S6720-SI Series Multi-Gigabit Switches

Huawei S6720-SI series switches are next-generation multi-gigabit 10GE fixed switches. They are ideal for high-speed wireless device access, 10GE data center server access, and campus network access/aggregation.

Introduction

Huawei S6720-SI series switches are next-generation multi-gigabit 10GE fixed switches. It can provide high-speed wireless device access and 10GE data center server access and also function as an access/aggregation switch on a campus network.

The S6720-SI is one of the multi-gigabit fixed switches in the industry, providing line-rate multi-gigabit 10M/100M/1G/2.5G/5G/10G access ports and 40GE uplink ports. It can provide high-speed access for APs, enable 10 Gbit/s access to high-density servers, and function as a core/aggregation switch on a campus network to provide 40 Gbit/s rate. In addition, the S6720-SI provides a wide variety of services, comprehensive security policies, and various QoS features to help customers build scalable, manageable, reliable, and secure campus and data center networks.

Product Overview

Models and Appearances

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

Models and appearances of the S6720-SI series

Appearance	Description
S6720-26Q-SI-24S-AC	• 24 × 10GE SFP+, 2 × 40GE QSFP+ • Double pluggable power supplies, AC power supply • USB • Forwarding performance: 240Mpps • Switching capacity: 2.56 Tbit/s
S6720S-26Q-SI-24S-AC	• 24 × 10GE SFP+, 2 × 40GE QSFP+ • Double pluggable power supplies, AC power supply • USB • Forwarding performance: 240Mpps • Switching capacity: 2.56 Tbit/s
S6720-32C-SI-AC	• 24 × multi-gigabit Base-T Ethernet ports, 4 ×10GE SFP+ • One extended slot • Double pluggable power supplies, AC power supply • USB

Appearance	Description
	• Forwarding performance: 240 Mpps • Switching capacity: 2.56 Tbit/s
S6720-32C-SI-DC	• 24 × multi-gigabit Base-T Ethernet ports, 4 ×10GE SFP+ • One extended slot • Double pluggable power supplies, DC power supply • USB • Forwarding performance: 240 Mpps • Switching capacity: 2.56 Tbit/s
S6720-32C-PWH-SI	• 24 × multi-gigabit Base-T Ethernet ports, 4 ×10GE SFP+ • One extended slot • Double pluggable power supplies, AC/DC power supply • Long distance PoE++ • USB • Forwarding performance: 240 Mpps • Switching capacity: 2.56 Tbit/s
S6720-56C-PWH-SI	• 32 × GE Base-T Ethernet ports, 16 × multi-gigabit Base-T Ethernet ports, 4 × 10GE SFP+ • One extended slot • Double pluggable power supplies, AC/DC power supply • PoE++ • USB • Forwarding performance: 240 Mpps • Switching capacity: 2.56 Tbit/s
S6720-52X-PWH-SI	• 48 × multi-gigabit Base-T Ethernet ports, 4 ×10GE SFP+ • Double pluggable power supplies, AC/DC power supply • PoE++ • USB • Forwarding performance: 480 Mpps • Switching capacity: 2.56 Tbit/s

Card Types

The S6720-SI provides one slot for ES5D21Q02Q00 (2-port 40GE QSFP+ rear interface card) or ES5D21X04S01 (4-port 10 GE SFP+ rear interface card) for upstream connections.

ES5D21Q02Q00 (2-Port 40GE QSFP+ Rear Interface Card)

The ES5D21Q02Q00 provides two 40GE QSFP+ optical ports for data access and line-rate switching. It can be installed in a rear card slot of the switch models listed in the following table. This card can be installed only in slot 1 of the switch models with dual slots.

Technical specifications of the ES5D21Q02Q00

Card Model	Technical Specifications	Applied Switch Model

Card Model	Technical Specifications	Applied Switch Model

ES5D21Q02Q00	• Physical specifications:
	  − Dimensions (W x D x H): 100 mm x 208 mm x 40 mm (3.9 in. x 8.2 in. x 1.6 in.)
	  − Weight: 0.92 kg (2.03 lb)
	  − Maximum power consumption: 9 W
	• Environment parameters:
	  − Operating temperature: 0°C to 45°C (32°F to 113°F)
	  − Relative humidity: 5% to 95%
	  − Storage temperature: -40°C to +70°C (-40°F to +158°F)
		• S6720-32C-SI-AC
		• S6720-32C-SI-DC
		• S6720-32C-PWH-SI
		• S6720-56C-PWH-SI

📖 **NOTE**

Cards shipped since June 2014 have an applicability label attached at the back. Notice the card model and applicable device series on the label to avoid installing a card into an inapplicable device.

Functions and features of the ES5D21Q02Q00

Function and Feature	Description
Basic function	Provides two 40GE QSFP+ optical ports for data access and line-rate switching. Each 40GE port can be split into four 10GE ports. **NOTE** When the card is installed on the S6720-SI, the restrictions are as follows: • The four 10GE SFP+ ports on the front panel cannot be used simultaneously with ports on the ES5D21Q02Q00 card. • If the ES5D21Q02Q00 card is installed in the switch, only the ports on the front panel can be used by default.
Hot swap	Supported
Service port stacking	Ports on the card can be used as stack ports. **NOTE** A 40GE port cannot be used as a stack port after it is split into four 10GE ports.

ES5D21X04S01 (4-Port 10GE SFP+ Rear Interface Card)

The ES5D21X04S01 provides four 10GE SFP+ optical ports for data access and line-rate switching.

The ES5D21X04S01 can be installed in rear card slot 2 of the S6720-SI.

Technical specifications of the ES5D21X04S01

Card Model	Technical Specifications	Applied Switch Model

ES5D21X04S01	• Physical specifications:
	  − Dimensions (W x D x H): 100 mm x 208 mm x 40 mm (3.94 in. x 8.19 in. x 1.57 in.)
	  − Weight: 0.76 kg (1.68 lb)
	  − Maximum power consumption: 9.59 W
	• Environment parameters:
	  − Operating temperature: 0°C to 45°C (32°F to 113°F)
		• S6720-32C-SI-AC
		• S6720-32C-SI-DC
		• S6720-32C-PWH-SI
		• S6720-56C-PWH-SI

Card Model	Technical Specifications	Applied Switch Model
	− Relative humidity: 5% RH to 95% RH − Storage temperature: -40℃ to +70℃ (-40°F to +158°F)	

📖 **NOTE**

Cards shipped since June 2014 have an applicability label attached at the back. Notice the card model and applicable device series on the label to avoid installing a card into an inapplicable device.

Functions and features of the ES5D21X04S01

Function and Feature	Description
Basic function	Provides four 10GE SFP+ optical ports for data access and line-rate switching.
Hot swap	Supported
Service ports for stacking	The service ports on the card can be used as stack ports.

Fan Module

The following table lists the fan modules on the S6720-SI.

Technical specifications of the fan module applicable to the S6720-SI series

Fan Module	Technical Specifications	Applied Switch Model
 FAN-060B-B	• Dimensions (W x D x H): 100 mm x 220 mm x 40 mm • Number of fan modules: 2 • Weight: 0.4 kg • Maximum power consumption: 32.6 W • Maximum fan speed: 19000±10% revolutions per minute (RPM) • Maximum wind rate: 64 cubic feet • Hot swap: Supported	• S6720-32C-SI-AC • S6720-32C-SI-DC • S6720-32C-PWH-SI • S6720-56C-PWH-SI • S6720-52X-PWH-SI
 FAN-046A-B	• Dimensions (W x D x H): 100 mm x 220 mm x 40 mm • Number of fan modules: 2 • Weight: 0.34 kg • Maximum power consumption: 14.4 W • Maximum fan speed: 18000±10% revolutions per minute (RPM) • Maximum wind rate: 46 cubic feet • Hot swap: Supported	• S6720-26Q-SI-24S-AC • S6720S-26Q-SI-24S-AC

Power Supply

The following table lists the power supplies on the S6720-SI.

