S5700-LI Series Simplified Gigabit Switches

Huawei S5700-LI series switches are simplified energy-saving Gigabit Ethernet switches that provide flexible GE access ports and 10GE uplink ports.

Introduction

Building on next-generation, high-performance hardware and the Huawei Versatile Routing Platform (VRP), the S5700-LI supports Advanced Hibernation Management (AHM), 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. In addition, Huawei customizes specialized models to meet customer requirements to suit special scenarios.

- Huawei S5700-LI-BAT series battery LAN switches (S5700-LI-BAT for short) are the industry's first switch series to support batteries and provide visualized battery status management. The S5700-LI-BAT can ensure uninterrupted services in environments facing frequent mains power failures at the access layer. Access switches are usually distributed; therefore, it is costly and space-consuming to deploy high-performance Uninterruptible Power Supplies (UPSs) for the access switches. Huawei battery LAN switches solve this problem. The use of batteries ensures stable operation of the access layer in the event of mains power failures.

- CSFP switches support downlink CSFP ports, and each downlink CSFP port provides 2 Gbit/s bandwidth bidirectionally. CSFP switches apply to scenarios where users increase continuously and demand higher bandwidth, and scenarios where deploying fibers is costly and difficult and construction timeframes are long. The switches with front power sockets can be installed in the 300 mm deep cabinet.

Product Overview

Models and Appearance

Models and appearances of the S5700-LI series

Appearance	Description↵
S5700-28P-LI-BAT	- 48 GE CSFP ports or 24 GE SFP ports, 4 Combo 10/100/1000Base-T Ethernet ports, 4 10GE SFP+ ports - AC power supply, front power sockets, front access
S5700-28P-LI-24S-BAT	- 24 10/100/1000Base-T Ethernet ports, 4 GE SFP ports - AC power supply - One battery slot for an external lead-acid battery used in the event of a mains power failure or a 150 W AC or DC power module used as the redundant power source
S5700-52X-LI-48CS-AC	- 28 GE SFP ports, 4 Combo 10/100/1000Base-T Ethernet ports - AC power supply - One battery slot for an external lead-acid battery used in the event of a mains power

Appearance	Description↵
	failure or a 150 W AC or DC power module used as the redundant power source

Power Supply

S5700-LI

The S5700-LI series switches have a single internal power module and do not support pluggable power modules.

The S5700-LI series switches support the RPS1800 and use the RPS1800 as the backup power supply. The following table lists the technical specifications of RPS1800.

Technical specifications of RPS1800 available in the S5700-LI series

Power Module	Technical Specifications	Applied Switch Model
RPS1800	• Dimensions (W x D x H): 442.0 mm x 310.0 mm x 43.6 mm • Weight: − Without power modules installed: 4 kg − With one power module installed: 5.5 kg − With two power modules installed: 7 kg • Rated input voltage: 220/110 V AC, 50/60 Hz • Input voltage range: 200 V AC to 240 V AC (220 V rated voltage input)/100 V AC to 120 V AC (110 V rated voltage input), 50/60 Hz • Maximum input voltage range: 90 V AC to 290 V AC, 45 Hz to 65 Hz • Input current: 12 A • Maximum output current (without power modules installed): +12 V: 29.17 A • Maximum output current (with one power module installed): − +12 V: 29.17 A − -53.5 V: 14.95 A (input voltage range: 200 V AC to 240 V AC) • Maximum output current (with two power modules installed): − +12 V: 29.17 A − -53.5 V: 15 A output per port (input voltage range: 200 V AC to 240 V AC) − -53.5 V: 15 A output per port (input voltage range: 100 V AC to 120 V AC, two 870 W PoE power modules required) • Maximum output power (without power modules installed): − 12 V: 140 W • Maximum output power (with one power module installed): − 12 V: 140 W − -53.5 V: 800 W (input voltage range: 200 V AC to 240 V AC) • Maximum output power (with two power modules installed):	S5700-52X-LI-48CS-AC

Power Module	Technical Specifications	Applied Switch Model
ES0W2PSA0150 (continued)	− 12 V: 140 W − -53.5 V: 1600 W (input voltage range: 200 V AC to 240 V AC) − -53.5 V: 800 W (input voltage range: 100 V AC to 120 V AC, two 870 W PoE power modules required) - Hot swap: The 870 W PoE power modules and RPS cables are not hot swappable.	

📖 **NOTE**

For more information about the RPS1800, visit
http://support.huawei.com/enterprise/en/doc/EDOC1000013597?section=j06e&topicName=rps1800-power-supply or contact your local Huawei sales office.

