Huawei S6720-SI Series Switches
Product Datasheet



HUAWEI TECHNOLOGIES CO., LTD.

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S6720-SI Series Switches

Product Overview

Huawei S6720-SI series switches are Huawei-developed next-generation multigigabit 10GE fixed switches. The S6720-SI can provide high-speed wireless access, and access for 10GE servers in data centers or function as access/aggregation switches on a campus network.

The S6720-SI is one of the multigigabit fixed switches with the highest performance in the industry, providing line-rate multigigabit 100M/1G/2.5G/5G/10G access ports and 40GE uplink ports. It can be used to provide high-speed access for APs and 10 Gbit/s access to high-density servers or function as a core/aggregation switch on a campus network to provide 40 Gbit/s rate. In addition, 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.

Models and Appearances

The S6720-SI series provides the following models.

S6720-26Q-SI-24S-AC
S6720S-26Q-SI-24S-AC



- 24 × 10GE SFP+, uplink 2 × 40GE QSFP+
- Double pluggable power supplies, AC power supply
- USB
- Forwarding performance: 240Mpps
- Switching capacity: 2.56/25.6Tbps

S6720-32X-SI-32S-AC



- 32 × 10GE SFP+
- Double pluggable power supplies, AC power supply
- USB
- Forwarding performance: 240 Mpps
- Switching capacity: 2.56/25.6Tbps

S6720-32C-SI-AC
S6720-32C-SI-DC



- 24 × 100M/1G/2.5G/5G/10G Base-T Ethernet ports, 4 × 10GE SFP+
- One extended slot
- Double pluggable power supplies, AC/DC power supply
- USB
- Forwarding performance: 240 Mpps
- Switching capacity: 2.56/25.6Tbps

S6720-32C-PWH-SI-AC
S6720-32C-PWH-SI



- 24 × 100M/1G/2.5G/5G/10G 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: 2.56/25.6Tbps

Interface Card

The S6720-SI provides 2 × 40GE QSFP+ interface card for upstream connections. The card support hot swap and ports on the card can be used as stack ports.

2 × 40GE QSFP+ interface card



The card can be installed in the rear extended slot on the S6720-32C-SI-AC or S6720-32C-SI-DC or S6720-32C-PWH-SI-AC or S6720-32C-PWH-SI.

S6720-SI Interface Card

Card Model	Name	Applied Switch Model
ES5D21Q02Q00	2 × 40GE QSFP+ interface card	S6720-32C-SI-AC S6720-32C-SI-DC S6720-32C-PWH-SI-AC S6720-32C-PWH-SI

Fan Module

Table 2-3 lists the fan module on the S6720-SI. FAN-060B-B and FAN-028A-B fan module has two fans to cool the chassis. It is hot swappable.

S6720-SI fan module

Fan Model	Description	Applied Switch Model
FAN-060B-B	Number of fans: 2 Max power consumption: 32.6 W Maximum fan speed: 19000 ± 10% rounds per minute (RPM) Maximum wind rate: 64 cubic feet per minute (CFM)	S6720-32C-SI-AC S6720-32C-SI-DC S6720-32C-PWH-SI-AC S6720-32C-PWH-SI
FAN-046A-B	Number of fans: 2 Max power consumption: 14.4W Maximum fan speed: 18000 ± 10% rounds per minute (RPM) Maximum wind rate: 46 cubic feet per minute (CFM)	S6720-26Q-SI-24S-AC S6720S-26Q-SI-24S-AC S6720-32X-SI-32S-AC

Power Supply

lists the power supplies on the S6720-SI.

S6720-SI power supplies

Power Model	Name	Applied Switch Model
ES0W2PSA0150	150W AC	S6720-26Q-SI-24S-AC S6720S-26Q-SI-24S-AC S6720-32X-SI-32S-AC S6720-32C-SI-AC S6720-32C-SI-DC
ES0W2PSD0150	150W DC	S6720-26Q-SI-24S-AC S6720S-26Q-SI-24S-AC S6720-32X-SI-32S-AC S6720-32C-SI-AC S6720-32C-SI-DC
W2PSA0580	580W AC	S6720-32C-PWH-SI-AC S6720-32C-PWH-SI
PDC-650WA-BE	650W DC	S6720-32C-PWH-SI-AC S6720-32C-PWH-SI
W2PSA1150	1150W AC	S6720-32C-PWH-SI

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

The S6720-SI provides two power slots, 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. The switch supports dual AC, dual DC, as well as AC and DC mixing.