Technical specifications of power supplies applicable to the S6720-SI series

Power Module	Technical Specifications	Applied Switch Model

Power Module	Technical Specifications	Applied Switch Model
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, 47 Hz to 63 Hz • Maximum input current: 3 A • Maximum output current: 12.5 A • Rated output voltage: 12 V • Maximum output power: 150W • Hot swap: Supported	• S6720-26Q-SI-24S-AC • S6720S-26Q-SI-24S-AC • S6720-32C-SI-AC • S6720-32C-SI-DC
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: 6 A • Maximum output current: 12.5 A • Rated output voltage: 12 V • Maximum output power: 150W • Hot swap: Supported	• S6720-26Q-SI-24S-AC • S6720S-26Q-SI-24S-AC • S6720-32C-SI-AC • S6720-32C-SI-DC

W2PSA0580	• 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: < 1.6 kg (3.53 lb)
	• Rated input voltage range: 100 V AC to 240 V AC, 50/60 Hz
	• Maximum input voltage range: 90 V AC to 290 V AC, 47 Hz to 63 Hz
	• Input current: 9 A to 4.5 A
	• Maximum output current:
	  − +12 V: 16.66 A
	  − -53.5 V: 7.11 A
	• Maximum output power:
	  − PoE: 369.6 W
	  − Total: 580 W
	• Hot swap: Supported
		• S6720-32C-PWH-SI
		• S6720-56C-PWH-SI

PDC-650WA-BE	• 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: 0.83 kg (1.83 lb) • Rated input voltage range: -48 V DC to -60 V DC • Maximum input voltage range: -38.4 V DC to -72 V DC • Maximum input current: 20 A • Maximum output current: − +12 V: 22.5 A	• S6720-32C-PWH-SI • S6720-56C-PWH-SI • S6720-52X-PWH-SI

Power Module	Technical Specifications	Applied Switch Model

	− -53.5 V: 7.11 A
	• Maximum output power:
	  − PoE power: 369.6 W
	  − Total power: 650 W
	• Hot swap: Supported	

W2PSA1150	• Dimensions (W x D x H): 100.0 mm x 281.0 mm x 41.4 mm (3.9 in. x 11.1 in. x 1.63 in.)
	• Weight: < 1.6 kg (3.53 lb)
	• Rated input voltage range: 100 V AC to 240 V AC, 50/60 Hz
	• Maximum input voltage range: 90 V AC to 290 V AC, 45 Hz to 65 Hz
	• Input current: 10 A
	• Maximum output current:
	  − +12 V: 29.17 A
	  − -53.5 V: 14.95 A
	• Maximum output power:
	  − PoE power: 785.4 W (220 V)/446.6 W (110 V)
	  − Total power: 1150W (220 V)/800 W (110 V)
	• Hot swap: Supported
		• S6720-32C-PWH-SI
		• S6720-56C-PWH-SI
		• S6720-52X-PWH-SI

PAC1000D5412	• Dimensions (W x D x H): 99 mm x 204 mm x 42 mm (3.9 in. x 8.1 in. x 1.7 in.)
	• Weight: 1.1 kg (2.43 lb)
	• Rated input voltage range:
	  − 100 V AC to 240 V AC, 50/60 Hz
	  − 240 V DC
	• Maximum input voltage range:
	  − 90 V AC to 290 V AC, 47 Hz to 63 Hz
	  − 190 V DC to 290 V DC
	• Input current:
	  − 100 V AC to 130 V AC: 12 A
	  − 200 V AC to 240 V AC: 6 A
	  − 240 V DC: 8A
	• Maximum output current:
	  − +12 V: 20.84 A
	  − -53.5 V: 14.58 A
	• Maximum output power:
	  − PoE: 754.6 W
	  − Total: 1000 W
	• Hot swap: Supported
		• S6720-32C-PWH-SI
		• S6720-56C-PWH-SI
		• S6720-52X-PWH-SI

An S6720-SI switch can have one or two power modules installed.

The S6720-SI provides two power slots, and by default, one AC or DC power supply is equipped. When a switch has two power supplies installed, the power supplies work in 1+1 backup mode to power the switch itself.

PoE/PoE+/PoE++

PWH in the model name indicates a PoE-capable switch, which supports IEEE 802.3af-compliant PoE , IEEE 802.3at-compliant PoE+ and IEEE 802.3bt-compliant PoE++. Each port delivers 15.4 W PoE or 30 W PoE+ or 60 W PoE++ power capacity.

Each S6720-SI series PoE-capable switch has two power slots for pluggable PoE power supplies. The following table lists the power supply options supported by S6720-SI series PoE-capable switches.

Model	Power Supply 1	Power Supply 2	PoE Power Supply	Number of PoE Ports
S6720-32C-PWH-SI	580W or 650W	-	369.6W	• PoE (15.4 W): 24 • PoE+ (30 W): 12 • PoE+ +(60 W): 6
	580W or 650W	580W or 650W	739.2W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 12
	1150W（220V）	–	785.4W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 13
	1150W（220V）	1150W（220V）	1440W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 24
	1150W（110V）	–	446.6W	• PoE (15.4 W): 24 • PoE+ (30 W): 14 • PoE+ +(60 W): 7
	1150W（110V）	1150W（110V）	893.2W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 14
	1000W（220V）	–	754.6W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 12
	1000W（220V）	1000W（220V）	1440W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 24
	1000W（110V）	–	754.6W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 12
	1000W（110V）	1000W（110V）	1440W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 24
	1000W	580W	739.2W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 12
	580W	1000W	739.2W	• PoE (15.4 W): 24 • PoE+ (30 W): 24

Model	Power Supply 1	Power Supply 2	PoE Power Supply	Number of PoE Ports
				• PoE+ +(60 W): 12
	1000W（220V）	1150W（220V）	1440W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 24
	1150W（220V）	1000W（220V）	1440W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 24
	1000W（110V）	1150W（110V）	893.2W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 14
	1150W（110V）	1000W（110V）	893.2W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 14
S6720-52X-PWH-SI	650W	–	369.6W	• PoE (15.4 W): 24 • PoE+ (30 W): 12 • PoE+ +(60 W): 6
	650W	650W	739.2W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 12
	1150W（220V）	–	785.4W	• PoE (15.4 W): 48 • PoE+ (30 W): 26 • PoE+ +(60 W): 13
	1150W（220V）	1150W（220V）	1440W	• PoE (15.4 W): 48 • PoE+ (30 W): 48 • PoE+ +(60 W): 24
	1150W（110V）	–	446.6W	• PoE (15.4 W): 29 • PoE+ (30 W): 14 • PoE+ +(60 W): 7
	1150W（110V）	1150W（110V）	893.2W	• PoE (15.4 W): 48 • PoE+ (30 W): 29 • PoE+ +(60 W): 14
	1000W（220V）	–	754.6W	• PoE (15.4 W): 48 • PoE+ (30 W): 25 • PoE+ +(60 W): 12
	1000W（220V）	1000W（220V）	1440W	• PoE (15.4 W): 48 • PoE+ (30 W): 48 • PoE+ +(60 W): 24
	1000W（110V）	–	646.8W	• PoE (15.4 W): 42 • PoE+ (30 W): 21 • PoE+ +(60 W): 10

