

# S6720-LI Series Next-Generation Simplified 10 GE Switches

Huawei S6720-LI series switches are next-generation simplified all-10GE fixed switches and can be used for 10GE access on campus and data center networks.

## Introduction

The S6720-LI series switches (S6720-LI) are next-generation simplified 10GE fixed switches and can be used as 10GE access switches on campus networks and data center networks.

The S6720-LI provides line-rate 10GE access ports and 40GE uplink ports. In addition, the S6720-LI delivers a wide variety of services, comprehensive security control policies, and various QoS features to help customers build scalable, reliable, manageable, and secure campus and data center networks.

#### **Product Overview**

## Models and Appearances

The following models are available in the S6720-LI series.

Models and appearances of the S6720-LI series

Appearance	Description
S6720-16X-LI-16S-AC	<ul> <li>16 x 10GE SFP+ ports</li> <li>Built-in AC power supply and redundant power supply (RPS)</li> <li>USB</li> <li>Forwarding performance: 240 Mpps</li> <li>Switching capacity: 1.28 Tbit/s</li> </ul>
S6720S-16X-LI-16S-AC	<ul> <li>16 x 10GE SFP+ ports</li> <li>Built-in AC power supply and redundant power supply (RPS)</li> <li>USB</li> <li>Forwarding performance: 240 Mpps</li> <li>Switching capacity: 1.28 Tbit/s</li> </ul>
S6720-26Q-LI-24S-AC	<ul> <li>24 x 10GE SFP+ ports, 2 x 40GE QSFP+ ports</li> <li>Built-in AC power supply and RPS</li> <li>USB</li> <li>Forwarding performance: 240 Mpps</li> <li>Switching capacity: 1.28 Tbit/s</li> </ul>

Appearance	Description
S6720S-26Q-LI-24S-AC	<ul> <li>24 x 10GE SFP+ ports, 2 x 40GE QSFP+ ports</li> <li>Built-in AC power supply and RPS</li> <li>USB</li> <li>Forwarding performance: 240 Mpps</li> <li>Switching capacity: 1.28 Tbit/s</li> </ul>
S6720-32X-LI-32S-AC	<ul> <li>32 x 10GE SFP+ ports</li> <li>Built-in AC power supply and RPS</li> <li>USB</li> <li>Forwarding performance: 240 Mpps</li> <li>Switching capacity: 1.28 Tbit/s</li> </ul>
S6720S-32X-LI-32S-AC	<ul> <li>32 x 10GE SFP+ ports</li> <li>Built-in AC power supply and RPS</li> <li>USB</li> <li>Forwarding performance: 240 Mpps</li> <li>Switching capacity: 1.28 Tbit/s</li> </ul>

## **Power Supply**

The S6720-LI has a built-in power supply and does not support pluggable power supplies. It can connect to an RPS1800 power supply for power redundancy.

Technical specifications of RPS1800 available in the S6720-LI series

Power Module	Technical Specifications	Applied Switch Model
PD04000	<ul> <li>Dimensions (W x D x H): 442.0 mm x 310.0 mm x 43.6 mm</li> <li>Weight:</li> <li>Without power modules installed: 4 kg</li> </ul>	S6720-LI and S6720S-LI series
RPS1800	<ul><li>With one power module installed: 5.5 kg</li><li>With two power modules installed: 7 kg</li></ul>	
	Rated input voltage: 220/110 V AC, 50/60 Hz	
	<ul> <li>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</li> </ul>	
	Input current: 12 A	
	<ul> <li>Maximum output current (without power modules installed):</li> <li>12 V: 11.5 A</li> </ul>	
	<ul> <li>Maximum output current (with one power module installed):</li> </ul>	
	- 12 V: 11.5 A	
	<ul> <li>53.5 V: 15 A (input voltage range: 200 V AC to 240 V AC)</li> </ul>	
	<ul> <li>Maximum output current (with two power modules installed):</li> </ul>	
	- 12 V: 11.5 A	
	<ul> <li>- 53.5 V: 15 A output per port (input voltage range: 200 V AC to 240 V AC)</li> </ul>	
	<ul> <li>- 53.5 V: 15 A output per port (input voltage range: 100</li> <li>V AC to 120 V AC, two 870 W PoE power modules</li> </ul>	

Power Module	Technical Specifications	Applied Switch Model
	required)	
	<ul> <li>Maximum output power (without power modules installed):</li> <li>12 V: 140 W</li> </ul>	
	Maximum output power (with one power module installed):	
	- 12 V: 140 W	
	<ul> <li>53.5 V: 800 W (input voltage range: 200 V AC to 240 V AC)</li> </ul>	
	<ul> <li>Maximum output power (with two power modules installed):</li> </ul>	
	- 12 V: 140 W	
	<ul> <li>53.5 V: 1600 W (input voltage range: 200 V AC to 240 V AC)</li> </ul>	
	<ul> <li>-53.5 V: 800 W (input voltage range: 100 V AC to 120 V AC, two 870 W PoE power modules required)</li> </ul>	
	Hot swap: Not supported	

#### M NOTE

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

## **Product Features and Highlights**

#### **High-Density 10GE Access Ports and 40GE Uplink Ports**

- To provide sufficient bandwidth for users, more and more servers use 10GE network adapters. The S6720-LI has the highest density of 10GE ports and largest switching capacity among counterpart switches. Each S6720-LI provides up to 32 line-rate 10GE ports and two line-rate 40GE QSFP+ ports.
- Ports of the S6720-LI support GE access and 10GE access and can identify optical module types, maximizing the return on investment and allowing users to flexibly deploy services.