Product Characteristics and Advantages

Huawei S6720-SI series switches have the following characteristics.

High-Density Multigigabit Access and 40 Gbit/s Uplink

- As the 802.11ac standard and related products are released, the wireless access rate has reached 2.5 Gbit/s. The S6720-SI multigigabit 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.
- The S6720-SI fixed switch has the highest density of multigigabit ports and largest switching capacity among counterpart switches. Each S6720-SI provides up to two line-rate QSFP+ ports and 24 100M/1G/2.5G/5G/10G Base-T ports.
- Ports of the S6720-SI support 100M/1G/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 to networks or users. DoS attacks include SYN flood, Land, Smurf, and ICMP flood attacks. Attacks to networks refer to STP BPDU/root attacks. Attacks to 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.

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 usage.
- 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, enabling users to manage and plan networks conveniently.
- 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, 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 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. 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 costs for system expansion and O&M.

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 MUX 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.

Product Specifications

Item	S6720-26Q-SI-24S-AC S6720S-26Q-SI-24S-AC	S6720-32X-SI-32S-AC	S6720-32C-SI-AC S6720-32C-SI-DC	S6720-32C-PWH-SI-AC S6720-32C-PWH-SI
Fixed ports	24 × 10GE SFP+ 2 × 40GE QSFP+	32 × 10GE SFP+	24 × 100M/1G/2.5G /5G/10GBase-T Ethernet ports 4 × 10GE SFP+	24 × 100M/1G/2.5G / 5G /10GBase-T Ethernet ports 4 × 10GE SFP+
Extended slots	Not supported	Not supported	One extended slot	One extended slot
MAC address table	32K MAC address learning and aging Static, dynamic, and blackhole MAC address entries Packet filtering based on source MAC addresses			
VLAN features	4K VLANs Guest VLAN and voice VLAN VLAN assignment based on MAC addresses, protocols, IP subnets, policies, and ports VLAN mapping Super VLAN Basic QinQ and selective QinQ			
IPv4 routing	Static routing, RIPv1, RIPv2, ECMP, URPF, OSPF, IS-IS, and BGP VRRP Policy-based routing Routing policies			
IPv6 routing	Static routing RIPng OSPFv3 BGP4+ ISISv6			
IPv6 features	Neighbor Discovery (ND) and ND snooping IPv6 Ping VRRP6 DHCPv6 snooping, DHCPv6 server, and DHCPv6 relay MLDv1 and MLDv2 PIM-DM for IPv6 PIM-SM for IPv6 6 Over 4 tunnels			
Multicast	IGMP V1/V2/V3 snooping Fast leave IGMP snooping proxy MLD snooping Port-based multicast traffic suppression Inter-VLAN multicast replication Controllable multicast IGMP v1/v2/v3 PIM-SM and PIM-DM Multicast Source Discovery Protocol (MSDP) Multicast routing policies			

Item	S6720-26Q-SI-24S-AC S6720S-26Q-SI-24S-AC	S6720-32X-SI-32S-AC	S6720-32C-SI-AC S6720-32C-SI-DC	S6720-32C-PWH-SI-AC S6720-32C-PWH-SI
QoS/ACL	Traffic classification based on ACLs Traffic classification based on outer 802.1p fields, inner VLAN IDs, outer VLAN IDs, source MAC addresses, and Ethernet types Access control after traffic classification Traffic policing based on traffic classifiers Re-marking based on traffic classifiers Class-based packet queuing Associating traffic classifiers with traffic behaviors Rate limiting on inbound and outbound ports Traffic shaping based on ports and queues Tail drop Priority Queuing (PQ) Deficit Round Robin (DRR) PQ + DRR scheduling Weighted Round Robin (WRR) PQ + WRR scheduling			
Reliability	STP (IEEE 802.1d), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s) BPDU protection, root protection, and loop protection RRPP ring topology and RRPP multi-instance Smart Link tree topology and Smart Link multi-instance, providing millisecond-level protection switchover Smart Ethernet Protection (SEP) G.8032 Ethernet Ring Protection Switching (ERPS) BFD for OSPF, IS-IS, VRRP, and PIM protocols Enhanced trunk (E-trunk)			
Security features	Defense against DoS, ARP, and ICMP attacks Binding of the IP address, MAC address, port number, and VLAN ID of a user Port isolation, port security, and sticky MAC MAC-Forced Forwarding (MACFF) Limit on the number of learned MAC addresses IEEE 802.1X authentication, MAC address authentication, Portal authentication, and hybrid authentication Authentication methods, including AAA, RADIUS, and HWTACACS CPU defense			
Super Virtual Fabric (SVF)	SVF Parent and Client			
Management and maintenance	iStack (using service ports as stack ports) Virtual Cable Test (VCT) Ethernet OAM (IEEE 802.3ah and 802.1ag) SNMPv1/v2c/v3 RMON Web-based network management system and relevant features System logs and multi-level alarms GVRP MUX VLAN sFlow Hypertext Transfer Protocol Secure (HTTPS) SSH1.5/SSH2			