Model	Power Supply 1	Power Supply 2	PoE Power Supply	Number of PoE Ports
	1000W（110V）	1000W（110V）	1293.6W	• PoE (15.4 W): 48 • PoE+ (30 W): 43 • PoE+ +(60 W): 21
	1000W（220V）	1150W（220V）	1440W	• PoE (15.4 W): 48 • PoE+ (30 W): 48 • PoE+ +(60 W): 24
	1150W（220V）	1000W（220V）	1440W	• PoE (15.4 W): 48 • PoE+ (30 W): 48 • PoE+ +(60 W): 24
	1000W（110V）	1150W（110V）	893.2W	• PoE (15.4 W): 48 • PoE+ (30 W): 29 • PoE+ +(60 W): 14
	1150W（110V）	1000W（110V）	893.2W	• PoE (15.4 W): 48 • PoE+ (30 W): 29 • PoE+ +(60 W): 14
S6720-56C-PWH-SI	580W or 650W	–	369.6W	• PoE (15.4 W): 24 • PoE+ (30 W): 12 • PoE+ +(60 W): 6
	580W or 650W	580W or 650W	739.2W	• PoE (15.4 W): 48 • PoE+ (30 W): 24 • PoE+ +(60 W): 12
	1150W（220V）	–	785.4W	• PoE (15.4 W): 48 • PoE+ (30 W): 26 • PoE+ +(60 W): 13
	1150W（220V）	1150W（220V）	1440W	• PoE (15.4 W): 48 • PoE+ (30 W): 48 • PoE+ +(60 W): 24
	1150W（110V）	–	446.6W	• PoE (15.4 W): 29 • PoE+ (30 W): 14 • PoE+ +(60 W): 7
	1150W（110V）	1150W（110V）	893.2W	• PoE (15.4 W): 48 • PoE+ (30 W): 29 • PoE+ +(60 W): 14
	1000W（220V）	–	754.6W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 14
	1000W（220V）	1000W（220V）	1440W	• PoE (15.4 W): 24 • PoE+ (30 W): 24 • PoE+ +(60 W): 14
	1000W（110V）	–	754.6W	• PoE (15.4 W): 48

Model	Power Supply 1	Power Supply 2	PoE Power Supply	Number of PoE Ports
				• PoE+ (30 W): 25 • PoE+ +(60 W): 12
	1000W（110V）	1000W（110V）	1440W	• PoE (15.4 W): 48 • PoE+ (30 W): 48 • PoE+ +(60 W): 24
	1000W	580W	739.2W	• PoE (15.4 W): 48 • PoE+ (30 W): 24 • PoE+ +(60 W): 12
	580W	1000W	739.2W	• PoE (15.4 W): 48 • PoE+ (30 W): 24 • PoE+ +(60 W): 12
	1000W（220V）	1150W（220V）	1440W	• PoE (15.4 W): 48 • PoE+ (30 W): 48 • PoE+ +(60 W): 24
	1150W（220V）	1000W（220V）	1440W	• PoE (15.4 W): 48 • PoE+ (30 W): 48 • PoE+ +(60 W): 24
	1000W（110V）	1150W（110V）	893.2W	• PoE (15.4 W): 48 • PoE+ (30 W): 29 • PoE+ +(60 W): 14
	1150W（110V）	1000W（110V）	893.2W	• PoE (15.4 W): 48 • PoE+ (30 W): 29 • PoE+ +(60 W): 14

📖 **NOTE**

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

Product Features and Highlights

High-Density Multi-Gigabit Access Ports and 40GE Uplink Ports

● As the 802.11ac standard and related products are released, the wireless access rate has reached 2.5 Gbit/s. The S6720-SI multi-gigabit fixed switches match perfectly with high-speed APs, and provide the long distance PoE++ function and 60 W PoE on a port. The S6720-SI can provide Ethernet power supply for APs and surveillance cameras.

● Each S6720-SI provides up to two line-rate QSFP+ ports and 24 GE/2.5G/5G/10G Base-T ports. Ports of the S6720-SI support GE/2.5G/5G/10G Base-T access and auto-sensing, maximizing the return on investment (ROI) and allowing users to flexibly deploy services.

Comprehensive Security Policies

● The S6720-SI provides multiple security measures to defend against Denial of Service (DoS) attacks and other 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, DHCP request flood attacks, and DoS attacks by changing the CHADDR field of packets.

- The S6720-SI 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 man-in-the-middle attacks on campus networks. DHCP snooping trusted and untrusted ports can be specified to ensure that users connect only to the authorized DHCP server.

- The S6720-SI supports strict ARP learning. This feature prevents ARP spoofing attackers from exhausting ARP entries so that users can connect to the Internet normally. It also provides IP source check to prevent DoS attacks caused by MAC address spoofing, IP address spoofing, and MAC/IP spoofing. URPF provided by the S6720-SI reversely checks packet transmission path to authenticate packets, which can protect the network against source address spoofing attacks.

- The S6720-SI 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 delivered to users dynamically.

- The S6720-SI can limit the number of MAC addresses learned on a port to prevent MAC address entries from being exhausted by source MAC address spoofing packets. This function minimizes packet flooding that occurs when MAC addresses of users cannot be found in the MAC address table.

- This series of switches supports MACsec, a secure LAN communication method based on 802.1AE and 802.1X. The switches provide identity authentication, data encryption, integrity check, and replay protection to protect Ethernet frames and prevent attack packets.

Comprehensive Reliability Mechanisms

- The S6720-SI supports redundant power supplies. Users can choose a single power supply or use two power supplies to ensure device reliability. With two pluggable fan modules, the S6720-SI has a longer MTBF time than counterpart switches.

- The S6720-SI 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 link protection switchover and ensure network reliability. Smart Link and RRPP both support multi-instance to implement load balancing among links, further improving bandwidth use efficiency.

- The S6720-SI 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-SI 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 uninterrupted services. This protocol is simple, reliable, easy to maintain, and supports fast switchover and flexible topology, facilitating network planning and management.

- The S6720-SI 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 switching on Ethernet. ERPS supports multiple services and provides flexible networking options, reducing the OPEX and CAPEX.

- The S6720-SI supports VRRP. Two S6720-SI switches 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-SI to provide route redundancy. When an active route is unreachable, traffic is switched to a backup route.

Various QoS Control Mechanisms

- The S6720-SI implements complex traffic classification based on packet information such as the 5-tuple, IP precedence, 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-SI supports the flow-based two-rate and three-color CAR. Each port supports eight priority queues and multiple queue scheduling algorithms such as WRR, DRR, PQ, WRR+PQ, and DRR+PQ, which ensures the quality of network services such as voice, video and data services.

High Scalability

- The S6720-SI supports iStack and virtualizes multiple switches into one logical switch. A port of the S6720-SI 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 features powerful scalability, reliability, performance, and architecture. Member switches in a stack implement redundancy backup to improve device reliability and use inter-device link aggregation to improve link reliability, which help to provide within 200 millisecond failover for path failure and hitless master/ backup failover.New member switches 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 structure. 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-SI supports automatic configuration, plug-and-play, deployment using a USB flash drive, and batch remote upgrade. These capabilities facilitate deployment, upgrade, and service provisioning, and simplify device management and maintenance. The maintenance costs are greatly reduced.

