/100/1000 ports,4 10 Gig SFP+,DC -48V)
S5720-28P-PWR-LI-AC(24 Ethernet 10/100/1000 PoE+ ports,4 Gig SFP, AC 110/220V)
S5720-28X-PWR-LI-AC(24 Ethernet 10/100/1000 PoE+ ports,4 10 Gig SFP+, AC 110/220V)
S5720-52P-LI-AC(48 Ethernet 10/100/1000 ports,4 Gig SFP,AC 110/220V)
S5720-52X-LI-AC(48 Ethernet 10/100/1000 ports,4 10 Gig SFP+,AC 110/220V)
S5720-52X-LI-DC(48 Ethernet 10/100/1000 ports,4 10 Gig SFP+,DC -48V)
S5720-52P-PWR-LI-AC(48 Ethernet 10/100/1000 PoE+ ports,4 Gig SFP, AC 110/220V)
S5720-52X-PWR-LI-AC(48 Ethernet 10/100/1000 PoE+ ports,4 10 Gig SFP+, AC 110/220V)
S5720-28X-LI-24S-AC(24 Gig SFP,8 combo 10/100/1000 Base-T Ethernet ports,4 10 Gig SFP+,AC 110/220V)
S5720-28X-LI-24S-DC(24 Gig SFP,8 combo 10/100/1000 Base-T Ethernet ports,4 10 Gig SFP+,DC -48V)
S5720-28TP-PWR-LI-ACL(24 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP and 2 combo 10/100/1000Base-T Ethernet ports, 8-port PoE+, AC 110/220V)
S5720-28TP-PWR-LI-AC(24 Ethernet 10/100/1000 Base-T PoE+ ports, 4 Gig SFP and 2 combo 10/100/1000 Base-T Ethernet ports, AC 110/220V)
S5720-28TP-LI-AC(24 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP and 2 combo 10/100/1000 Base-T Ethernet ports, AC 110/220V)
RPS1800 Redundant Power System

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

11 Others

The latest version of S5720-LI is V2R10.