#### **Comprehensive Security Control Policies**

- The S6720-LI provides multiple security measures to defend against Denial of Service (DoS) attacks, as well as attacks on networks or users. DoS attacks include SYN flood, Land, Smurf, and ICMP flood attacks. Attacks on networks refer to STP BPDU/root attacks. Attacks on users include bogus DHCP server attacks, man-in-the-middle attacks, IP/MAC spoofing attacks, and DHCP request flood attacks. DoS attacks that change the CHADDR field in DHCP packets are also attacks against users.
- The S6720-LI supports DHCP snooping, which generates user binding entries. DHCP snooping discards invalid packets that do not match any binding entries, such as ARP spoofing packets and IP spoofing packets. This prevents hackers from using ARP packets to initiate attacks on campus networks. DHCP snooping trusted ports can be specified to ensure that users connect only to the authorized DHCP server.
- The S6720-LI supports strict ARP learning. This feature prevents ARP spoofing attackers from exhausting ARP entries so that users can connect to the Internet normally. The S6720-LI supports IP source check to prevent DoS attacks caused by MAC address spoofing, IP address spoofing, and MAC/IP spoofing.
- The S6720-LI supports centralized MAC address authentication and 802.1X authentication. It authenticates users based on statically or dynamically bound user information such as the user name, IP address, MAC address, VLAN ID, port number, and flag indicating whether antivirus software is installed. VLANs, QoS policies, and ACLs can be applied to users dynamically.
- The S6720-LI can limit the number of MAC addresses learned on a port to prevent attackers from exhausting MAC address entries by using bogus source MAC addresses. This function minimizes packet flooding that occurs when MAC addresses of users cannot be found in the MAC address table.

#### **Comprehensive Reliability Mechanisms**

- The S6720-LI supports MSTP multi-process that enhances the existing STP, RSTP, and MSTP implementation. This function increases the number of MSTIs supported on a network. It also supports enhanced Ethernet reliability technologies such as Smart Link and RRPP, which implement millisecond-level protection switchover and ensure network reliability. Smart Link and RRPP both support multi-instance to implement load balancing among links, improving bandwidth use efficiency.
- The S6720-LI supports enhanced trunk (E-trunk). A CE can be dual-homed to two PEs through Eth-Trunk links. This implements inter-device link aggregation and link load balancing, and greatly improves reliability of access devices.
- The S6720-LI supports the Smart Ethernet Protection (SEP) protocol, a ring network protocol applied to the link layer of an Ethernet network. SEP can be used on open ring networks and provides millisecond-level switchover to ensure nonstop services. SEP features simplicity, high reliability, fast switchover, easy maintenance, and flexible topology, facilitating network planning and management.
- The S6720-LI supports G.8032, also called Ethernet Ring Protection Switching (ERPS). ERPS is based on traditional Ethernet MAC and bridging functions. It uses the mature Ethernet OAM and Ring Automatic Protection Switching (Ring APS or R-APS) technologies to implement millisecond-level protection switchover on Ethernet. ERPS supports multiple services and provides flexible networking options, reducing the OPEX and CAPEX.
- The S6720-LI supports VRRP. Two S6720-LIs can form a VRRP group to ensure nonstop and reliable communication. Multiple equal-cost routes to an upstream device can be configured on the S6720-LI to provide route redundancy. When an active route is unreachable, traffic is switched to a backup route.

#### **Various QoS Control Mechanisms**

• The S6720-LI implements complex traffic classification based on packet information such as the 5-tuple, IP preference, ToS, DSCP, IP protocol type, ICMP type, TCP source port, VLAN ID, Ethernet protocol type, and CoS. ACLs can be applied to the inbound or outbound direction to filter packets. The S6720-LI supports a flow-based two-rate three-color CAR. Each port supports eight priority queues and multiple queue scheduling algorithms such as WRR, DRR, PQ, WRR+PQ, and DRR+PQ. All of these ensure the quality of voice, video, and data services.

#### **High Scalability**

• The S6720-LI supports intelligent stack (iStack) and virtualizes multiple switches into one logical switch. A port of the S6720-LI can be configured as a stack port using a command for flexible stack deployment. The distance between stacked switches is further increased when the switches are connected with optical fibers. Compared with a single device, iStack has advantages on scalability, reliability, performance, and overall architecture. A new switch can join a stack to increase the system capacity or replace a faulty member switch without interrupting services. Compared with stacking of modular switches, the iStack function can increase system capacity and port density with no restriction of the hardware architecture. Multiple devices in a stack can be considered as one logical device. These switches can be managed using a single IP address, which greatly reduces system expansion and O&M costs.

#### **Convenient Management**

- The S6720-LI supports automatic configuration, plug-and-play, deployment using a USB flash drive, and batch remote upgrade. These capabilities simplify device management and maintenance, and greatly reduce maintenance costs.
- The S6720-LI supports SNMPv1/v2/v3 and provides flexible methods for managing and maintaining devices, such as CLI and Web NMS. The NQA function helps users with network planning and upgrades. In addition, the S6720-LI supports NTP, SSH v2, HWTACACS, RMON, log hosts, and port-based traffic statistics.
- The S6720-LI supports GVRP, which dynamically distributes, registers, and propagates VLAN attributes to reduce the manual configuration workloads of network administrators and ensure correct VLAN configuration.
- The S6720-LI supports MUX VLAN that isolates Layer 2 traffic between ports in a VLAN. MUX VLAN defines principal VLANs and subordinate VLANs. Subordinate VLANs can communicate with the principal VLAN but cannot communicate with each other. This function prevents communication between network devices connected to certain ports or port groups but allows the devices to communicate with the default gateway. MUX VLAN is usually used on an enterprise intranet to isolate user ports from each other but allow them to communicate with server ports.
- Complying with IEEE 802.3ah and 802.1ag, the S6720-LI supports point-to-point Ethernet fault management and can detect faults in the last mile of an Ethernet link to users. Ethernet OAM improves the Ethernet network management and maintenance capabilities and ensures a stable network.

#### **Various IPv6 Features**

• The S6720-LI supports various IPv6 routing protocols including RIPng and OSPFv3. It uses the IPv6 Neighbor Discovery Protocol (NDP) to manage packets exchanged between neighbors. It also provides the Path MTU Discovery (PMTU) mechanism to select a proper MTU on the path from the source to the destination, optimizing network resources and obtaining the maximum throughput.

