

S5720-EI Series Enhanced Gigabit Switches

Huawei S5720-EI series switches provide flexible all-gigabit access and enhanced 10GE uplink port scalability. They are widely used as access/aggregation switches in enterprise campus networks or gigabit access switches in data centers.

Introduction

The S5720-EI series enhanced Gigabit Ethernet switches are switches that provide flexible GE access ports (including optical, electrical, and combo ports) and 10GE uplink ports. Built on next-generation high-performance processors and Huawei Versatile Routing Platform (VRP), the S5720-EI provides larger table sizes and higher hardware processing capabilities than equivalent switches. Besides, it provides comprehensive service processing capabilities, enhanced security control, and mature IPv6 features, and supports MACsec, intelligent stack (iStack), flexible Ethernet networking, and easy operations and maintenance (O&M). With all these advantages, the S5720-EI is widely used for access/aggregation in enterprise campus networks or gigabit access in data center networks.

Product Overview

Models and Appearances

The following models are available in the S5720-EI series.

Models and appearances of the S5720-EI series

Appearance	Description
 S5720-32P-EI-AC	<ul style="list-style-type: none"> • 24 10/100/1000 Ethernet ports, 4 100/1000 SFP ports, 4GE SFP ports, 2 QSFP+ dedicated stack ports • AC power supply, supporting Redundant Power Supply (RPS), power socket on the front panel • Forwarding performance: 48 Mpps • Switching capacity: 598 Gbit/s
 S5720-32X-EI-AC	<ul style="list-style-type: none"> • 24 10/100/1000 Ethernet ports, 4 100/1000 SFP ports, 4 10GE SFP+ ports, 2 QSFP+ dedicated stack ports • AC power supply, supporting RPS, power socket on the front panel • Forwarding performance: 102 Mpps • Switching capacity: 598 Gbit/s
 S5720-32X-EI-24S-AC S5720-32X-EI-24S-DC	<ul style="list-style-type: none"> • 24 Gig SFP ports, 4 10/100/1000 Ethernet ports, 4 10GE SFP+ ports, 2 QSFP+ dedicated stack ports • AC or DC power supply, supporting RPS, power socket on the front panel • Forwarding performance: 102 Mpps

Appearance	Description
 <p>S5720-36C-EI-28S-AC S5720-36C-EI-28S-DC</p>	<ul style="list-style-type: none"> Switching capacity: 598 Gbit/s 28 Gig SFP ports (4 of which are dual-purpose 10/100/1000 ports), 4 10GE SFP+ ports One extended slot Double hot swappable AC or DC power supplies, one AC or DC power supply equipped by default Forwarding performance: 132 Mpps Switching capacity: 598 Gbit/s
 <p>S5720-36C-EI-AC</p>	<ul style="list-style-type: none"> 28 10/100/1000 Ethernet ports (4 of which are dual-purpose 10/100/1000 or SFP ports), 4 10GE SFP+ ports One extended slot Double hot swappable AC or DC power supplies, one AC power supply equipped by default Forwarding performance: 132 Mpps Switching capacity: 598 Gbit/s
 <p>S5720-36C-PWR-EI-AC</p>	<ul style="list-style-type: none"> 28 10/100/1000 Ethernet PoE+ ports (4 of which are dual-purpose 10/100/1000 or SFP ports), 4 10GE SFP+ ports One extended slot PoE+ Double hot swappable AC or DC power supplies, one AC power supply equipped by default Forwarding performance: 132 Mpps Switching capacity: 598 Gbit/s
 <p>S5720-36PC-EI-AC</p>	<ul style="list-style-type: none"> 28 10/100/1000 Ethernet ports (4 of which are dual-purpose 10/100/1000 or SFP ports), 4 GE SFP ports One extended slot Double hot swappable AC or DC power supplies, one AC power supply equipped by default Forwarding performance: 78 Mpps Switching capacity: 598 Gbit/s
 <p>S5720-50X-EI-AC S5720-50X-EI-DC</p>	<ul style="list-style-type: none"> 46 10/100/1000 Ethernet ports, 4 10GE SFP+ ports, 2 QSFP+ dedicated stack ports AC or DC power supply, supporting RPS, power socket on the front panel Forwarding performance: 129 Mpps Switching capacity: 598 Gbit/s
 <p>S5720-50X-EI-46S-AC S5720-50X-EI-46S-DC</p>	<ul style="list-style-type: none"> 46 Gig SFP ports, 4 10GE SFP+ ports, 2 QSFP+ dedicated stack ports AC or DC power supply, supporting RPS, power socket on the front panel Forwarding performance: 129 Mpps Switching capacity: 598 Gbit/s
 <p>S5720-52X-EI-AC</p>	<ul style="list-style-type: none"> 48 10/100/1000 Ethernet ports, 4 10GE SFP+ ports, 2 QSFP+ dedicated stack ports AC power supply, supporting RPS Forwarding performance: 132 Mpps Switching capacity: 598 Gbit/s