S5700-LI-BAT

The S5700-LI-BAT series switches have a built-in AC power supply unit and can use a pluggable power module or battery for power redundancy. Power modules and batteries for the S5700-LI-BAT series switches are hot swappable.

Battery and Battery Charger Module

The battery installed on an S5700-LI-BAT switch can automatically supply power to the switch in case of a mains power outage, ensuring uninterrupted services. When the AC power supply recovers, the battery turns to the charging state.

The S5700-LI-BAT series switches support the following batteries and battery charger module:

- PBB-12AHA (12AH lead-acid battery charger module)

📖 **NOTE**

The PBB-12AHA module must connect to a lead-acid battery with 12AH of rated capacity.

Power Module

The S5700-LI-BAT series switches can be configured with a power module as a backup of the built-in power supply unit to improve power reliability.

The following table lists the power supplies applicable to the S5700-LI-BAT.

Power Module	Technical Specifications	Applied Switch Model
PBB-12AHA	- Dimensions (W x D x H): 100 mm x 205 mm x 40 mm (3.9 in. x 8.1 in. x 1.6 in.) - Weight: 0.48 kg (1.06 lb) - Charge voltage range: 10.8 V DC to 13.8 V DC - Discharge voltage range: 10.8 V DC to 13.6 V DC - Charge current: − S5700-28P-LI-BAT: maximum value 1.25 A; typical value 1.0 A − S5700-28P-LI-24S-BAT: maximum value 2.0 A; typical value 1.8 A - Maximum discharge power: 80 W	- S5700-28P-LI-BAT - S5700-28P-LI-24S-BAT
ES0W2PSA0150	- Dimensions (W x D x H): 100 mm x 205 mm x 40 mm (3.9 in. x 8.1 in. x 1.6 in.) - Weight: 0.8 kg (1.76 lb) - Rated input voltage range: 100 V AC to 240 V AC, 50/60 Hz - Maximum input voltage range: 90 V AC to 264 V AC,	- S5700-28P-LI-BAT - S5700-28P-LI-24S-BAT

Power Module	Technical Specifications	Applied Switch Model
	47 Hz to 63 Hz • Maximum input current: 3 A • Maximum output current: 12.5 A • Rated output voltage: 12 V • Maximum output power: 150 W • Hot swap: Supported	
ES0W2PSD0150	• Dimensions (W x D x H): 100 mm x 205 mm x 40 mm (3.9 in. x 8.1 in. x 1.6 in.) • Weight: 0.8 kg (1.76 lb) • Rated input voltage range: -48 V DC to -60 V DC • Maximum input voltage range: -36 V DC to -72 V DC • Maximum input current: 3 A • Maximum output current: 12.5 A • Rated output voltage: 12 V • Maximum output power: 150 W • Hot swap: Supported	• S5700-28P-LI-BAT • S5700-28P-LI-24S-BAT

Product Features and Highlights

Innovative Energy Saving Design

• The S5700-LI series smart energy-saving switches reduce power consumption without degrading system performance or user experience. The S5700-LI series uses innovative energy-saving technologies including energy efficient Ethernet (EEE), port power detection, dynamic CPU frequency adjustment, and device sleep mode. These technologies help reduce power consumption by adjusting power depending on the Up/Down states of links, presence/absence of optical modules, shutdown and undo shutdown operations on ports, and peak and off-peak hours. The S5700-LI series is the industry's first switch series that supports device sleep mode, and provides three energy saving modes to adapt to different usage scenarios: standard, basic, and deep modes.

Flexible Ethernet Networking

• In addition to traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), and Multiple Spanning Tree Protocol (MSTP), the S5700-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 S5700-LI supports SmartLink, which implements backup of uplinks. One S5700-LI switch can connect to multiple aggregation switches through multiple links, significantly improving reliability of access devices.

• The S5700-LI supports Ethernet OAM (IEEE 802.3ah/802.1ag) to fast-detect link faults.

Diversified Security Control

• The S5700-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 S5700-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 S5700-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 S5700-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 S5700-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 S5700-LI can be managed and maintained using Simple Network Management Protocol (SNMP) V1, V2, and V3, Command Line Interface (CLI), web-based network management system, or Secure Shell (SSH) V2.0. Additionally, it supports remote network monitoring (RMON), multiple log hosts, port traffic statistics collection, and network quality analysis that helps with network consolidation and reconstruction.

- EasyDeploy: The Commander collects information about the topology of the client connecting to the Commander and saves client startup information based on the topology. The client can be replaced without configuration. Configuration and scripts can be delivered to the client in batches. In addition, the configuration delivery result can be queried.