Item	S6720-26Q-SI-24S-AC S6720S-26Q-SI-24S-AC	S6720-32X-SI-32S-AC	S6720-32C-SI-AC S6720-32C-SI-DC	S6720-32C-PWH-SI-AC S6720-32C-PWH-SI
Operating environment	Working temperature: 0–1800 m, 0–45° C; 1800–5000 m, the highest operating temperature reduces by 1° C every time the altitude increases by 220 m. Relative humidity: 5%–95% (noncondensing)			
Input voltage	AC: Rated voltage range: 100 V to 240 V AC, 50/60 Hz Maximum voltage range: 90 V to 264 V AC, 47/63Hz DC: Rated voltage range: –48 V to –60 V DC Maximum voltage range: –36 V to –72 V DC			
Dimensions (W x D x H, mm)	442 × 420 × 44.4	442 × 420 × 44.4	442 × 420 × 44.4	442 × 420 × 44.4
Typical power consumption	68.4W	72.6W	93W(without card)	580W AC: without PD:106.9W; 1150W ACwithout PD: 121.6W

Hardware Specifications

Item	Specification
Cabinet	Standard 19-inch cabinet/rack, such as N66E and N68E
Memory (RAM)	1 GB
Flash memory	240 MB
Switching capacity	680Gbps
Forwarding performance	S6720-26Q-SI-24S-AC: 245 Mpps S6720S-26Q-SI-24S-AC: 245 Mpps S6720-32X-SI-32S-AC: 245 Mpps S6720-32C-SI-AC : 245 Mpps S6720-32C-SI-DC: 245 Mpps S6720-32C-PWH-SI-AC: 245 Mpps S6720-32C-PWH-SI: 245 Mpps
Mean Time Between Failures (MTBF), years	S6720-26Q-SI-24S-AC: 41.9 S6720S-26Q-SI-24S-AC: 41.9 S6720-32X-SI-32S-AC: 46.7 S6720-32C-SI-AC : 27.4 S6720-32C-SI-DC: 27.4 S6720-32C-PWH-SI-AC: 22.7 S6720-32C-PWH-SI: 22.7
Mean Time To Repair (MTTR), hours	2
Availability	> 0.99999