Appearance	Description
 S5720-52P-EI-AC	<ul style="list-style-type: none"> • 48 10/100/1000 Ethernet ports, 4 GE SFP ports, 2 QSFP+ dedicated stack ports • AC power supply, supporting RPS • Forwarding performance: 78 Mpps • Switching capacity: 598 Gbit/s
 S5720-56C-EI-48S-AC S5720-56C-EI-48S-DC	<ul style="list-style-type: none"> • 48 Gig SFP ports, 4 10GE SFP+ ports • One extended slot • Double hot swappable AC or DC power supplies, one AC or DC power supply equipped by default • Forwarding performance: 162 Mpps • Switching capacity: 598 Gbit/s
 S5720-56C-EI-AC S5720-56C-EI-DC	<ul style="list-style-type: none"> • 48 10/100/1000 Ethernet ports, 4 10GE SFP+ ports • One extended slot • Double hot swappable AC or DC power supplies, one AC or DC power supply equipped by default • Forwarding performance: 162 Mpps • Switching capacity: 598 Gbit/s
 S5720-56C-PWR-EI-AC S5720-56C-PWR-EI-AC1 S5720-56C-PWR-EI-DC	<ul style="list-style-type: none"> • 48 10/100/1000 Ethernet PoE+ ports, 4 10GE SFP+ ports • One extended slot • PoE+ • Double hot swappable AC or DC power supplies, one AC or DC power supply equipped by default • Forwarding performance: 162 Mpps • Switching capacity: 598 Gbit/s
 S5720-56PC-EI-AC	<ul style="list-style-type: none"> • 48 10/100/1000 Ethernet ports, 4 GE SFP ports • One extended slot • Double hot swappable AC or DC power supplies, one AC power supply equipped by default • Forwarding performance: 108 Mpps • Switching capacity: 598 Gbit/s

Card Types

The S5720-EI (C series and PC series) provides one extended slot for ES5D21X02S01 (2-port 10GE SFP+ rear interface card) for upstream connections, or ES5D21VST000 (dedicated stack card with two QSFP+ ports) for stack connection.

ES5D21X02S01 (2-Port 10 Gig SFP+ Rear Interface Card, Used in S5720-EI Series)

The ES5D21X02S01 provides two 10GE SFP+ 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.

Technical specifications of the ES5D21X02S01

Card Model	Technical Specifications	Applied Switch Model
	<ul style="list-style-type: none"> • Physical specifications: <ul style="list-style-type: none"> – 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: 0.78 kg (1.72 lb) – Maximum power consumption: 8 W 	S5720-C-EI and S5720-PC-EI series

Card Model	Technical Specifications	Applied Switch Model
ES5D21X02S01	<ul style="list-style-type: none"> Environment parameters: <ul style="list-style-type: none"> Operating temperature: 0°C to 45°C (32°F to 113°F) Relative humidity: 5% RH to 95% RH Storage temperature: -40°C to +70°C (-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 ES5D21X02S01

Function and Feature	Description
Basic function	Provides two 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.

ES5D21VST000 (Dedicated Stack Card with 2 QSFP+ Interface)

The ES5D21VST000 is a stack card that provides two QSFP+ optical ports for stack connection. It can be installed in a rear card slot of the switch models listed in the following table.

Technical specifications of the ES5D21VST000

Card Model	Technical Specifications	Applied Switch Model
 <p>ES5D21VST000</p>	<ul style="list-style-type: none"> Physical specifications: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> Operating temperature: 0°C to 45°C (32°F to 113°F) Relative humidity: 5% RH to 95% RH Storage temperature: -40°C to +70°C (-40°F to +158°F) 	S5720-C-EI and S5720-PC-EI series

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 ES5D21VST000

Function and Feature	Description
Basic function	Provides two QSFP+ optical ports for setting up a stack system among multiple switches.
Hot swap	Supported

Fan Module

The following table lists the fan module applicable to the S5720-EI.