- The Commander can collect and display power consumption on the entire network.

- The S5700-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 S5700-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 S5700-LI also supports VLAN Central Management Protocol (VCMP) and VLAN-Based Spanning Tree (VBST) protocol.

iStack

- The S5700-LI supports intelligent stack (iStack). This technology combines multiple switches into a logical switch. Member switches in a stack implement redundancy backup to improve device reliability and use inter-device link aggregation to improve link reliability. iStack provides high network scalability. You can increase ports, bandwidth, and processing capacity of a stack by simply adding member switches to the stack. iStack also simplifies device configuration and management. After a stack is set up, multiple physical switches are virtualized into one logical device. You can log in to any member switch in the stack to manage all the member switches in the stack.

Excellent Network Traffic Analysis

- The S5700-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.

CSFP Providing High-density Access and Increased Bandwidth

- CSFP switches support downlink CSFP ports. Each downlink CSFP port equipped with a CSFP GE optical module and one pair of fibers can provide 2 Gbit/s bandwidth bidirectionally, which is two times the bandwidth of standard SFP optical modules. The 24 downlink CSFP ports can provide 48 Gbit/s bandwidth bidirectionally, implementing high-density access (equal to access of 48 standard SFP ports) and saving the cost of deploying fibers and adding optical modules.

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.

Product Specifications

Functions and Features

The following table lists the functions and features available on the S5700-LI.

Functions and features available on the S5700-LI series

Function and 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
Reliability	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
IP routing	Static route, RIP, RIPng
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
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

Function and Feature	Description
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
Access security	DHCP relay, DHCP server, DHCP snooping, and DHCP security
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 (excluding battery LAN switches)
	Virtual Cable Test (VCT)
	Remote configuration and maintenance using Telnet
	SNMPv1/v2c/v3
	CLI configuration
	RMON
	eSight and web-based NMS
	HTTPS
	LLDP/LLDP-MED
	System logs and multi-level alarms
	802.3az EEE
	Dying Gasp (excluding battery LAN switches)
	Device hibernation mode (excluding battery LAN switches)
Interoperability	Supports VBST (Compatible with PVST/PVST+/RPVST)
	Supports LNP (Similar to DTP)
	Supports VCMP (Similar to VTP)

Hardware Specifications

The following table lists the S5700-LI hardware specifications.

Hardware specifications of the S5700-LI series

Item	S5700-52X-LI-48CS-AC	S5700-28P-LI-BAT	S5700-28P-LI-24S-BAT
Memory (RAM)	256 MB	256 MB	256 MB
Flash memory	200 MB	200 MB	200 MB

| Item		S5700-52X-LI-48CS-AC	S5700-28P-LI-BAT	S5700-28P-LI-24S-BAT
Switching capacity		256 Gbps	256 Gbps	256 Gbps
Forwarding performance		132 Mpps	42 Mpps	42 Mpps
MTBF (year)		92.57	57.9	45
MTTR (hour)		2	2	2
Availability		> 0.99999	> 0.99999	> 0.99999
Surge protection	Service port protection	±2 kV in common mode	±6 kV in common mode	±6 kV in common mode
	Power supply port protection	AC: • ±6 kV in differential mode • ±6 kV in common mode	DC: • ±1 kV in differential mode • ±2 kV in common mode AC: • ±6 kV in differential mode • ±6 kV in common mode	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)		442.0 mm x 220.0 mm x 43.6 mm	442.0 mm x 310.0 mm x 43.6 mm	442.0 mm x 310.0 mm x 43.6 mm
Weight		≤ 5 kg	≤ 5 kg	≤ 5 kg
Stack port		Supported **NOTE** The four uplink 10GE SFP+ optical ports can be used as stack ports.	NA	NA
RPS		Supported	NA	NA
DC input voltage	Rated voltage range	NA	-48V DC to -60V DC	-48V DC to -60V DC
	Maximum voltage range	NA	-36V DC to -72V DC	-36V DC to -72V DC
AC input voltage	Rated voltage range	100V AC to 240V AC; 50/60 Hz	100V AC to 240V AC; 50/60 Hz	100V AC to 240V AC; 50/60 Hz
	Maximum voltage range	90V AC to 264V AC; 47 Hz to 63 Hz	90V AC to 264V AC; 47 Hz to 63 Hz	90V AC to 264V AC; 47 Hz to 63 Hz
Maximum power consumption (100% throughput, full speed of fans)		79.93 W	23 W	34.1 W
Temperature	Operating temperature	The operating temperature is 0°C to 45°C at an altitude between 0 m and 1800 m	The operating temperature is 0°C to 45°C at an altitude between 0 m and 1800 m	The operating temperature is 0°C to 45°C at an altitude between 0 m and 1800 m
	Storage temperature	-40°C to +70°C	• Without pluggable module: -40°C to +70°C • With a power module: -40°C to +70°C • With a lead-acid battery: depending on the storage	• Without pluggable module: -40°C to +70°C • With a power module: -40°C to +70°C • With a lead-acid battery: depending on the storage