Item		Specification
Surge protection	Service port protection	NA
	Power supply port protection	AC model: ± 6 kV in differential mode and ± 6 kV in common mode DC model: ± 1 kV in differential mode and ± 2 kV in common mode
Dimensions (W x D x H)		S6720-26Q-SI-24S-AC: 442.0mm × 420.0mm × 44.4mm S6720S-26Q-SI-24S-AC: 442.0mm × 420.0mm × 44.4mm S6720-32X-SI-32S-AC: 442.0mm × 420.0mm × 44.4mm S6720-32C-SI-AC : 442.0mm × 420.0mm × 44.4mm S6720-32C-SI-DC: 442.0mm × 420.0mm × 44.4mm S6720-32C-PWH-SI-AC: 442.0mm × 420.0mm × 44.4mm S6720-32C-PWH-SI: 442.0mm × 420.0mm × 44.4mm
Weight (full configuration)		S6720-26Q-SI-24S-AC: 8.83kg S6720S-26Q-SI-24S-AC: 8.83kg S6720-32X-SI-32S-AC: 8.89kg S6720-32C-SI-AC : 8.63kg S6720-32C-SI-DC: 8.63kg S6720-32C-PWH-SI-AC: 9.1kg S6720-32C-PWH-SI: 8.02kg
Stack port		Any MultiGE and 10GE SFP+ ports (a maximum of 16 physical ports) Any 40GE QSFP+ ports (a maximum of 2 physical ports)
RPS		Not supported
PoE		supported
DC input voltage	Rated voltage range	-48V DC to -60V DC
	Maximum voltage range	-36V DC to -72V DC
AC input voltage	Rated voltage range	100V AC to 240V AC; 50/60 Hz
	Maximum voltage range	90V AC to 264V AC; 47 Hz to 63 Hz
Maximum power consumption (100% throughput, full speed of fans)		S6720-26Q-SI-24S-AC: 68.4W S6720S-26Q-SI-24S-AC: 68.4W S6720-32X-SI-32S-AC: 72.6W S6720-32C-SI-AC : 108W(without card) S6720-32C-SI-DC: 108W(without card) S6720-32C-PWH-SI-AC: without card and PD:121.6W S6720-32C-PWH-SI:580W without card and PD:121.6W; 1150W AC without card and PD: 106.9W

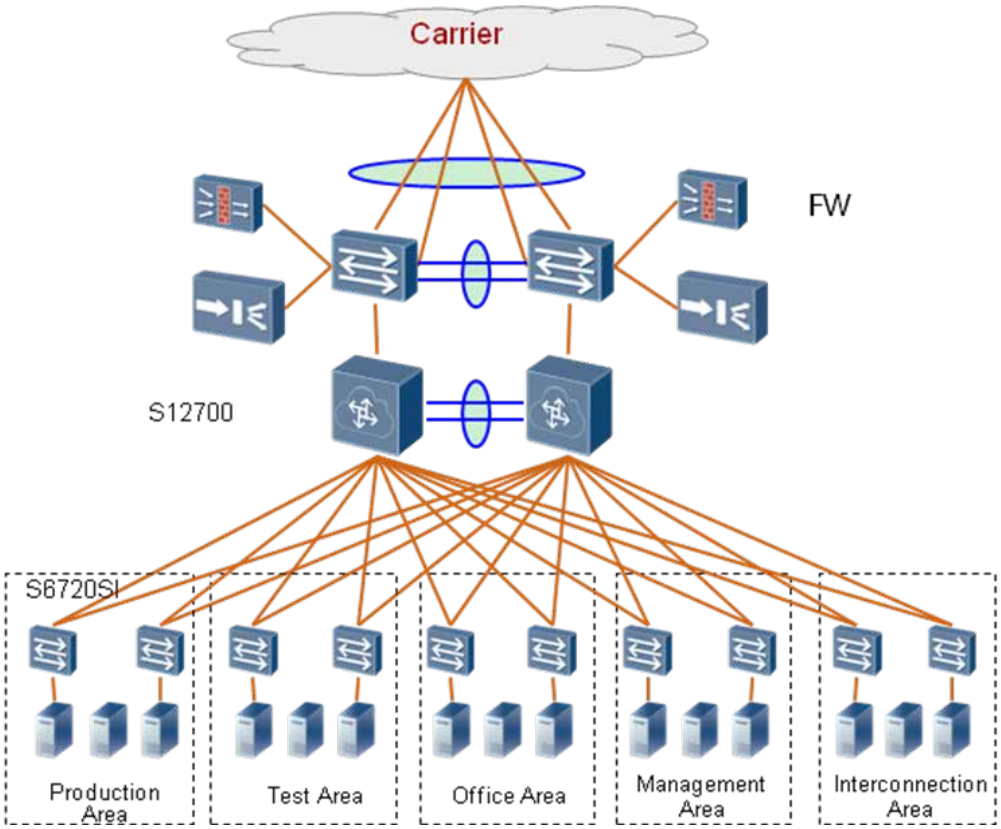
Item		Specification
Temperature	Operating temperature	0° C to 45° C (0m-1800m altitude) Note: When the altitude is between 1800 m and 5000 m, the operating temperature reduces by 1° C every time the altitude increases by 220 m.
	Storage temperature	-40° C to +70° C
Noise under normal temperature (sound power)		S6720-26Q-SI-24S-AC: 57dBA S6720S-26Q-SI-24S-AC: 57dBA S6720-32X-SI-32S-AC: 60.5dBA S6720-32C-SI-AC : 62.3dBA S6720-32C-SI-DC: 62.3dBA S6720-32C-PWH-SI-AC: 62.3dBA S6720-32C-PWH-SI: 62.3dBA
Noise under normal temperature (sound voltage)		S6720-26Q-SI-24S-AC: 44.9dBA S6720S-26Q-SI-24S-AC: 44.9dBA S6720-32X-SI-32S-AC: 48.4dBA S6720-32C-SI-AC : 54.4dBA S6720-32C-SI-DC: 54.4dBA S6720-32C-PWH-SI-AC: 54.4dBA S6720-32C-PWH-SI: 54.4dBA
Relative humidity		5%RH to 95%RH, noncondensing
Operating altitude		AC power equipped: 0 m to 5000 m DC power equipped: 0 m to 2000 m