- The S6720-SI supports SNMPv1/v2/v3 and provides flexible methods for managing devices. Users can manage the S6720-SI using the CLI and Web NMS. The NQA function helps users with network planning and upgrades. In addition, the S6720-SI supports NTP, SSH v2, HWTACACS, RMON, log hosts, and port-based traffic statistics.

- The S6720-SI 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-SI supports MUX VLAN, a mechanism 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.

- The S6720-SI supports BFD, which provides millisecond-level fault detection for protocols such as OSPF, IS-IS, VRRP, and PIM to improve network reliability. The S6720-SI supports IEEE 802.1ag and IEEE 802.3ah. 802.1ag allows for point-to-point Ethernet fault management, and IEEE 802.3ah can detect faults in the last mile of an Ethernet link. Ethernet OAM improves the Ethernet network management and maintenance capabilities and ensures a stable network.

Various IPv6 Features

- The S6720-SI supports IPv4/IPv6 dual stack and can migrate from an IPv4 network to an IPv6 network. The S6720-SI hardware supports IPv4/IPv6 dual stack and IPv6 over IPv4 tunnels (including manual tunnels, 6to4 tunnels, and ISATAP tunnels). The S6720-SI can be deployed on IPv4 networks, IPv6 networks, or networks that run both IPv4 and IPv6. This makes networking flexible and enables a network to migrate from IPv4 to IPv6.

- The S6720-SI supports various IPv6 routing protocols including RIPng and OSPFv3. The S6720-SI supports the Neighbor Discovery Protocol (NDP) of IPv6, and manages 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.

Cloud Management

- The Huawei cloud management platform allows users to configure, monitor, and inspect switches on the cloud, reducing on-site deployment and O&M manpower costs and decreasing network OPEX. Huawei switches support both cloud management and on-premise management modes. These two management modes can be flexibly switched as required to achieve smooth evolution while maximizing return on investment (ROI).

High-Performance VRP Software System

- Huawei S series switches build on a unified Versatile Routing Platform (VRP) software system, meeting the growing network scale and the evolving Internet technologies and guaranteeing network services and network quality.

- VRP is a network operating system developed by Huawei with independent intellectual property rights. It can run on multiple hardware platforms and provide unified network, user, and management views. VRP provides flexible application solutions for users. In addition, VRP is a future-proof platform that maximally protects customer investments.

- The VRP platform is focused on IP services and uses a component-based architecture to provide more than 300 features. Besides, VRP stands out for its application-based tailorable and scalable capabilities.

OPS

- Open Programmability System (OPS) is an open programmable system based on the Python language. IT administrators can program the O&M functions of a switch through Python scripts to quickly innovate functions and implement intelligent O&M.

Long-Distance PoE++ Power Supply

- When some PoE++ ports on Huawei S6720-32C-PWH-SI work at 2.5 Gbit/s and Category 5E shielded network cables are used, these switches can provide 200-meter PoE power supply to Huawei specific APs, such as AP7052DN, AP7152DN, AP6052DN, AP8082DN, AP8182DN, AP7052DE, and AP7060DN.

Perpetual PoE

- When a PoE switch is abnormal Power-off or the software version is upgraded, the power supply to PDs is not interrupted. This capability ensures that PDs are not powered off during the switch reboot.

Fast PoE

- PoE switches can supply power to PDs within 10s after they are powered on. This is different from common switches that generally take 1 to 3 minutes to start to supply power to PDs. When a PoE switch reboots due to a power failure, the PoE switch continues to supply power to the PDs immediately after being powered on without waiting until it finishes reboot. This greatly shortens the power failure time of PDs.

Intelligent O&M

- The S6720-SI 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-SI 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-SI 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.

Intelligent Upgrade

- Switches support the intelligent upgrade feature. Specifically, switches obtain the version upgrade path and download the newest version for upgrade from the Huawei Online Upgrade Platform (HOUP). The entire upgrade process is highly automated and achieves one-click upgrade. In addition, preloading the version is supported, which greatly shortens the upgrade time and service interruption time.

- The intelligent upgrade feature greatly simplifies device upgrade operations and makes it possible for the customer to upgrade the version independently. This greatly reduces the customer's maintenance costs. In addition, the upgrade policies on the HOUP platform standardize the upgrade operations, which greatly reduces the risk of upgrade failures.

Product Specifications

Functions and Features

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

Function and feature metrics for the S6720-SI series

Function and Feature		Description	S6720-Q-SI series	S6720S-Q-SI series	S6720-C-SI series	S6720-X-SI 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

Function and Feature		Description	S6720-Q-SI series	S6720S-Q-SI series	S6720-C-SI series	S6720-X-SI series
		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
		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

Function and Feature		Description	S6720-Q-SI series	S6720S-Q-SI series	S6720-C-SI series	S6720-X-SI series
		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
		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

Function and Feature		Description	S6720-Q-SI series	S6720S-Q-SI series	S6720-C-SI series	S6720-X-SI series
	ARP	Static ARP	Yes	Yes	Yes	Yes
		Dynamic ARP	Yes	Yes	Yes	Yes
		ARP entry	20K	20K	20K	20K
		ARP aging detection	Yes	Yes	Yes	Yes
		Intra-VLAN proxy ARP	Yes	Yes	Yes	Yes
		Routed proxy ARP	Yes	Yes	Yes	Yes
Ethernet loop protection	MSTP	STP	Yes	Yes	Yes	Yes
		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
		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

Function and Feature		Description	S6720-Q-SI series	S6720S-Q-SI series	S6720-C-SI series	S6720-X-SI series
IPv4/IPv6 forwarding	IPv4 and unicast routing	IPv4 static routing	Yes	Yes	Yes	Yes
		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 features	IGMPv1/v2/v3	Yes	Yes	Yes	Yes
		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
		ND entry	10K	10K	10K	10K
		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

Function and Feature		Description	S6720-Q-SI series	S6720S-Q-SI series	S6720-C-SI series	S6720-X-SI series
		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 features	-	IGMPv1/v2/v3 snooping	Yes	Yes	Yes	Yes
		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
		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	Yes	Yes	Yes	Yes

Function and Feature		Description	S6720-Q-SI series	S6720S-Q-SI series	S6720-C-SI series	S6720-X-SI series
		priorities				
		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 4	Number of rules per IPv4 ACL	2K	2K	2K	2K
		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 maintenanc	Login and configuration	Command line interface (CLI)-based configuration	Yes	Yes	Yes	Yes

Function and Feature		Description	S6720-Q-SI series	S6720S-Q-SI series	S6720-C-SI series	S6720-X-SI series
e	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	Yes	Yes	Yes	Yes

Function and Feature		Description	S6720-Q-SI series	S6720S-Q-SI series	S6720-C-SI series	S6720-X-SI series
		Inspection (DAI)				
		Static ARP Inspection (SAI)	Yes	Yes	Yes	Yes
		Egress ARP Inspection (EAI)	Yes	Yes	Yes	Yes
	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
	MACSec	MACSec	No	No	Yes	No
User access and authentication	AAA	Local authentication	Yes	Yes	Yes	Yes
		Local authorization	Yes	Yes	Yes	Yes
		RADIUS authentication	Yes	Yes	Yes	Yes
		RADIUS	Yes	Yes	Yes	Yes

Function and Feature		Description	S6720-Q-SI series	S6720S-Q-SI series	S6720-C-SI series	S6720-X-SI series
		authorization				
		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 control device	Yes	Yes	Yes	Yes
		Functioning as the access device	Yes	Yes	Yes	Yes
Network management	-	Ping	Yes	Yes	Yes	Yes
		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