#### **Intelligent O&M**

- The S6720-LI provides telemetry technology to collect device data in real time and send the data to Huawei campus network analyzer CampusInsight. The CampusInsight analyzes network data based on the intelligent fault identification algorithm, accurately displays the real-time network status, effectively demarcates and locates faults in a timely manner, and identifies network problems that affect user experience, accurately guaranteeing user experience.
- The S6720-LI supports a variety of intelligent O&M features for audio and video services, including the enhanced Media Delivery Index (eMDI). With this eDMI function, the S6720-LI can function as a monitored node to periodically conduct statistics and report audio and video service indicators to the CampusInsight platform. In this way, the CampusInsight platform can quickly demarcate audio and video service quality faults based on the results of multiple monitored nodes.

## **Product Specifications**

#### **Functions and Features**

The following table describes the functions and features available on the S6720-LI.

Function and feature metrics for the S6720-LI series

Function and Fe	eature	Description	S6720-X- LI series	S6720S-X- LI series	S6720- Q-LI series	S6720S- Q-LI series
Ethernet features	Ethernet basics	Full-duplex, half-duplex, and auto-negotiation	Yes	Yes	Yes	Yes
		Rate auto-negotiation on an interface	Yes	Yes	Yes	Yes
		Flow control on an interface	Yes	Yes	Yes	Yes
		Jumbo frames	Yes	Yes	Yes	Yes
		Link aggregation	Yes	Yes	Yes	Yes
		Load balancing among links of a trunk	Yes	Yes	Yes	Yes
		Transparent transmission of Layer 2 protocol packets	Yes	Yes	Yes	Yes
		Device Link Detection Protocol (DLDP)	Yes	Yes	Yes	Yes
		Link Layer Discovery Protocol (LLDP)	Yes	Yes	Yes	Yes
	Link Layer Discovery Protocol-Media Endpoint Discovery (LLDP-MED)	Yes	Yes	Yes	Yes	
		Interface isolation	Yes	Yes	Yes	Yes
		Broadcast traffic suppression on an interface	Yes	Yes	Yes	Yes

Function and Feature		Description	S6720-X- LI series	S6720S-X- LI series	S6720- Q-LI series	S6720S- Q-LI series
		Multicast traffic suppression on an interface	Yes	Yes	Yes	Yes
		Unknown unicast traffic suppression on an interface	Yes	Yes	Yes	Yes
		VLAN broadcast traffic suppression	Yes	Yes	Yes	Yes
		VLAN multicast traffic suppression	Yes	Yes	Yes	Yes
		VLAN unknown unicast traffic suppression	Yes	Yes	Yes	Yes
	VLAN	VLAN specification	4094	4094	4094	4094
		VLANIF interface specification	1024	1024	1024	1024
		Access mode	Yes	Yes	Yes	Yes
		Trunk mode	Yes	Yes	Yes	Yes
		Hybrid mode	Yes	Yes	Yes	Yes
		QinQ mode	Yes	Yes	Yes	Yes
		Default VLAN	Yes	Yes	Yes	Yes
		VLAN assignment based on interfaces	Yes	Yes	Yes	Yes
		VLAN assignment based on protocols	Yes	Yes	Yes	Yes
		VLAN assignment based on IP subnets	Yes	Yes	Yes	Yes
		VLAN assignment based on MAC addresses	Yes	Yes	Yes	Yes
		VLAN assignment based on MAC address + IP address	Yes	Yes	Yes	Yes
		VLAN assignment based on MAC address + IP address + interface number	Yes	Yes	Yes	Yes
		Adding double VLAN tags to packets based on interfaces	Yes	Yes	Yes	Yes
		VLAN mapping	Yes	Yes	Yes	Yes
		Selective QinQ	Yes	Yes	Yes	Yes
		MUX VLAN	Yes	Yes	Yes	Yes
		Voice VLAN	Yes	Yes	Yes	Yes
		Guest VLAN	Yes	Yes	Yes	Yes
	GVRP	GARP	Yes	Yes	Yes	Yes

Function and Feature		Description	S6720-X- LI series	S6720S-X- LI series	S6720- Q-LI series	S6720S- Q-LI series
		GVRP	Yes	Yes	Yes	Yes
	VCMP	VCMP	Yes	Yes	Yes	Yes
	MAC	MAC address	32K	32K	32K	32K
		Automatic learning of MAC addresses	Yes	Yes	Yes	Yes
		Automatic aging of MAC addresses	Yes	Yes	Yes	Yes
		Static, dynamic, and blackhole MAC address entries	Yes	Yes	Yes	Yes
		Interface-based MAC address learning limiting	Yes	Yes	Yes	Yes
		Sticky MAC	Yes	Yes	Yes	Yes
		MAC address flapping detection	Yes	Yes	Yes	Yes
		MAC address spoofing defense	Yes	Yes	Yes	Yes
		Port bridge	Yes	Yes	Yes	Yes
	ARP	Static ARP	Yes	Yes	Yes	Yes
		Dynamic ARP	Yes	Yes	Yes	Yes
		ARP entry	8K	8K	8K	8K
		ARP aging detection	Yes	Yes	Yes	Yes
		Intra-VLAN proxy ARP	Yes	Yes	Yes	Yes
		Routed proxy ARP	Yes	Yes	Yes	Yes
Ethernet loop	MSTP	STP	Yes	Yes	Yes	Yes
protection		RSTP	Yes	Yes	Yes	Yes
		MSTP	Yes	Yes	Yes	Yes
		VBST	Yes	Yes	Yes	Yes
		BPDU protection	Yes	Yes	Yes	Yes
		Root protection	Yes	Yes	Yes	Yes
		Loop protection	Yes	Yes	Yes	Yes
		Defense against TC BPDU attacks	Yes	Yes	Yes	Yes
	Loopback detection	Loop detection on an interface	Yes	Yes	Yes	Yes
	SEP	SEP	Yes	Yes	Yes	Yes
	Smart Link	Smart Link	Yes	Yes	Yes	Yes