Item	S5700-52X-LI-48CS-AC	S5700-28P-LI-BAT	S5700-28P-LI-24S-BAT
		temperature range required by the lead-acid battery	temperature range required by the lead-acid battery
Noise under normal temperature (sound power)	< 67.3 dBA	< 43.2 dBA	< 46.1 dBA
Noise under normal temperature (sound pressure)	< 37.1 dBA	< 30.6 dBA	< 35.1 dBA
Relative humidity	5%RH to 95%RH, noncondensing	5%RH to 95%RH, noncondensing	5%RH to 95%RH, noncondensing
Operating altitude	0 m to 5000 m	• DC power equipped: 0 m to 2000 m • AC power equipped: 0 m to 5000 m	• DC power equipped: 0 m to 2000 m • AC power equipped: 0 m to 5000 m

📖 NOTE

● Forwarding performance 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 indicates the packet header processing capability.

● Switching capacity is 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.

Networking and Applications

The S5700-LI provides 1000M desktop access functions for a high performance network, such as voice VLAN, NAC and so on.
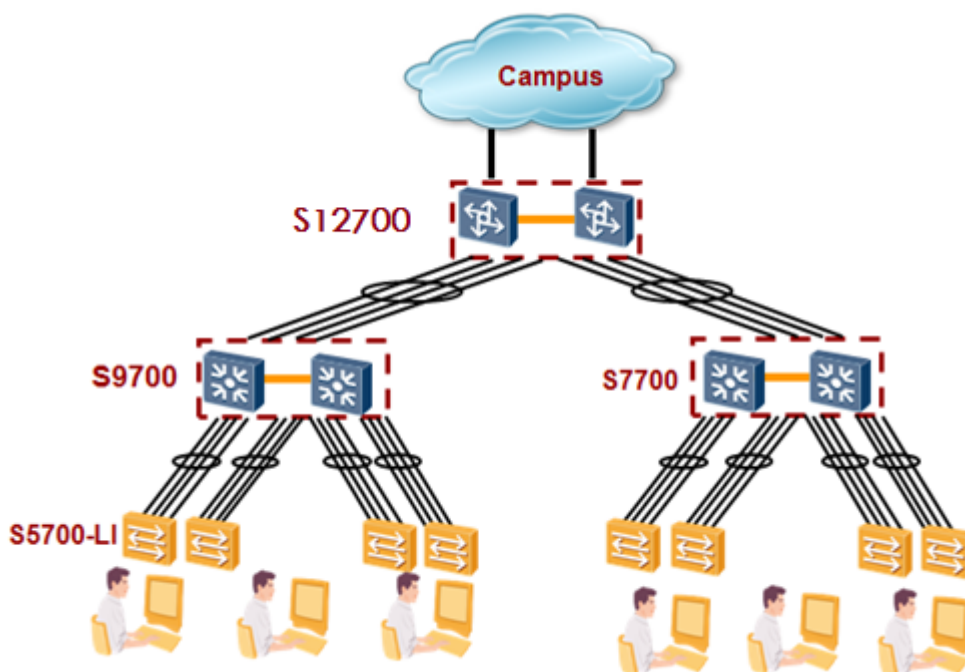
The S5700-LI-BAT uses a battery as the backup power supply. When a mains power failure occurs, the battery begins powering the switch. When the mains power supply recovers, the switch automatically charges the battery. The use of batteries ensures high reliability at the access layer in the case of frequent mains power failures.
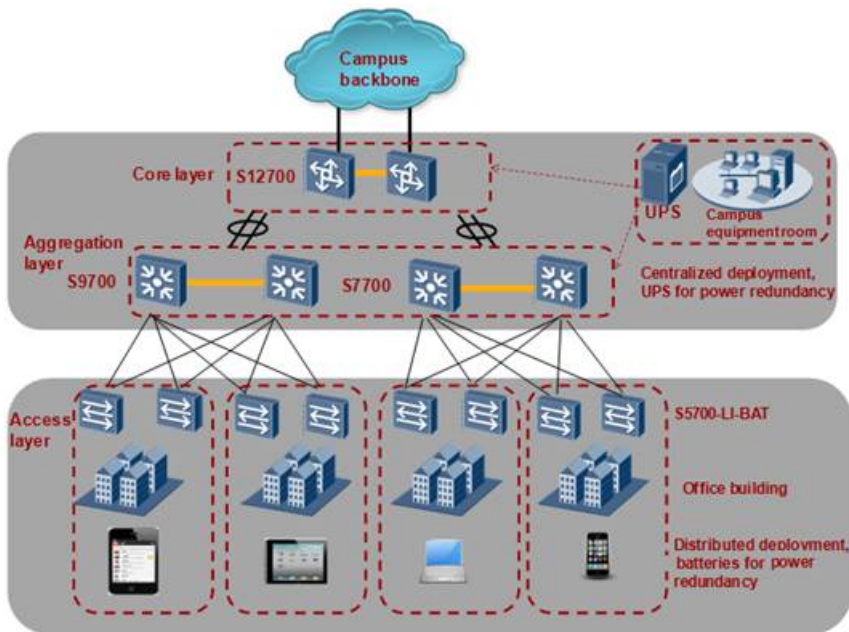
Product Accessories