Hardware Specifications

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

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

Item		S6720-26Q-SI-24S-AC	S6720S-26Q-SI-24S-AC
Physical specifications	Chassis dimensions (W x D x H, mm)	442 x 420 x 44.4	442 x 420 x 44.4
	Chassis height	1 U	1 U
	Chassis weight (full configuration weight, including weight of packaging materials)	8.83 kg	8.83 kg
Fixed port	10GE port	24	24
	40GE port	2	2
Management port	ETH port	Supported	Supported
	Console port (RJ45)	Supported	Supported
	USB port	USB 2.0	USB 2.0
CPU	Frequency	1 GHz	1 GHz
	Cores	2	2
Storage	Memory (RAM)	1 GB	1 GB
	Flash memory	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	• 150W AC (pluggable) • 150W DC (pluggable)	• 150W AC (pluggable) • 150W DC (pluggable)
	Power supply specification	For details about power supplies, see the section Power Supply.	For details about power supplies, see the section Power Supply.
	Power supply redundancy	1+1 backup NOTE The backup power supply is optional.	1+1 backup NOTE The backup power supply is optional.
	Rated voltage range	• AC: 100 V AC to 240 V AC; 50/60 Hz • DC: -48 V DC to -60 V DC	• AC: 100 V AC to 240 V AC; 50/60 Hz • DC: -48 V DC to -60 V DC
	Maximum voltage range	• AC: 90 V AC to 264 V AC; 47-63 Hz • DC: -36 V DC to -72 V DC	• AC: 90 V AC to 264 V AC; 47-63 Hz • DC: -36 V DC to -72 V DC
	Maximum input current	• 150W AC: 3 A • 150W DC: 6 A	• 150W AC: 3 A • 150W DC: 6 A
	Maximum power consumption of the device	97 W	97 W
	Power consumption in the case of 30%	68.4 W	68.4 W

Item		S6720-26Q-SI-24S-AC	S6720S-26Q-SI-24S-AC
	traffic load[1]		
	Power consumption in the case of 100% traffic load[1]	68.4 W	68.4 W
Heat dissipation system	Heat dissipation mode	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment
	Number of fan modules	Pluggable dual fans	Pluggable dual fans
	Airflow	Air flows in from the left, right, and front sides and exhausts from the rear side	Air flows in from the left, right, and front sides and exhausts from the rear side
	Maximum heat dissipation of the device (BTU/hour)	331	331
Environment parameters	Long-term operating temperature	• 0-1800 m: 0℃ to 45℃ • 1800-5000 m: The operating temperature decreases 1℃ for every 220 m increase in altitude.	• 0-1800 m: 0℃ to 45℃ • 1800-5000 m: The operating temperature decreases 1℃ for every 220 m increase in altitude.
	Short-term operating temperature	• 0-1800 m: -5℃ to +50℃ • 1800-5000 m: The operating temperature decreases 1℃ 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℃ is no more than 15 in a year.	• 0-1800 m: -5℃ to +50℃ • 1800-5000 m: The operating temperature decreases 1℃ 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℃ is no more than 15 in a year.
	Storage temperature	-40℃ to +70℃	-40℃ to +70℃
	Relative humidity	5%–95% (non-condensing)	5%–95% (non-condensing)
	Operating altitude	• AC: 5000 m • DC: 2000 m	• AC: 5000 m • DC: 2000 m
	Noise under normal temperature (sound power)	57 dB(A)	57 dB(A)
	Noise under high temperature (sound power)	71.6 dB(A)	71.6 dB(A)
	Noise under normal temperature (sound pressure)	44.9 dB(A)	44.9 dB(A)
	Surge protection specification (RJ45 service port)	NA	NA
	Surge protection specification (power	• AC power interface: ±6 kV in differential or common mode	• AC power interface: ±6 kV in differential or common mode

Item		S6720-26Q-SI-24S-AC	S6720S-26Q-SI-24S-AC
	port)	• DC power interface: ±1 kV in differential mode; ±2 kV in common mode	• DC power interface: ±1 kV in differential mode; ±2 kV in common mode
Reliability	MTBF (year)[2]	41.9	41.9
	MTTR (hour)	2	2
	Availability	> 0.99999	> 0.99999
Certification		• EMC certification • Safety certification • Manufacturing certification For details about certifications, see the section Safety and Regulatory Compliance.	• EMC certification • Safety certification • Manufacturing certification For details about certifications, see the section Safety and Regulatory Compliance.

Hardware specifications of S6720-32C-SI and S6720-32X-SI series

Item		S6720-32C-PWH-SI	S6720-32C-SI-AC S6720-32C-SI-DC
Physical specifications	Chassis dimensions (W x D x H, mm)	• With the 580 W/650 W power supply: 442 x 420 x 44.4 • With the 1150W power supply: 442 x 507 x 44.4	442 x 420 x 44.4
	Chassis height	1 U	1 U
	Chassis weight (full configuration weight, including weight of packaging materials)	8.02 kg	8.63 kg
Fixed port	10GE port	4	4
	MultiGe port	24	24
Flexible card	Card slot	1	1
	Card type	• 2-port 40GE QSFP+ interface card • 4-port 10GE SFP+ interface card	• 2-port 40GE QSFP+ interface card • 4-port 10GE SFP+ interface card
	Card specification	For details about cards, see Card Types.	For details about cards, see Card Types.
Management port	ETH port	Supported	Supported
	Console port (RJ45)	Supported	Supported
	USB port	USB 2.0	USB 2.0
CPU	Frequency	1 GHz	1 GHz
	Cores	2	2
Storage	Memory (RAM)	1 GB	1 GB
	Flash memory	Hardware: 512 MB, of which 240 MB is available for users	Hardware: 512 MB, of which 240 MB is available for users

Item		S6720-32C-PWH-SI	S6720-32C-SI-AC S6720-32C-SI-DC
Power supply system	Power supply type	• 1150W AC (pluggable) • 1000W AC (pluggable) • 580W AC (pluggable) • 650W DC (pluggable)	• 150W AC (pluggable) • 150W DC (pluggable)
	Power supply specification	For details about power supplies, see the section Power Supply.	For details about power supplies, see the section Power Supply.

	Power supply redundancy	1+1 backup
		NOTE
		  The backup power supply is optional.
			1+1 backup
			NOTE
			  The backup power supply is optional.