Function and Feature		Description	S6720-X- LI series	S6720S-X- LI series	S6720- Q-LI series	S6720S- Q-LI series
		Smart Link multi-instance	Yes	Yes	Yes	Yes
		Monitor Link	Yes	Yes	Yes	Yes
	RRPP	RRPP	Yes	Yes	Yes	Yes
		Single RRPP ring	Yes	Yes	Yes	Yes
		Tangent RRPP ring	Yes	Yes	Yes	Yes
		Intersecting RRPP ring	Yes	Yes	Yes	Yes
		Hybrid networking of RRPP rings and other ring networks	Yes	Yes	Yes	Yes
	ERPS	G.8032 v1	Yes	Yes	Yes	Yes
		G.8032 v2	Yes	Yes	Yes	Yes
		ERPS semi-ring topology	Yes	Yes	Yes	Yes
		ERPS closed-ring topology	Yes	Yes	Yes	Yes
IPv4/IPv6	IPv4 and unicast	IPv4 static routing	Yes	Yes	Yes	Yes
forwarding	routing	VRF	Yes	Yes	Yes	Yes
		DHCP client	Yes	Yes	Yes	Yes
		DHCP server	Yes	Yes	Yes	Yes
		DHCP relay	Yes	Yes	Yes	Yes
		DHCP policy check	Yes	Yes	Yes	Yes
		Routing policies	Yes	Yes	Yes	Yes
		IPv4 routes	8K	8K	8K	8K
		RIPv1	Yes	Yes	Yes	Yes
		RIPv2	Yes	Yes	Yes	Yes
		OSPF	Yes	Yes	Yes	Yes
		Policy-based routing (PBR)	Yes	Yes	Yes	Yes
	Multicast routing	IGMPv1/v2/v3	Yes	Yes	Yes	Yes
	features	PIM-DM	Yes	Yes	Yes	Yes
		PIM-SM	Yes	Yes	Yes	Yes
		MSDP	Yes	Yes	Yes	Yes
		IPv4 multicast routes	1.5K	1.5K	1.5K	1.5K
		IPv6 multicast routes	0.5K	0.5K	0.5K	0.5K
		Multicast routing policies	Yes	Yes	Yes	Yes
		RPF	Yes	Yes	Yes	Yes
	IPv6 features	IPv6 protocol stack	Yes	Yes	Yes	Yes
		ND	Yes	Yes	Yes	Yes

Function and Feature		Description	S6720-X- LI series	S6720S-X- LI series	S6720- Q-LI series	S6720S- Q-LI series
		ND entry	8K	8K	8K	8K
		ND snooping	Yes	Yes	Yes	Yes
		DHCPv6 snooping	Yes	Yes	Yes	Yes
		RIPng	Yes	Yes	Yes	Yes
		DHCPv6 server	Yes	Yes	Yes	Yes
		DHCPv6 relay	Yes	Yes	Yes	Yes
		OSPFv3	Yes	Yes	Yes	Yes
		IPv6 routes	4K	4K	4K	4K
		VRRP6	Yes	Yes	Yes	Yes
		MLDv1/v2	Yes	Yes	Yes	Yes
		PIM-DM for IPv6	Yes	Yes	Yes	Yes
		PIM-SM for IPv6	Yes	Yes	Yes	Yes
Layer 2 multicast	-	IGMPv1/v2/v3 snooping	Yes	Yes	Yes	Yes
features		IGMP snooping proxy	Yes	Yes	Yes	Yes
		MLD snooping	Yes	Yes	Yes	Yes
		Multicast traffic suppression	Yes	Yes	Yes	Yes
		Inter-VLAN multicast replication	Yes	Yes	Yes	Yes
Device reliability	Stacking	Service interface-based stacking	Yes	Yes	Yes	Yes
		Maximum number of stacked devices	9	9	9	9
		Stack bandwidth (Unidirectional)	Up to 176 Gbit/s	Up to 176 Gbit/s	Up to 176 Gbit/s	Up to 176 Gbit/s
	VRRP	VRRP standard protocol	Yes	Yes	Yes	Yes
Ethernet OAM	EFM (802.3ah)	Automatic discovery of links	Yes	Yes	Yes	Yes
		Link fault detection	Yes	Yes	Yes	Yes
		Link troubleshooting	Yes	Yes	Yes	Yes
		Remote loopback	Yes	Yes	Yes	Yes
	CFM (802.1ag)	Software-level CCM	Yes	Yes	Yes	Yes
		802.1ag MAC ping	Yes	Yes	Yes	Yes
		802.1ag MAC trace	Yes	Yes	Yes	Yes
	OAM association	Association between 802.1ag and 802.3ah	Yes	Yes	Yes	Yes
	Y.1731	Unidirectional delay and jitter measurement	Yes	Yes	Yes	Yes

Function and Feature		Description	S6720-X- LI series	S6720S-X- LI series	S6720- Q-LI series	S6720S- Q-LI series
		Bidirectional delay and jitter measurement	Yes	Yes	Yes	Yes
QoS features	Traffic classification	Traffic classification based on ACLs	Yes	Yes	Yes	Yes
		Configuring traffic classification priorities	Yes	Yes	Yes	Yes
		Matching the simple domains of packets	Yes	Yes	Yes	Yes
	Traffic behavior	Traffic filtering	Yes	Yes	Yes	Yes
		Traffic policing (CAR)	Yes	Yes	Yes	Yes
		Modifying the packet priorities	Yes	Yes	Yes	Yes
		Modifying the simple domains of packets	Yes	Yes	Yes	Yes
		Modifying the packet VLANs	Yes	Yes	Yes	Yes
	Traffic shaping	Traffic shaping on an egress interface	Yes	Yes	Yes	Yes
		Traffic shaping on queues on an interface	Yes	Yes	Yes	Yes
	Congestion avoidance	Tail drop	Yes	Yes	Yes	Yes
	Congestion management	Priority Queuing (PQ)	Yes	Yes	Yes	Yes
		Weighted Deficit Round Robin (WDRR)	Yes	Yes	Yes	Yes
		PQ+WDRR	Yes	Yes	Yes	Yes
		Weighted Round Robin (WRR)	Yes	Yes	Yes	Yes
		PQ+WRR	Yes	Yes	Yes	Yes
ACL	Packet filtering at Layer 2 to Layer	Number of rules per IPv4 ACL	2K	2K	2K	2K
	4	Number of rules per IPv6 ACL	2K	2K	2K	2K
		Basic IPv4 ACL	Yes	Yes	Yes	Yes
		Advanced IPv4 ACL	Yes	Yes	Yes	Yes
		Basic IPv6 ACL	Yes	Yes	Yes	Yes
		Advanced IPv6 ACL	Yes	Yes	Yes	Yes
		Layer 2 ACL	Yes	Yes	Yes	Yes
		User-defined ACL	Yes	Yes	Yes	Yes
Configuration and	Login and	Command line interface	Yes	Yes	Yes	Yes