- Switching capacity: also called switching bandwidth. It refers to the maximum volume of bidirectional traffic that can be transferred between the switching chip and data bus. This index indicates the data transferring capability of a switch.
- Forwarding performance: This index indicates the wire-speed forwarding capability of a switch when the switch processes 64-byte packets (plus an 8-byte preamble and a 12-byte IFG). It represents the packet header processing capability.

Networking and Applications

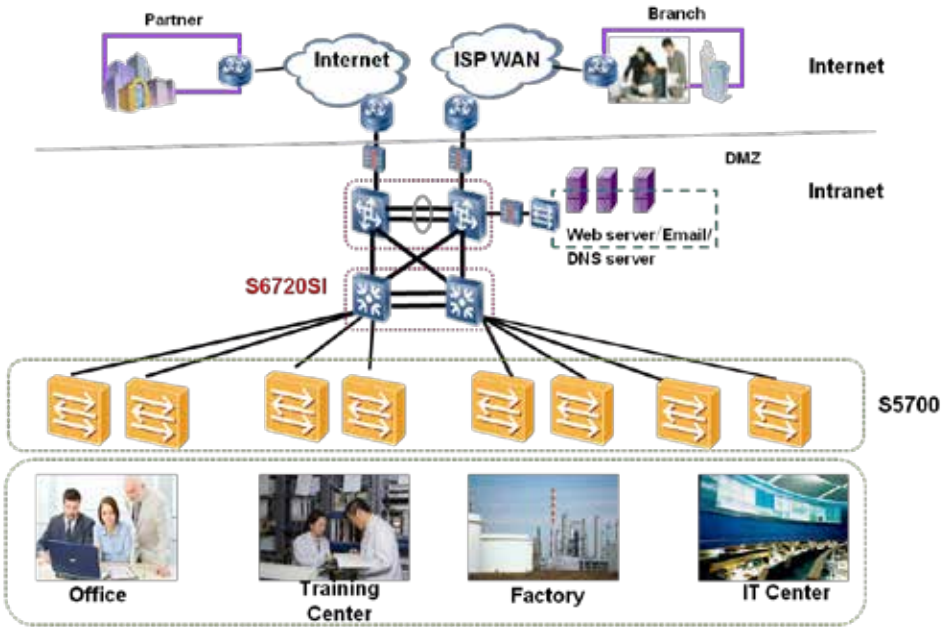
Data Center Network

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 Network

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 updating. For the latest information, visit http://enterprise.huawei.com 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 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, QSFP-40G-CU5M.

Stack Cable		Description
AOC	SFP-10G-AOC3M	Cable length: 3 m; connector: SFP+
	SFP-10G-AOC10M	Cable length: 10 m; connector: SFP+
SFP+ high-speed	SFP-10G-CU1M	Cable length: 1 m; connector: SFP+
	SFP-10G-CU3M	Cable length: 3 m; connector: SFP+
	SFP-10G-CU5M	Cable length: 5 m; connector: SFP+
	SFP-10G-CU10M	Cable length: 10 m; connector: SFP+
QSFP+ high-speed	QSFP-40G-CU1M	Cable length: 1 m; connector: QSFP+
	QSFP-40G-CU3M	Cable length: 3 m; connector: QSFP+
	QSFP-40G-CU5M	Cable length: 5 m; connector: QSFP+