	Rated voltage range	• AC: 100 V AC to 240 V AC; 50/60 Hz • DC: -48 V DC to -60 V DC	• AC: 100 V AC to 240 V AC; 50/60 Hz • DC: -48 V DC to -60 V DC
	Maximum voltage range	• AC: 90 V AC to 264 V AC; 47-63 Hz • DC: -38.4 V DC to -72 V DC	• AC: 90 V AC to 264 V AC; 47-63 Hz • DC: -36 V DC to -72 V DC
	Maximum input current	• 580W AC: 4.5-9A • 650W DC: 20A • 1000W AC:12A • 1150W AC: 10A	• 150W AC: 3 A • 150W DC: 6 A

	Maximum power consumption of the device(100% traffic, full speed of fans)	• 580W AC/650W DC:
		  − Without cards and PD: 125.6 W
		  − With PDs: 1017.2 W (PD: 739.2 W)
		• 1150W AC/1000W AC:
		  − Without cards and PDs: 125.6 W
		  − With PDs: 1735 W (PD: 1440 W)
			• 117.62 W (without cards)

	Power consumption in the case of 30% traffic load[1]	• 580W AC/650W DC: without cards and PDs: 106.9 W • 1150W AC/1000W AC, without cards and PDs: 121.6 W	93 W (without cards)
Heat dissipation system	Heat dissipation mode	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment
	Number of fan modules	Pluggable dual fans	Pluggable dual fans
	Airflow	Air flows in from the left, right, and front sides and exhausts from the rear side	Air flows in from the left, right, and front sides and exhausts from the rear side

Item		S6720-32C-PWH-SI	S6720-32C-SI-AC S6720-32C-SI-DC
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.	• 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. **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.	• 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.
	Storage temperature	-40°C to +70°C	-40°C to +70°C
	Relative humidity	5%–95% (non-condensing)	5%–95% (non-condensing)
	Operating altitude	• AC: 5000 m • DC: 5000 m	• AC: 5000 m • DC: 2000 m
	Noise under normal temperature (sound power)	62.3 dB(A)	62.3 dB(A)
	Noise under high temperature (sound power)	78.8 dB(A)	78.8 dB(A)
	Noise under normal temperature (sound pressure)	54.4 dB(A)	54.4 dB(A)
	Surge protection specification (RJ45 service port)	±7 kV	±7 kV
	Surge protection specification (power port)	• 580W AC/1000W AC power interface: ±6kV in differential or common mode • 650W DC/1150W AC power interface: ±2 kV in differential mode; ±4 kV in common mode	• AC power interface: ±6 kV in differential or common mode • DC power interface: ±1 kV in differential mode; ±2 kV in common mode
Reliability	MTBF (year)[2]	22.7	27.4
	MTTR (hour)	2	2
	Availability	> 0.99999	> 0.99999
Certification		• EMC certification	• EMC certification

Item	S6720-32C-PWH-SI	S6720-32C-SI-AC S6720-32C-SI-DC
	• Safety certification • Manufacturing certification For details about certifications, see the section Safety and Regulatory Compliance.	• Safety certification • Manufacturing certification For details about certifications, see the section Safety and Regulatory Compliance.

Hardware specifications of S6720-56C-SI and S6720-52X-SI series

Item		S6720-52X-PWH-SI	S6720-56C-PWH-SI
Physical specifications	Chassis dimensions (W x D x H, mm)	442 x 507 x 44.4	• With the 580 W/650 W power supply: 442 x 420 x 44.4 • With the 1150W power supply: 442 x 507 x 44.4
	Chassis height	1 U	1 U
	Chassis weight (full configuration weight, including weight of packaging materials)	7.0 kg	8.3 kg
Fixed port	GE port	NA	32
	10GE port	4	4
	MultiGe port	48	16
Flexible card	Card slot	NA	1
	Card type	NA	• 2-port 40GE QSFP+ interface card • 4-port 10GE SFP+ interface card
	Card specification	For details about cards, see Card Types.	For details about cards, see Card Types.
Management port	ETH port	Supported	Supported
	Console port (RJ45)	Supported	Supported
	USB port	USB 2.0	USB 2.0
CPU	Frequency	1 GHz	1 GHz
	Cores	2	2
Storage	Memory (RAM)	1 GB	1 GB
	Flash memory	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	• 1150W AC (pluggable) • 650W DC (pluggable) • 1000W AC (pluggable)	• 1150W AC (pluggable) • 580W AC (pluggable) • 650W DC (pluggable) • 1000W AC (pluggable)

Item		S6720-52X-PWH-SI	S6720-56C-PWH-SI
	Power supply specification	For details about power supplies, see the section Power Supply.	For details about power supplies, see the section Power Supply.
	Power supply redundancy	1+1 backup **NOTE** The backup power supply is optional.	1+1 backup **NOTE** The backup power supply is optional.
	Rated voltage range	• AC: 100 V AC to 240 V AC; 50/60 Hz • DC: -48 V DC to -60 V DC	• AC: 100 V AC to 240 V AC; 50/60 Hz • DC: -48 V DC to -60 V DC
	Maximum voltage range	• AC: 90 V AC to 264 V AC; 47-63 Hz • DC: -38.4 V DC to -72 V DC	• AC: 90 V AC to 264 V AC; 47-63 Hz • DC: -38.4 V DC to -72 V DC
	Maximum input current	• 650W DC: 20A • 1150W AC: 10A • 1000W AC: 12A	• 580W AC: 4.5-9A • 650W DC: 20A • 1150W AC: 10A • 1000W AC: 12A

	Maximum power consumption of the device(100% traffic, full speed of fans)	• 650W DC:
		  − Without PDs: 207.4 W
		  − With PDs: 940 W (PD: 739.2 W)
		• 1150W AC:
		  − Without PDs: 236.8 W
		  − With PD: 1724.4 W (PD: 1440 W)
			• 580W AC/650W DC:
			  − Without cards and PDs: 120.5 W
			  − With PDs: 1068.1 W (PD: 739.2 W)
			• 1150W AC/1000W AC:
			  − Without cards and PDs: 120.5 W
			  − With PDs: 1995.4 W (PD: 1440 W)

	Power consumption in the case of 30% traffic load[1]	Without PDs: 159.5 W	Without cards and PDs: 91.01 W
Heat dissipation system	Heat dissipation mode	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment
	Number of fan modules	Pluggable dual fans	Pluggable dual fans
	Airflow	Air flows in from the left, right, and front sides and exhausts from the rear side	Air flows in from the left, right, and front sides and exhausts from the rear side
Environment parameters	Long-term operating temperature	• 0-1800 m: 0℃ to 45℃ • 1800-5000 m: The operating temperature decreases 1℃ for every 220 m increase in altitude.	• 0-1800 m: 0℃ to 45℃ • 1800-5000 m: The operating temperature decreases 1℃ for every 220 m increase in altitude.
	Short-term operating temperature	• 0-1800 m: -5℃ to +50℃ • 1800-5000 m: The operating temperature decreases 1℃ for every 220 m increase in altitude. **NOTE** Short term indicates that the	• 0-1800 m: -5℃ to +50℃ • 1800-5000 m: The operating temperature decreases 1℃ for every 220 m increase in altitude. **NOTE** Short term indicates that the successive operating time is no

| Item		S6720-52X-PWH-SI	S6720-56C-PWH-SI
		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℃ is no more than 15 in a year.	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℃ is no more than 15 in a year.
	Storage temperature	-40℃ to +70℃	-40℃ to +70℃
	Relative humidity	5%–95% (non-condensing)	5%–95% (non-condensing)
	Operating altitude	• AC: 5000 m • DC: 5000 m	• AC: 5000 m • DC: 5000 m
	Noise under normal temperature (sound power)	66.4 dB(A)	62.1 dB(A)
	Noise under high temperature (sound power)	79 dB(A)	78.2 dB(A)
	Noise under normal temperature (sound pressure)	58.4 dB(A)	54 dB(A)
	Surge protection specification (RJ45 service port)	7 kV	±6 kV
	Surge protection specification (power port)	• 1000W AC power interface: ±6 kV in differential mode; ±6 kV in common mode • 1150W AC power interface: ±2 kV in differential mode; ±4 kV in common mode	• 580W AC/1000W AC power interface: ±6kV in differential or common mode • 650W DC power interface: ±2 kV in differential mode; ±4 kV in common mode • 1150W AC power interface: ±2 kV in differential mode; ±4 kV in common mode
Reliability	MTBF (year)[2]	35.1	Without cards: 23.9
	MTTR (hour)	2	2
	Availability	> 0.99999	> 0.99999
Certification		• EMC certification • Safety certification • Manufacturing certification For details about certifications, see the section Safety and Regulatory Compliance.	• EMC certification • Safety certification • Manufacturing certification For details about certifications, see the section Safety and Regulatory Compliance.