Function and Feature		Description	S6720-X- LI series	S6720S-X- LI series	S6720- Q-LI series	S6720S- Q-LI series
maintenance	configuration	(CLI)-based configuration				
	management	Console terminal service	Yes	Yes	Yes	Yes
		Telnet terminal service	Yes	Yes	Yes	Yes
		SSH v1.5	Yes	Yes	Yes	Yes
		SSH v2.0	Yes	Yes	Yes	Yes
		SNMP-based NMS for unified configuration	Yes	Yes	Yes	Yes
		Web page-based configuration and management	Yes	Yes	Yes	Yes
		EasyDeploy (client)	Yes	Yes	Yes	Yes
		SVF	Yes	Yes	Yes	Yes
		OPS	Yes	Yes	Yes	Yes
	File system	Directory and file management	Yes	Yes	Yes	Yes
		File upload and download	Yes	Yes	Yes	Yes
	Monitoring and maintenance	eMDI	Yes	Yes	Yes	Yes
		Hardware monitoring	Yes	Yes	Yes	Yes
		Log information output	Yes	Yes	Yes	Yes
		Alarm information output	Yes	Yes	Yes	Yes
		Debugging information output	Yes	Yes	Yes	Yes
		Port mirroring	Yes	Yes	Yes	Yes
		Flow mirroring	Yes	Yes	Yes	Yes
		Remote mirroring	Yes	Yes	Yes	Yes
		Energy saving	Yes	Yes	Yes	Yes
	Version upgrade	Version upgrade	Yes	Yes	Yes	Yes
		Version rollback	Yes	Yes	Yes	Yes
Security	ARP security	ARP packet rate limiting	Yes	Yes	Yes	Yes
		ARP anti-spoofing	Yes	Yes	Yes	Yes
		Association between ARP and STP	Yes	Yes	Yes	Yes
		Dynamic ARP Inspection (DAI)	Yes	Yes	Yes	Yes
		Static ARP Inspection (SAI)	Yes	Yes	Yes	Yes
		Egress ARP Inspection (EAI)	Yes	Yes	Yes	Yes

Function and Feature		Description	S6720-X- LI series	S6720S-X- LI series	S6720- Q-LI series	S6720S- Q-LI series
	IP security	ICMP attack defense	Yes	Yes	Yes	Yes
		IPSG for IPv4	Yes	Yes	Yes	Yes
		IPSG user capacity	1000	1000	1000	1000
		IPSG for IPv6	Yes	Yes	Yes	Yes
		IPSGv6 user capacity	512	512	512	512
	Local attack defense	CPU attack defense	Yes	Yes	Yes	Yes
	MFF	MFF	Yes	Yes	Yes	Yes
	DHCP snooping	DHCP snooping	Yes	Yes	Yes	Yes
		Option 82 function	Yes	Yes	Yes	Yes
		Dynamic rate limiting for DHCP packets	Yes	Yes	Yes	Yes
	Attack defense	Defense against malformed packet attacks	Yes	Yes	Yes	Yes
		Defense against UDP flood attacks	Yes	Yes	Yes	Yes
		Defense against TCP SYN flood attacks	Yes	Yes	Yes	Yes
		Defense against ICMP flood attacks	Yes	Yes	Yes	Yes
		Defense against packet fragment attacks	Yes	Yes	Yes	Yes
		Local URPF	Yes	Yes	Yes	Yes
User access and	AAA	Local authentication	Yes	Yes	Yes	Yes
authentication		Local authorization	Yes	Yes	Yes	Yes
		RADIUS authentication	Yes	Yes	Yes	Yes
		RADIUS authorization	Yes	Yes	Yes	Yes
		RADIUS accounting	Yes	Yes	Yes	Yes
		HWTACACS authentication	Yes	Yes	Yes	Yes
		HWTACACS authorization	Yes	Yes	Yes	Yes
		HWTACACS accounting	Yes	Yes	Yes	Yes
	NAC	802.1X authentication	Yes	Yes	Yes	Yes
		MAC address authentication	Yes	Yes	Yes	Yes
		Portal authentication	Yes	Yes	Yes	Yes
		Hybrid authentication	Yes	Yes	Yes	Yes
	Policy association	Functioning as the access	Yes	Yes	Yes	Yes

Function and Fe	eature	Description	S6720-X- LI series	S6720S-X- LI series	S6720- Q-LI series	S6720S- Q-LI series
		device				
Network .	-	Ping	Yes	Yes	Yes	Yes
management		Tracert	Yes	Yes	Yes	Yes
		NQA	Yes	Yes	Yes	Yes
		NTP	Yes	Yes	Yes	Yes
		sFlow	Yes	Yes	Yes	Yes
		SNMP v1	Yes	Yes	Yes	Yes
		SNMP v2c	Yes	Yes	Yes	Yes
		SNMP v3	Yes	Yes	Yes	Yes
		HTTP	Yes	Yes	Yes	Yes
		HTTPS	Yes	Yes	Yes	Yes
		RMON	Yes	Yes	Yes	Yes
		NETCONF/YANG	Yes	Yes	Yes	Yes
Interoperability -	-	VLAN-based Spanning Tree (VBST)	Yes	Yes	Yes	Yes
		Link-type Negotiation Protocol (LNP)	Yes	Yes	Yes	Yes
		VLAN Central Management Protocol (VCMP)	Yes	Yes	Yes	Yes

NOTE
This content is applicable only to regions outside mainland China. Huawei reserves the right to interpret this content.