Safety and Regulatory Compliance

Certification Category	Description
Safety	IEC 60950-1 EN 60950-1/A11/A12 UL 60950-1 CSA C22.2 No 60950-1 AS/NZS 60950.1 CNS 14336-1 IEC60825-1 IEC60825-2 EN60825-1 EN60825-2
Electromagnetic Compatibility (EMC)	CISPR22 Class A CISPR24 EN55022 Class A EN55024 ETSI EN 300 386 Class A CFR 47 FCC Part 15 Class A ICES 003 Class A AS/NZS CISPR22 Class A VCCI Class A IEC61000-4-2 ITU-T K 20 ITU-T K 21 ITU-T K 44 CNS13438
Environment	RoHS REACH WEEE

- 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

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 RMON2-MIB RMON-MIB SAVI-MIB SNMP-FRAMEWORK-MIB SNMP-MPD-MIB SNMP-NOTIFICATION-MIB SNMP-TARGET-MIB SNMP-USER-BASED-SM-MIB SNMPv2-MIB TCP-MIB UDP-MIB

Category	MIB
Huawei-proprietary MIB	HUAWEI-AAA-MIB HUAWEI-ACL-MIB HUAWEI-ALARM-MIB HUAWEI-ALARM-RELIABILITY-MIB HUAWEI-BASE-TRAP-MIB HUAWEI-BRAS-RADIUS-MIB HUAWEI-BRAS-SRVCFG-EAP-MIB HUAWEI-BRAS-SRVCFG-STATICUSER-MIB HUAWEI-CBQOS-MIB HUAWEI-CDP-COMPLIANCE-MIB HUAWEI-CONFIG-MAN-MIB HUAWEI-CPU-MIB HUAWEI-DAD-TRAP-MIB HUAWEI-DC-MIB HUAWEI-DATASYNC-MIB HUAWEI-DEVICE-MIB HUAWEI-DHCPR-MIB HUAWEI-DHCPS-MIB HUAWEI-DHCP-SNOOPING-MIB HUAWEI-DIE-MIB HUAWEI-DNS-MIB HUAWEI-DLDP-MIB HUAWEI-ELMI-MIB HUAWEI-ERPS-MIB HUAWEI-ERRORDOWN-MIB HUAWEI-ENERGYMNGT-MIB HUAWEI-EASY-OPERATION-MIB HUAWEI-ENTITY-EXTENT-MIB HUAWEI-ENTITY-TRAP-MIB HUAWEI-ETHARP-MIB HUAWEI-ETHOAM-MIB HUAWEI-FLASH-MAN-MIB HUAWEI-FWD-RES-TRAP-MIB HUAWEI-GARP-APP-MIB HUAWEI-GTSM-MIB HUAWEI-HGMP-MIB HUAWEI-HWTACACS-MIB HUAWEI-IF-EXT-MIB HUAWEI-INFOCENTER-MIB HUAWEI-IPPOOL-MIB HUAWEI-IPV6-MIB HUAWEI-ISOLATE-MIB HUAWEI-L2IF-MIB HUAWEI-L2MAM-MIB HUAWEI-L2VLAN-MIB HUAWEI_LDT-MIB HUAWEI- LLDP-MIB HUAWEI-MAC-AUTHEN-MIB HUAWEI-MEMORY-MIB HUAWEI-MFF-MIB HUAWEI-MFLP-MIB HUAWEI-MSTP-MIB HUAWEI-MULTICAST-MIB

Category	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

Standard Organization	Standard or Protocol
IETF	RFC 768 User Datagram Protocol (UDP) RFC 792 Internet Control Message Protocol (ICMP) RFC 793 Transmission Control Protocol (TCP) RFC 826 Ethernet Address Resolution Protocol (ARP) RFC 854 Telnet Protocol Specification RFC 951 Bootstrap Protocol (BOOTP) RFC 959 File Transfer Protocol (FTP) RFC 1058 Routing Information Protocol (RIP) RFC 1112 Host extensions for IP multicasting RFC 1157 A Simple Network Management Protocol (SNMP) RFC 1256 ICMP Router Discovery RFC 1305 Network Time Protocol Version 3 (NTP) RFC 1349 Internet Protocol (IP) RFC 1493 Definitions of Managed Objects for Bridges RFC 1542 Clarifications and Extensions for the Bootstrap Protocol RFC 1643 Ethernet Interface MIB RFC 1757 Remote Network Monitoring (RMON) RFC 1901 Introduction to Community-based SNMPv2 RFC 1902-1907 SNMP v2 RFC 1981 Path MTU Discovery for IP version 6 RFC 2131 Dynamic Host Configuration Protocol (DHCP) RFC 2328 OSPF Version 2 RFC 2453 RIP Version 2