Optical Modules and Fibers

The S5700-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.

NOTE

The fibers and optical modules supported by Huawei switches are being updated. For the latest information, visit http://support.huawei.com/enterprise/en/doc/EDOC1000013597?section=j07w&topicName=pluggable-modules-for-interfaces or contact your local Huawei sales office.

Stack Cables

The S5700-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-CU10M.

The following table lists the stack cable types and connectors.

Stack cable types and connectors available in the S5700-LI series

Stack Cable	Model	Cable Length	Connector
AOC	SFP-10G-AOC3M	3 m	SFP+
	SFP-10G-AOC10M	10 m	SFP+

Stack Cable	Model	Cable Length	Connector
SFP+ high-speed	SFP-10G-CU1M	1 m	SFP+
	SFP-10G-CU3M	3 m	SFP+
	SFP-10G-CU5M	5 m	SFP+
	SFP-10G-CU10M	10 m	SFP+

📖 **NOTE**

For more information about the stack cables applicable to the S5700-LI series, visit http://support.huawei.com/enterprise/en/doc/EDOC1000013597?section=j07f&topicName=cables or contact your local Huawei sales office.

Safety and Regulatory Compliance

The following table lists the safety and regulatory compliance of S5700-LI.

Safety and regulatory compliance of the S5700-LI series

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
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

Certification Category	Description
	• 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

MIB and Standards Compliance

Supported MIBs

The following table lists the MIBs supported by S5700-LI.

Supported MIBs of the S5700-LI series

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

Category	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
	• 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

Category	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
	- 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

📖 NOTE

For more detailed information of MIBs supported by S5700-LI series, visit
https://support.huawei.com/enterprise/en/switches/s5700-pid-6691579?category=reference-guides&subcategory=mib-reference.

Standard Compliance

The following table lists the standards that the S5700-LI complies with.

Standard compliance list of the S5700-LI series

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) • 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

Standard Organization	Standard or Protocol
	- 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.

Ordering Information

Ordering information of the S5700-LI series

Item	Product Description
1	S5700-28P-LI-BAT (24x10/100/1000Base-T Ethernet ports, 4xGE SFP ports, 1 battery slot, AC power supply)
2	S5700-28P-LI-24S-BAT (28xGE SFP ports, 4xCombo 10/100/1000Base-T Ethernet ports, 1 battery slot, AC power supply)
3	S5700-52X-LI-48CS-AC (48xGE CSFP ports or 24xGE SFP ports, 4xCombo 10/100/1000Base-T Ethernet ports, 4x10GE SFP+ ports, AC power supply, front power sockets, front access)
4	100/1000BASE-BIDI CSFP single-fiber bidirectional optical module-CSFP-GE/FE-single-mode optical module (Tx1490/Rx1310 nm, 10 km, LC)
5	RPS1800 Redundant Power System
6	PBB-12AHA (12AH lead-acid battery charger module)
7	150 W AC power module (optional for battery LAN switches, used as the redundancy for the internal power module)

Item	Product Description
8	150 W DC power module (optional for battery LAN switches, used as the redundancy for the internal power module)

More Information

For more information about Huawei Campus Switches, visit http://e.huawei.com or contact us in the following ways:

- Global service hotline: http://e.huawei.com/en/service-hotline
- Logging in to the Huawei Enterprise technical support website: http://support.huawei.com/enterprise/
- Sending an email to the customer service mailbox: support_e@huawei.com

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