## **Hardware Specifications**

The following table lists hardware specifications of the S6720-LI series.

Hardware specifications of the S6720-26Q-LI-24S-AC and S6720S-26Q-LI-24S-AC

Item		S6720-26Q-LI-24S-AC	S6720S-26Q-LI-24S-AC
Physical specifications	Chassis dimensions (W x D x H, mm)	420 x 220 x 43.6	420 x 220 x 43.6
	Chassis height	1 U	1 U
	Chassis weight (full configuration weight, including weight of packaging materials)	4.2 kg	4.2 kg
Fixed port	10GE port	24	24
	40GE port	2	2
Management port	ETH management port	Supported	Supported
	Console port (RJ45)	Supported	Supported

Item		S6720-26Q-LI-24S-AC	S6720S-26Q-LI-24S-AC
	USB port	USB 2.0	USB 2.0
CPU	Frequency	1 GHz	1 GHz
	Cores	2	2
Memory	Memory (RAM)	1 GB	1 GB
	Flash	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users
Power supply	Power supply type	Built-in AC	Built-in AC
system	Power supply redundancy	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode
	RPS	Supported	Supported
	Rated voltage range	AC: 100 V AC to 240 V AC, 50/60 Hz	AC: 100 V AC to 240 V AC, 50/60 Hz
	Maximum voltage range	AC: 90 V AC to 264 V AC; 47-63 Hz	AC: 90 V AC to 264 V AC; 47-63 Hz
	Maximum input current	3 A	3 A
	Maximum power consumption of the device	100.2 W	100.2 W
	Power consumption in the case of 30% traffic load <sup>1</sup>	67.1 W	67.1 W
	Power consumption in the case of 100% traffic load <sup>1</sup>	67.1 W	67.1 W
Heat dissipation	Heat dissipation mode	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment
system	Number of fan modules	3	3
	Airflow	Air flows in from the left side and front panel, and exhausts from the right side.	Air flows in from the left side and front panel, and exhausts from the right side.
	Maximum heat dissipation of the device (BTU/hour)	342	342
Environment parameters	Long-term operating temperature	<ul> <li>0-1800 m: 0°C to 45°C</li> <li>1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.</li> </ul>	<ul> <li>0-1800 m: 0°C to 45°C</li> <li>1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.</li> </ul>
	Short-term operating temperature	0-1800 m: -5°C to +50°C      1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.  NOTE  Short term indicates that the successive operating time is no more	0-1800 m: -5°C to +50°C      1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.  NOTE  Short term indicates that the successive operating time is no more

Item		S6720-26Q-LI-24S-AC	S6720S-26Q-LI-24S-AC
		than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.	than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.
	Storage temperature	-40°C to +70°C	-40°C to +70°C
	Relative humidity	5%-95% (non-condensing)	5%-95% (non-condensing)
	Operating altitude	5000 m	5000 m
	Noise under normal temperature (sound power)	46.5 dB(A)	46.5 dB(A)
	Noise under high temperature (sound power)	72.9 dB(A)	72.9 dB(A)
	Noise under normal temperature (sound pressure)	34.6 dB(A)	34.6 dB(A)
	Surge protection specification (power port)	AC power port: ±6 kV in differential or common mode	AC power port: ±6 kV in differential or common mode
Reliability	MTBF (year) <sup>2</sup>	39.2	39.2
	MTTR (hour)	2	2
	Availability	> 0.99999	> 0.99999
Certification		<ul> <li>EMC certification</li> <li>Safety certification</li> <li>Manufacturing certification</li> <li>NOTE         For details about certifications, see the section Safety and Regulatory Compliance.     </li> </ul>	<ul> <li>EMC certification</li> <li>Safety certification</li> <li>Manufacturing certification</li> <li>NOTE</li> <li>For details about certifications, see the section Safety and Regulatory Compliance.</li> </ul>

### Hardware specifications of the S6720-16X-LI and S6720-32X-LI series

Item		S6720-16X-LI- 16S-AC	S6720S-16X-LI- 16S-AC	S6720-32X-LI- 32S-AC	S6720S-32X-LI- 32S-AC
Physical specifications	Chassis dimensions (W x D x H, mm)	420 x 220 x 43.6	420 x 220 x 43.6	420 x 220 x 43.6	420 x 220 x 43.6
	Chassis height	1 U	1 U	1 U	1 U
	Chassis weight (full configuration weight, including	4.08 kg	4.08 kg	4.25 kg	4.25 kg

Item		S6720-16X-LI- 16S-AC	S6720S-16X-LI- 16S-AC	S6720-32X-LI- 32S-AC	S6720S-32X-LI- 32S-AC
	weight of packaging materials)				
Fixed port	10GE port	16	16	32	32
	40GE port	NA	NA	NA	NA
Management port	ETH management port	Supported	Supported	Supported	Supported
	Console port (RJ45)	Supported	Supported	Supported	Supported
	USB port	USB 2.0	USB 2.0	USB 2.0	USB 2.0
CPU	Frequency	1 GHz	1 GHz	1 GHz	1 GHz
	Cores	2	2	2	2
Memory	Memory (RAM)	1 GB	1 GB	1 GB	1 GB
	Flash	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users
Power supply system	Power supply type	Built-in AC	Built-in AC	Built-in AC	Built-in AC
	Power supply redundancy	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode
	RPS	Supported	Supported	Supported	Supported
	Rated voltage range	AC: 100 V AC to 240 V AC, 50/60 Hz	AC: 100 V AC to 240 V AC, 50/60 Hz	AC: 100 V AC to 240 V AC, 50/60 Hz	AC: 100 V AC to 240 V AC, 50/60 Hz
	Maximum voltage range	AC: 90 V AC to 264 V AC; 47-63 Hz	AC: 90 V AC to 264 V AC; 47-63 Hz	AC: 90 V AC to 264 V AC; 47-63 Hz	AC: 90 V AC to 264 V AC; 47-63 Hz
	Maximum input current	3 A	3 A	3 A	3 A
	Maximum power consumption of the device	67.9 W	67.9 W	108.5 W	108.5 W
	Power consumption in the case of 30% traffic load <sup>1</sup>	45.2 W	45.2 W	71.8 W	71.8 W
	Power consumption in the case of 100% traffic load <sup>1</sup>	45.2 W	45.2 W	71.8 W	71.8 W
Heat	Heat	Air-cooled heat	Air-cooled heat	Air-cooled heat	Air-cooled heat