📖 **NOTE**

1: 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.

2: 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.

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-SIs function as access switches and provide high-density 10GE ports to connect to 10G servers.
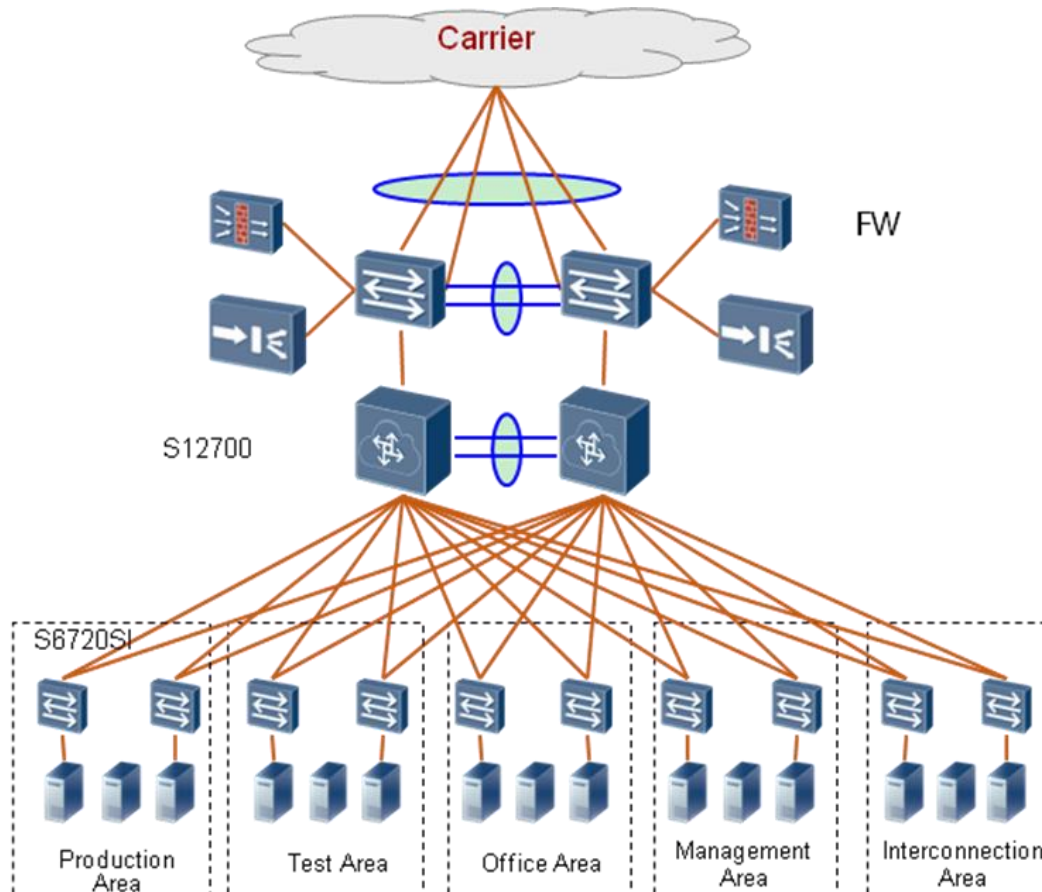
Small and Middle Campus Networks

The S6720-SI series switches can be used as access or aggregation switches on small- and medium-sized campus networks and provide 2.5G ports for high-speed AP access, meeting the requirement for increasing bandwidth. The rich service features and comprehensive security mechanisms make the S6720-SI cost effective on campus networks.
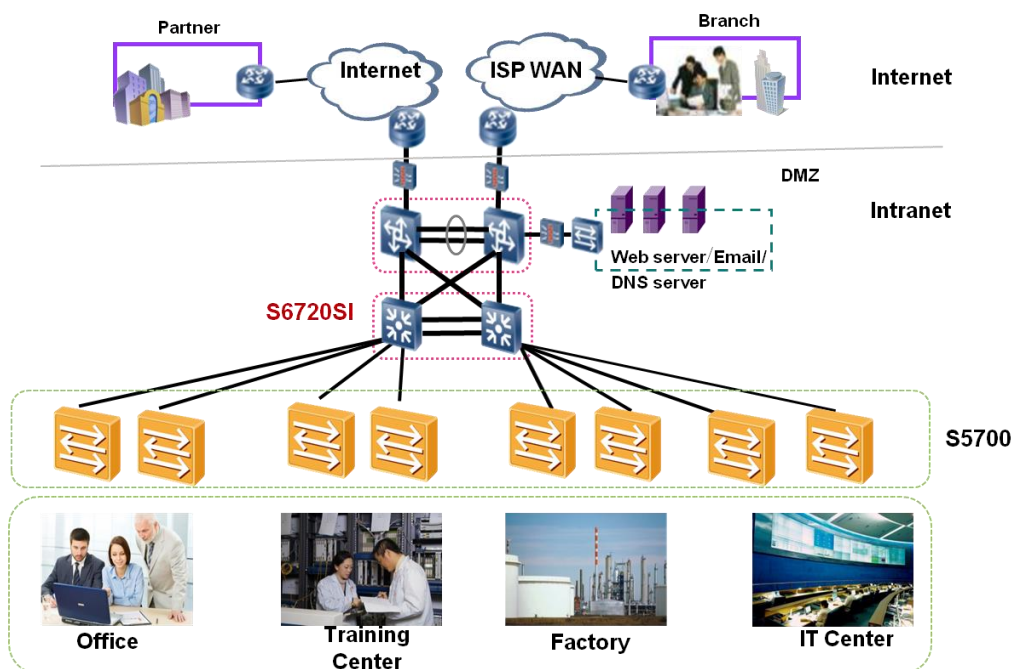
Product Accessories

Optical Modules and Fibers

The S6720-SI 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 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 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 S6720-SI 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	Model	Cable Length	Description
AOC	SFP-10G-AOC3M	3 m	SFP+
	SFP-10G-AOC10M	10 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-speed	QSFP-40G-CU1M	1 m	QSFP+
	QSFP-40G-CU3M	3 m	QSFP+
	QSFP-40G-CU5M	5 m	QSFP+

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

Safety and regulatory compliance of the S6720-SI series

Certification Category	Description
Safety	• IEC 60950-1 and all country deviations • EN 60950-1 • UL 60950-1 • CAN/CSA 22.2 No.60950-1 • GB 4943
Electromagnetic Compatibility (EMC)	• EMI • FCC CFR47 Part 15 Class A • EN55022 Class A • CISPR 22 Class A • EN61000-3-2/IEC-1000-3-2, Power line harmonics • EN61000-4-3/IEC-1000-4-3, Radiated immunity • EN61000-4-2/IEC-1000-4-2, ESD • EN61000-4-4/IEC-1000-4-4, EFT • EN61000-4-5/IEC-1000-4-5, Surge Signal Port • EN61000-4-6/IEC-1000-4-6, Low frequency conducted immunity • EN61000-4-11/IEC-1000-4-11, Voltage dips and sags • EN61000-4-29/IEC61000-4-29, Voltage dips and sags • EMC Directive 89/336/EEC • EMC Directive 2004/108/EC • VCCI V-3 Class A • ICES-003 Class A

Certification Category	Description
	• AS/NZS CISPR 22 Class A • CNS 13438 Class A • GB9254 Class A

📖 **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

MIB and Standards Compliance

Supported MIBs

The following table lists the MIBs supported by the S6720-SI.