Technical specifications of the fan module available in the S5720-EI series

Fan Module	Technical Specifications	Applied Switch Model
 <p>FAN-028A-B</p>	<ul style="list-style-type: none"> • Dimensions (W x D x H): 100 mm x 220 mm x 40 mm • Number of fans: 2 • Weight: 0.34 kg • Maximum power consumption: 12 W • Maximum fan speed: 16000±10% revolutions per minute (RPM) • Maximum wind rate: 28 cubic feet per minute (CFM) • Hot swap: Supported 	<p>S5720-C-EI and S5720-PC-EI series</p> <p>NOTE</p> <p>Besides the S5720-C-EI and S5720-PC-EI series, the S5720-EI has a built-in heat dissipation system. Customers do not need to purchase fan modules.</p>

Power Supply

The following table lists the power supplies applicable to the S5720-EI.

Technical specifications of power supplies applicable to the S5720-EI series

Power Module	Technical Specifications	Applied Switch Model
 <p>ES0W2PSA0150</p>	<ul style="list-style-type: none"> • 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: 150 W • Hot swap: Supported 	<ul style="list-style-type: none"> • S5720-36C-EI-AC • S5720-56C-EI-AC • S5720-56C-EI-DC • S5720-36C-EI-28S-AC • S5720-36C-EI-28S-DC • S5720-56C-EI-48S-AC • S5720-56C-EI-48S-DC • S5720-36PC-EI-AC • S5720-56PC-EI-AC
 <p>ES0W2PSD0150</p>	<ul style="list-style-type: none"> • Dimensions (W x D x H): 100 mm x 205 mm x 40 mm (3.9 in. x 8.1 in. x 1.6 in.) • Weight: 0.8 kg (1.76 lb) • Rated input voltage range: -48 V DC to -60 V DC • Maximum input voltage range: -36 V DC to -72 V DC • Maximum input current: 3 A • Maximum output current: 12.5 A • Rated output voltage: 12 V • Maximum output power: 150 W • Hot swap: Supported 	<ul style="list-style-type: none"> • S5720-36C-EI-AC • S5720-56C-EI-AC • S5720-56C-EI-DC • S5720-36C-EI-28S-AC • S5720-36C-EI-28S-DC • S5720-56C-EI-48S-AC • S5720-56C-EI-48S-DC • S5720-36PC-EI-AC • S5720-56PC-EI-AC
	<ul style="list-style-type: none"> • 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: 1.06 kg (2.34 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 	<ul style="list-style-type: none"> • S5720-36C-PWR-EI-AC • S5720-56C-PWR-EI-DC • S5720-56C-PWR-EI-AC

Power Module	Technical Specifications	Applied Switch Model
PAC-500WA-BE	<ul style="list-style-type: none"> AC, 47 Hz to 63 Hz Maximum input current: 7 A to 3.5 A Maximum output current: <ul style="list-style-type: none"> +12 V: 10 A -53.5 V: 7.11 A Maximum output power: <ul style="list-style-type: none"> +12 V: 120 W -53.5 V: 380 W Hot swap: Supported 	
 <p>PDC-650WA-BE</p>	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> +12 V: 22.5 A -53.5 V: 7.11 A Maximum output power: <ul style="list-style-type: none"> PoE power: 380 W Total power: 650 W Hot swap: Supported 	<ul style="list-style-type: none"> S5720-36C-PWR-EI-AC S5720-56C-PWR-EI-DC S5720-56C-PWR-EI-AC
 <p>W2PSA1150</p>	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> +12 V: 29.17 A -53.5 V: 14.95 A Maximum output power: <ul style="list-style-type: none"> PoE power: 800 W (220 V)/450 W (110 V) Total power: 1150 W (220 V)/800 W (110 V) Hot swap: Supported 	<ul style="list-style-type: none"> S5720-56C-PWR-EI-AC1
 <p>PAC1000D5412</p>	<ul style="list-style-type: none"> 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 Maximum input voltage range: 90 V AC to 290 V AC, 47 Hz to 63 Hz Input current: 	<ul style="list-style-type: none"> S5720-56C-PWR-EI-AC1