Item		S6720-16X-LI- 16S-AC	S6720S-16X-LI- 16S-AC	S6720-32X-LI- 32S-AC	S6720S-32X-LI- 32S-AC
dissipation system	dissipation mode	dissipation and intelligent fan speed adjustment			
	Number of fan modules	3	3	3	3
	Airflow	Air flows in from the left side and front panel, and exhausts from the right side.	Air flows in from the left side and front panel, and exhausts from the right side.	Air flows in from the left side and front panel, and exhausts from the right side.	Air flows in from the left side and front panel, and exhausts from the right side.
	Maximum heat dissipation of the device (BTU/hour)	231.7	231.7	370	370
Environment parameters	Long-term operating temperature	0-1800 m: 0°C to 45°C      1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.	<ul> <li>0-1800 m: 0°C to 45°C</li> <li>1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.</li> </ul>	0-1800 m: 0°C to 45°C      1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.	0-1800 m: 0°C to 45°C      1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.
	Short-term operating temperature	0-1800 m: -5°C to +50°C      1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.	0-1800 m: -5°C to +50°C      1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.	0-1800 m: -5°C to +50°C      1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.	0-1800 m: -5°C to +50°C      1800-5000 m: The operating temperature decreases 1°C for every 220 m increase in altitude.
		NOTE  Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.	NOTE  Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.	NOTE  Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.	NOTE  Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45°C is no more than 15 in a year.
	Storage temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
	Relative humidity	5%-95% (non- condensing)	5%-95% (non- condensing)	5%-95% (non- condensing)	5%-95% (non- condensing)

Item		S6720-16X-LI- 16S-AC	S6720S-16X-LI- 16S-AC	S6720-32X-LI- 32S-AC	S6720S-32X-LI- 32S-AC
	Operating altitude	5000 m	5000 m	5000 m	5000 m
	Noise under normal temperature (sound power)	46.5 dB(A)	46.5 dB(A)	46.4 dB(A)	46.4 dB(A)
	Noise under high temperature (sound power)	72.9 dB(A)	72.9 dB(A)	72.9 dB(A)	72.9 dB(A)
	Noise under normal temperature (sound pressure)	34.6 dB(A)	34.6 dB(A)	34.6 dB(A)	34.6 dB(A)
	Surge protection specification (power port)	AC power port: ±6 kV in differential or common mode	AC power port: ±6 kV in differential or common mode	AC power port: ±6 kV in differential or common mode	AC power port: ±6 kV in differential or common mode
Reliability	MTBF (year) <sup>2</sup>	39.2	39.2	42.8	42.8
	MTTR (hour)	2	2	2	2
	Availability	> 0.99999	> 0.99999	> 0.99999	> 0.99999
Certification		<ul><li>EMC certification</li><li>Safety certification</li><li>Manufacturing certification</li></ul>	<ul><li>EMC certification</li><li>Safety certification</li><li>Manufacturing certification</li></ul>	<ul><li>EMC certification</li><li>Safety certification</li><li>Manufacturing certification</li></ul>	<ul><li>EMC certification</li><li>Safety certification</li><li>Manufacturing certification</li></ul>
		For details about certifications, see the section Safety and Regulatory Compliance.	For details about certifications, see the section Safety and Regulatory Compliance.	For details about certifications, see the section Safety and Regulatory Compliance.	For details about certifications, see the section Safety and Regulatory Compliance.

#### **Ⅲ** NOTE

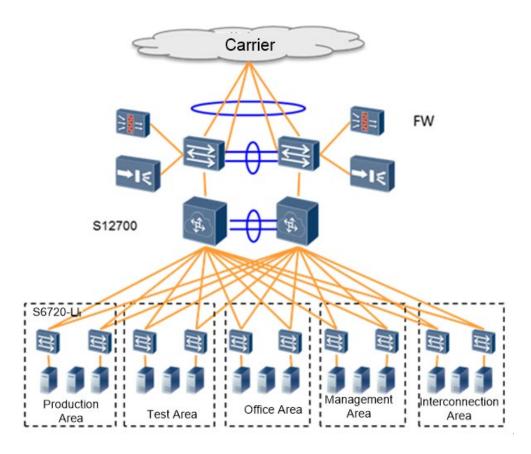
## **Networking and Applications**

#### **Data Center Networks**

As shown in the following figure, the S12700 agile switches function as core switches in a data center and use firewall and load balancer cards to ensure security and perform load balancing. The S6720-LIs function as access switches and provide high-density 10GE ports to connect to 10G servers.

<sup>1:</sup> The power consumption under different load conditions is calculated according to the ATIS standard. Additionally, the EEE function is enabled and there is no PoE power output.

<sup>2:</sup> The reliability parameter values are calculated based on the typical configuration of the device. The parameter values vary according to the modules configured by the customer.



#### **Campus Networks**

The S6720-LI series switches can be used as access or aggregation switches on small- and medium-sized campus networks and provide high-density line-rate 10GE ports, rich service features, and comprehensive security mechanisms. All of these make the S6720-LI cost-effective on campus networks.

## **Product Accessories**

## **Optical Modules and Fibers**

The S6720-LI supports the following GE, 10GE, and 40GE optical modules:

- GE: 100 m electrical, 500 m optical multi-mode, 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+
- 40GE: 150/400 m QSFP+ optical multi-mode, 1.4/2/10/40 km optical single-mode

Optical fibers fall into single-mode and multi-mode 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 port 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.