Standard Organization	Standard or Protocol
IETF	RFC 2460 Internet Protocol, Version 6 Specification (IPv6) RFC 2461 Neighbor Discovery for IP Version 6 (IPv6) RFC 2462 IPv6 Stateless Address Auto configuration RFC 2463 Internet Control Message Protocol for IPv6 (IC MPv6) RFC 2474 Differentiated Services Field (DS Field) RFC 2740 OSPF for IPv6 (OSPFv3) RFC 2863 The Interfaces Group MIB RFC 2597 Assured Forwarding PHB Group RFC 2598 An Expedited Forwarding PHB RFC 2571 SNMP Management Frameworks RFC 2865 Remote Authentication Dial In User Service (RADIUS) RFC 3046 DHCP Option82 RFC 3376 Internet Group Management Protocol, Version 3 (IGMPv3) RFC 3513 IP Version 6 Addressing Architecture RFC 3579 RADIUS Support For EAP RFC 4271 A Border Gateway Protocol 4 (BGP-4) RFC 4760 Multiprotocol Extensions for BGP-4 draft-grant-tacacs-02 TACACS+
IEEE	IEEE 802.1D Media Access Control (MAC) Bridges IEEE 802.1p Virtual Bridged Local Area Networks IEEE 802.1Q Virtual Bridged Local Area Networks IEEE 802.1ad Provider Bridges IEEE 802.2 Logical Link Control IEEE Std 802.3 CSMA/CD IEEE Std 802.3ab 1000BASE-T specification IEEE Std 802.3ad Aggregation of Multiple Link Segments IEEE Std 802.3ae 10GE WEN/LAN Standard IEEE Std 802.3x Full Duplex and flow control IEEE Std 802.3z Gigabit Ethernet Standard IEEE802.1ax/IEEE802.3ad Link Aggregation IEEE 802.3ah Ethernet in the First Mile. IEEE 802.1ag Connectivity Fault Management IEEE 802.1ab Link Layer Discovery Protocol IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1s Multiple Spanning Tree Protocol IEEE802.1x Port based network access control protocol IEEE802.3af DTE Power via MIDI IEEE802.3at DTE Power via the MDI Enhancements
ITU	ITU SG13 Y.17ethoam ITU SG13 QoS control Ethernet-Based IP Access ITU-T Y.1731 ETH OAM performance monitor

Standard Organization	Standard or 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

Product Description
S6720-26Q-SI-24S bundle (24 10GE SFP+, 2 40GE QSFP+, with 1 150W AC power supply)
S6720S-26Q-SI-24S bundle (24 10GE SFP+, 2 40GE QSFP+, with 1 150W AC power supply)
S6720-32X-SI-32S bundle (32 10GE SFP+, with 1 150W AC power supply)
S6720-32C-SI-AC bundle (24 100M/1G/2.5G/5G/10G Base-T Ethernet ports, 4 10GE SFP+, with 1 interface slot, with 1 150W AC power supply)
S6720-32C-SI-DC bundle (24 100M/1G/2.5G/5G/10G Base-T Ethernet ports, 4 10GE SFP+, with 1 interface slot, with 1 150W DC power supply)
S6720-32C-PWH-SI-AC bundle (24 100M/1G/2.5G/5G/10G Base-T Ethernet ports, 4 10GE SFP+, PoE++, with 1 interface slot, with 1 580W AC power supply)
6720-32C-PWH-SI (24 100M/1G/2.5G/5G/10G Base-T Ethernet ports, 4 10GE SFP+, PoE++, with 1 interface slot, without power supply)
2-port 40GE QSFP+ interface card
150W AC Power Module
150W DC Power Module
580W AC Power Module
650W DC Power Module
1150W AC Power Module

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

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