Power Module	Technical Specifications	Applied Switch Model
	<ul style="list-style-type: none"> - 100 V AC to 130 V AC: 12 A - 200 V AC to 240 V AC: 6 A • Maximum output current: <ul style="list-style-type: none"> - +12 V: 20.84 A - -53.5 V: 14.58 A • Maximum output power: <ul style="list-style-type: none"> - PoE: 754.6 W - Total: 1000 W • Hot swap: Supported 	
 <p>RPS1800</p>	<ul style="list-style-type: none"> • Dimensions (W x D x H): 442.0 mm x 310.0 mm x 43.6 mm • Weight: <ul style="list-style-type: none"> - Without power modules installed: 4 kg - With one power module installed: 5.5 kg - With two power modules installed: 7 kg • Rated input voltage: 220/110 V AC, 50/60 Hz • Input voltage range: 200 V AC to 240 V AC (220 V rated voltage input)/100 V AC to 120 V AC (110 V rated voltage input), 50/60 Hz • Maximum input voltage range: 90 V AC to 290 V AC, 45 Hz to 65 Hz • Input current: 12 A • Maximum output current (without power modules installed): +12 V: 29.17 A • Maximum output current (with one power module installed): <ul style="list-style-type: none"> - +12 V: 29.17 A - -53.5 V: 14.95 A (input voltage range: 200 V AC to 240 V AC) • Maximum output current (with two power modules installed): <ul style="list-style-type: none"> - +12 V: 29.17 A - -53.5 V: 15 A output per port (input voltage range: 200 V AC to 240 V AC) - -53.5 V: 15 A output per port (input voltage range: 100 V AC to 120 V AC, two 870 W PoE power modules required) • Maximum output power (without power modules installed): <ul style="list-style-type: none"> - 12 V: 140 W • Maximum output power (with one power module installed): <ul style="list-style-type: none"> - 12 V: 140 W - -53.5 V: 800 W (input voltage range: 200 V AC to 240 V AC) • Maximum output power (with two power modules installed): <ul style="list-style-type: none"> - 12 V: 140 W 	S5720-X-EI and S5720-P-EI series

Power Module	Technical Specifications	Applied Switch Model
	<ul style="list-style-type: none"> - -53.5 V: 1600 W (input voltage range: 200 V AC to 240 V AC) - -53.5 V: 800 W (input voltage range: 100 V AC to 120 V AC, two 870 W PoE power modules required) • Hot swap: The 870 W PoE power modules and RPS cables are not hot swappable. 	

Some models of the S5720-EI series use built-in power supplies by default. If a switch supports pluggable power supplies, the customer can purchase the power supplies when or after purchasing the switch.

The S5720-EI supports multiple power supply options, including dual-power, PoE, and single-power.

 **NOTE**

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

Dual-Power (Non-PoE)

Dual-power models (non-PoE) use pluggable power supplies and provide two power slots. By default, one AC power supply (ES0W2PSA0150) is equipped. When a switch has two power supplies installed, the power supplies work in 1+1 backup mode to power the switch. The switch supports dual AC power supplies, dual DC power supplies, as well as mixed insertion of AC and DC power supplies.

The following table lists the power supply options supported by the S5720-EI.

Power supply options supported by the S5720-EI series

Model	Power Supply 1	Power Supply 2
S5720-36C-EI-AC	ES0W2PSA0150 (150 W-AC) or ES0W2PSD0150 (150 W-DC)	ES0W2PSA0150 (150 W-AC) or ES0W2PSD0150 (150 W-DC)
S5720-56C-EI-AC (DC)	ES0W2PSA0150 (150 W-AC) or ES0W2PSD0150 (150 W-DC)	ES0W2PSA0150 (150 W-AC) or ES0W2PSD0150 (150 W-DC)
S5720-36C-EI-28S-AC (DC)	ES0W2PSA0150 (150 W-AC) or ES0W2PSD0150 (150 W-DC)	ES0W2PSA0150 (150 W-AC) or ES0W2PSD0150 (150 W-DC)
S5720-56C-EI-48S-AC (DC)	ES0W2PSA0150 (150 W-AC) or ES0W2PSD0150 (150 W-DC)	ES0W2PSA0150 (150 W-AC) or ES0W2PSD0150 (150 W-DC)
S5720-36PC-EI-AC	ES0W2PSA0150 (150 W-AC) or ES0W2PSD0150 (150 W-DC)	ES0W2PSA0150 (150 W-AC) or ES0W2PSD0150 (150 W-DC)
S5720-56PC-EI-AC	ES0W2PSA0150 (150 W-AC) or ES0W2PSD0150 (150 W-DC)	ES0W2PSA0150 (150 W-AC) or ES0W2PSD0150 (150 W-DC)

PoE/PoE+

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

Each PoE-capable S5720-EI switch has two power slots for pluggable PoE power supplies. The following table lists the power supply options supported by PoE-capable S5720-EI models.