#### **Ⅲ** NOTE

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

#### **Stack Cables**

The S6720-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.

QSFP+ high-speed cable

The QSFP+ high-speed cable also integrates an optical module and cable. The QSFP+ high-speed cables are available in QSFP-40G-CU1M, QSFP-40G-CU3M, and QSFP-40G-CU5M.

The following table lists the stack cable types and connectors.

Stack cable types and connectors applicable to the S6720-LI series

Stack Cable	Model	Cable Length	Connector
AOC	SFP-10G-AOC3M	3 m	SFP+
	SFP-10G-AOC10M	5 m	SFP+
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+
QSFP+ high-	QSFP-40G-CU1M	1 m	QSFP+
speed	QSFP-40G-CU3M	3 m	QSFP+
	QSFP-40G-CU5M	5 m	QSFP+



For more information about stack cables of the S6720-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 the S6720-LI.

Safety and regulatory compliance of the S6720-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
	• IEC60825-1
	• IEC60825-2
	• EN60825-1
	• EN60825-2

Certification Category	Description
Electromagnetic Compatibility (EMC)	<ul> <li>CISPR22 Class A</li> <li>CISPR24</li> <li>EN55022 Class A</li> <li>EN55024</li> <li>ETSI EN 300 386 Class A</li> </ul>
	<ul> <li>CFR 47 FCC Part 15 Class A</li> <li>ICES 003 Class A</li> <li>AS/NZS CISPR22 Class A</li> <li>VCCI Class A</li> <li>IEC61000-4-2</li> <li>ITU-T K 20</li> <li>ITU-T K 21</li> </ul>
	<ul><li>ITU-T K 44</li><li>CNS13438</li></ul>
Environment	<ul><li>RoHS</li><li>REACH</li><li>WEEE</li></ul>

#### ■ 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 the S6720-LI.

MIBs supported by the S6720-LI series

Category	MIB
Public MIB	BRIDGE-MIB     DISMAN-NSLOOKUP-MIB
	DISMAN-PING-MIB

Category	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
	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     Top 1/17
	• TCP-MIB
	UDP-MIB
Huawei-proprietary MIB	HUAWEI-AAA-MIB
	HUAWEI-ACL-MIB
	HUAWEI-ALARM-MIB
	HUAWEI-ALARM-RELIABILITY-MIB     HUAWEI-BAGE TRADAUB
	HUAWEI-BASE-TRAP-MIB     HUAWEI-BRAS BABUIS MIB
	HUAWEI-BRAS - RADIUS-MIB     HUAWEI-BRAS - RADIUS-MIB
	HUAWEI-BRAS-SRVCFG-EAP-MIB     HUAWEI-BRAS SRVCFG STATISLISER MIR
	<ul><li>HUAWEI-BRAS-SRVCFG-STATICUSER-MIB</li><li>HUAWEI-CBQOS-MIB</li></ul>
	HUAWEI-CDP-COMPLIANCE-MIB
	HUAWEI-CONFIG-MAN-MIB
	HUAWEI-CPU-MIB
	HUAWEI-DAD-TRAP-MIB
	HUAWEI-DC-MIB
	HUAWEI-DATASYNC-MIB
	HUAWEI-DEVICE-MIB

Category	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
	HUAWELIPV6-MIB
	HUAWEL-ISOLATE-MIB     HUAWEL-ISOLATE-MIB
	HUAWEL-L2IF-MIB     HUAWEL-L2MAM MID
	HUAWEI-L2MAM-MIB     HUAWEI-L2WIAN MIB
	<ul><li>HUAWEI-L2VLAN-MIB</li><li>HUAWEI_LDT-MIB</li></ul>
	HUAWEI-LLDP-MIB
	HUAWEI-MAC-AUTHEN-MIB
	HUAWEI-MEMORY-MIB
	HUAWEI-MFF-MIB
	HUAWEI-MFLP-MIB
	HUAWEI-MSTP-MIB
	HUAWEI-MULTICAST-MIB
	HUAWEI-NAP-MIB
	HUAWEI-NTPV3-MIB
	HUAWEI-PERFORMANCE-MIB
	HUAWEI-PORT-MIB
	HUAWEI-PORTAL-MIB
	HUAWEI-QINQ-MIB
	HUAWEI-RIPv2-EXT-MIB
	HUAWEI-RM-EXT-MIB

Category	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

#### M NOTE

For more information about MIBs supported by the S6720-LI series, visit: https://support.huawei.com/enterprise/en/switches/s6700-pid-6691593?category=reference-guides

## **Standards Compliance**

The following table lists the standards that the S6720-LI complies with.

Standard compliance list of the S6720-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 2328 OSPF Version 2
	RFC 2453 RIP Version 2

Standard Organization	Standard or Protocol
	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+
	RFC 6241 Network Configuration Protocol (NETCONF)
	<ul> <li>RFC 6020 YANG - A Data Modeling Language for the Network Configuration Protocol (NETCONF)</li> </ul>
IEEE	IEEE 802.1D Media Access Control (MAC) Bridges
	IEEE 802.1p Traffic Class Expediting and Dynamic Multicast Filtering
	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

Standard Organization	Standard or Protocol
	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

#### M NOTE

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

## **Ordering Information**

The following table lists ordering information of the S6720-LI.

Ordering information of the S6720-LI series

Item	Product Description
1	S6720-16X-LI-16S-AC (16 x 10GE SFP+, AC power supply)
2	S6720S-16X-LI-16S-AC (16 x 10GE SFP+, AC power supply)
3	S6720-26Q-LI-24S-AC (24 x 10GE SFP+, 2 x 40GE QSFP+, AC power supply)
4	S6720S-26Q-LI-24S-AC (24 x 10GE SFP+, 2 x 40GE QSFP+, AC power supply)
5	S6720-32X-LI-32S-AC (32 x 10GE SFP+, AC power supply)
6	S6720S-32X-LI-32S-AC (32 x 10GE SFP+, AC power supply)

## **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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