MIBs supported by the S6720-SI 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 • OSPF-TRAP-MIB • P-BRIDGE-MIB • Q-BRIDGE-MIB • RFC1213-MIB • RIPv2-MIB

Category	MIB
	• RMON2-MIB
	• RMON-MIB
	• SAVI-MIB
	• SNMP-FRAMEWORK-MIB
	• SNMP-MPD-MIB
	• SNMP-NOTIFICATION-MIB
	• SNMP-TARGET-MIB
	• SNMP-USER-BASED-SM-MIB
	• SNMPv2-MIB
	• TCP-MIB
	• UDP-MIB
Huawei-proprietary MIB	• HUAWEI-AAA-MIB
	• HUAWEI-ACL-MIB
	• HUAWEI-ALARM-MIB
	• HUAWEI-ALARM-RELIABILITY-MIB
	• HUAWEI-BASE-TRAP-MIB
	• HUAWEI-BRAS-RADIUS-MIB
	• HUAWEI-BRAS-SRVCFG-EAP-MIB
	• HUAWEI-BRAS-SRVCFG-STATICUSER-MIB
	• HUAWEI-CBQOS-MIB
	• HUAWEI-CDP-COMPLIANCE-MIB
	• HUAWEI-CONFIG-MAN-MIB
	• HUAWEI-CPU-MIB
	• HUAWEI-DAD-TRAP-MIB
	• HUAWEI-DC-MIB
	• HUAWEI-DATASYNC-MIB
	• HUAWEI-DEVICE-MIB
	• HUAWEI-DHCPR-MIB
	• HUAWEI-DHCPS-MIB
	• HUAWEI-DHCP-SNOOPING-MIB
	• HUAWEI-DIE-MIB
	• HUAWEI-DNS-MIB
	• HUAWEI-DLDP-MIB
	• HUAWEI-ELMI-MIB
	• HUAWEI-ERPS-MIB
	• HUAWEI-ERRORDOWN-MIB
	• HUAWEI-ENERGYMNGT-MIB
	• HUAWEI-EASY-OPERATION-MIB
	• HUAWEI-ENTITY-EXTENT-MIB
	• HUAWEI-ENTITY-TRAP-MIB
	• HUAWEI-ETHARP-MIB
	• HUAWEI-ETHOAM-MIB
	• HUAWEI-FLASH-MAN-MIB
	• HUAWEI-FWD-RES-TRAP-MIB

Category	MIB
	• HUAWEI-GARP-APP-MIB
	• HUAWEI-GTSM-MIB
	• HUAWEI-HGMP-MIB
	• HUAWEI-HWTACACS-MIB
	• HUAWEI-IF-EXT-MIB
	• HUAWEI-INFOCENTER-MIB
	• HUAWEI-IPPOOL-MIB
	• HUAWEI-IPV6-MIB
	• HUAWEI-ISOLATE-MIB
	• HUAWEI-L2IF-MIB
	• HUAWEI-L2MAM-MIB
	• HUAWEI-L2VLAN-MIB
	• HUAWEI_LDT-MIB
	• HUAWEI-LLDP-MIB
	• HUAWEI-MAC-AUTHEN-MIB
	• HUAWEI-MEMORY-MIB
	• HUAWEI-MFF-MIB
	• HUAWEI-MFLP-MIB
	• HUAWEI-MSTP-MIB
	• HUAWEI-MULTICAST-MIB
	• HUAWEI-NAP-MIB
	• HUAWEI-NTPV3-MIB
	• HUAWEI-PERFORMANCE-MIB
	• HUAWEI-PORT-MIB
	• HUAWEI-PORTAL-MIB
	• HUAWEI-QINQ-MIB
	• HUAWEI-RIPv2-EXT-MIB
	• HUAWEI-RM-EXT-MIB
	• HUAWEI-RRPP-MIB
	• HUAWEI-SECURITY-MIB
	• HUAWEI-SEP-MIB
	• HUAWEI-SNMP-EXT-MIB
	• HUAWEI-SSH-MIB
	• HUAWEI-STACK-MIB
	• HUAWEI-SWITCH-L2MAM-EXT-MIB
	• HUAWEI-SWITCH-SRV-TRAP-MIB
	• HUAWEI-SYS-MAN-MIB
	• HUAWEI-TCP-MIB
	• HUAWEI-TFTPC-MIB
	• HUAWEI-TRNG-MIB
	• HUAWEI-XQOS-MIB

📖 **NOTE**

For more information about MIBs supported by the S6720-SI 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-SI complies with.

Standard compliance list of the S6720-SI 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 • 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

Standard Organization	Standard or Protocol
	• draft-grant-tacacs-02 TACACS+ • RFC 6241 Network Configuration Protocol (NETCONF) • RFC 6020 YANG - A Data Modeling Language for the Network Configuration Protocol (NETCONF)
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 • IEEE Std 802.3bz 2.5G/5GBASE-T • 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 • IEEE802.3bt DTE Power via MDI over 4-Pair • IEEE802.3az Energy Efficient Ethernet
ITU	• ITU SG13 Y.17ethoam • ITU SG13 QoS control Ethernet-Based IP Access • ITU-T Y.1731 ETH OAM performance monitor
ISO	• ISO 10589 IS-IS Routing Protocol
MEF	• MEF 2 Requirements and Framework for Ethernet Service Protection • MEF 9 Abstract Test Suite for Ethernet Services at the UNI • MEF 10.2 Ethernet Services Attributes Phase 2 • MEF 11 UNI Requirements and Framework • MEF 13 UNI Type 1 Implementation Agreement • MEF 15 Requirements for Management of Metro Ethernet Phase 1 Network Elements • MEF 17 Service OAM Framework and Requirements • MEF 20 UNI Type 2 Implementation Agreement • MEF 23 Class of Service Phase 1 Implementation Agreement • Xmodem XMODEM/YMODEM Protocol Reference

Ordering Information

The following table lists ordering information of the S6720-SI series switches.

Ordering information of the S6720-SI series

Item	Product Description
1	S6720-26Q-SI-24S bundle (24 x 10GE SFP+, 2 x 40GE QSFP+, with 1 150W AC power supply)
2	S6720S-26Q-SI-24S bundle (24 x 10GE SFP+, 2 x 40GE QSFP+, with 1 150W AC power supply)
3	S6720-32X-SI-32S bundle (32 x 10GE SFP+, with 1 150W AC power supply)
4	S6720-32C-SI-AC bundle (24 x multi-gigabit Base-T Ethernet ports, 4 x 10GE SFP+, with 1 interface slot, with 1 150W AC power supply)
5	S6720-32C-SI-DC bundle (24 x multi-gigabit Base-T Ethernet ports, 4 x 10GE SFP+, with 1 interface slot, with 1 150W DC power supply)
6	S6720-32C-PWH-SI (24 x multi-gigabit Base-T Ethernet ports, 4 x 10GE SFP+, PoE++, with 1 interface slot, without power supply)
7	2-port 40GE QSFP+ interface card
8	4-port 10GE SFP+ interface card
9	150W AC Power Module
10	150W DC Power Module
11	580W AC PoE Power Module
12	650W DC PoE Power Module
13	1000W AC PoE Power Module
14	1150W AC PoE 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