Power supply options supported by PoE-capable S5720-EI series

Model	Power Supply 1	Power Supply 2	PoE Power Supply	Number of PoE Ports
S5720-36C-	500 W or 650 W	-	369.6 W	• PoE (15.4 W): 24

Model	Power Supply 1	Power Supply 2	PoE Power Supply	Number of PoE Ports
PWR-EI-AC				<ul style="list-style-type: none"> PoE+ (30 W): 12
	P500 W or 650 W	500 W or 650 W	739.2 W	<ul style="list-style-type: none"> PoE (15.4 W): 28 PoE+ (30 W): 24
S5720-56C-PWR-EI-AC (DC)	500 W or 650 W	–	369.6 W	<ul style="list-style-type: none"> PoE (15.4 W): 24 PoE+ (30 W): 12
	500 W or 650 W	500 W or 650 W	739.2 W	<ul style="list-style-type: none"> PoE (15.4 W): 48 PoE+ (30 W): 24
S5720-56C-PWR-EI-AC1	1150 W (220 V)	–	785.4 W	<ul style="list-style-type: none"> PoE (15.4 W): 48 PoE+ (30 W): 26
	1150 W (220 V)	1150 W (220 V)	1440 W	<ul style="list-style-type: none"> PoE (15.4 W): 48 PoE+ (30 W): 48
	1150 W (110 V)	–	446.6 W	<ul style="list-style-type: none"> PoE (15.4 W): 29 PoE+ (30 W): 14
	1150 W (110 V)	1150 W (110 V)	893.2 W	<ul style="list-style-type: none"> PoE (15.4 W): 48 PoE+ (30 W): 29
	1000 W (220 V)	–	754.6 W	<ul style="list-style-type: none"> PoE (15.4 W): 48 PoE+ (30 W): 25
	1000 W (220 V)	1000 W (220 V)	1440 W	<ul style="list-style-type: none"> PoE (15.4 W): 48 PoE+ (30 W): 48
	1000 W (110 V)	–	754.6 W	<ul style="list-style-type: none"> PoE (15.4 W): 48 PoE+ (30 W): 25
	1000 W (110 V)	1000 W (110 V)	1440 W	<ul style="list-style-type: none"> PoE (15.4 W): 48 PoE+ (30 W): 48
	1000 W (220 V)	1150 W (220 V)	1440 W	<ul style="list-style-type: none"> PoE (15.4 W): 48 PoE+ (30 W): 48
	1150 W (220 V)	1000 W (220 V)	1440 W	<ul style="list-style-type: none"> PoE (15.4 W): 48 PoE+ (30 W): 48
	1000 W (110 V)	1150 W (110 V)	893.2 W	<ul style="list-style-type: none"> PoE (15.4 W): 48 PoE+ (30 W): 29
	1150 W (110 V)	1000 W (110 V)	893.2 W	<ul style="list-style-type: none"> PoE (15.4 W): 48 PoE+ (30 W): 29

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).

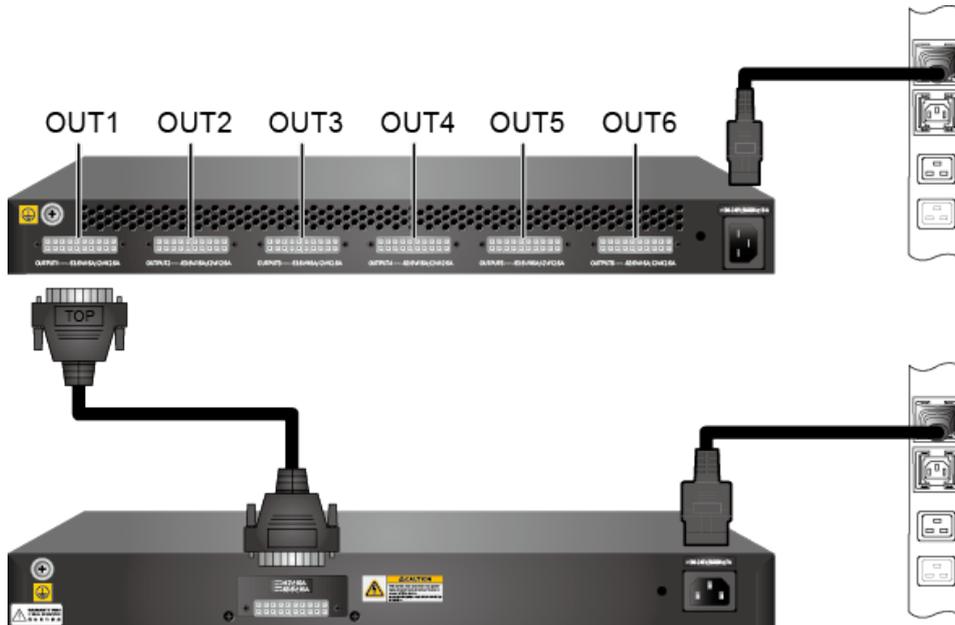
Single-Power

Single-power models use a built-in AC power supply and support RPS1800. Single-power models include S5720-32P-EI-AC, S5720-32X-EI-AC, S5720-32X-EI-24S-AC, S5720-32X-EI-24S-DC, S5720-50X-EI-AC, S5720-50X-EI-DC, S5720-50X-EI-46S-AC, S5720-50X-EI-46S-DC, S5720-52X-EI-AC, and S5720-52P-EI-AC.

An RPS1800 is a redundant power supply system that provides power redundancy for the connected switches to ensure uninterrupted services. When the internal power supply of a switch fails, the RPS1800 provides power to the switch immediately, improving system reliability. The following figure shows how to connect an RPS1800 to a switch.

NOTE

The RPS1800 only provides power redundancy for switches and cannot power on a switch directly.



The RPS1800 can connect to a maximum of six switches and ensures seamless failover for at most one switch when the internal power supply of the switch fails.

When the internal power supply of the switch powered by the RPS1800 recovers, the RPS1800 immediately restores to backup state.

Among the six DC output ports, OUT1 has the highest priority, and the other five ports have the same priority. When the RPS1800 connects to six switches, the switch connected to OUT1 preferentially receives power from the RPS1800.

Product Features and Highlights

Easy Operations and Maintenance (O&M)

- The S5720-EI models with power sockets on the front panel can be installed in a 300 mm deep cabinet and maintained from the front panel. This simplifies equipment O&M and allows more flexible cabinet deployment. The small-sized cabinets can be placed against a wall or back to back to save space in the equipment room.
- The S5720-EI allows management personnel to remotely switch on the SYS indicator on the front panel. After configuration commands are used, the SYS indicator quickly blinks within a certain period, helping the management personnel locate the device in the equipment room quickly and efficiently.
- The S5720-EI supports Super Virtual Fabric (SVF), which virtualizes the "Core/Aggregation switches + Access switches + APs" structure into a single logical device. The S5720-EI enables the simplest network management solution in the industry. It allows plug-and-play of access switches and APs. In addition, the S5720-EI supports service configuration templates. The templates are configured on core devices and automatically delivered to access devices, enabling centralized control, simplified service configuration, and flexible configuration modification. The S5720-EI functions as a client in an SVF system.
- The S5720-EI supports EasyOperation, a solution that provides zero-touch deployment, replacement of faulty devices without additional configuration, USB-based deployment, batch configuration, and batch remote upgrade. The EasyOperation solution facilitates device deployment, upgrade, service provisioning, and other management and maintenance operations, greatly reducing O&M costs. The S5720-EI can be managed using Simple Network Management Protocol (SNMP) v1/v2c/v3, command line interface (CLI), web-based network management system, or Secure Shell (SSH) V2.0. Additionally, it supports remote network monitoring (RMON), multiple log hosts, port traffic statistics collection, and network quality analysis, which facilitate network optimization and reconstruction.
- The S5720-EI supports Two-Way Active Measurement Protocol (TWAMP) to accurately check any IP link and obtain the entire network's IP performance. This protocol eliminates the need of using a dedicated probe or a proprietary protocol.

Intelligent O&M

- The S5720-EI 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 S5720-EI supports Enhanced Media Delivery Index (eMDI). It functions as a monitoring node to periodically collect and report eMDI fault data to eSight, and then eSight quickly locates video service quality faults based on monitoring results of multiple nodes. The device can also report eMDI fault data to the campus network analyzer CampusInsight for intelligent diagnosis of video services.

Multiple Reliability Mechanisms

- The S5720-EI supports intelligent stack (iStack). This technology can virtualize up to nine physical switches into a single logical switch. Member switches in a stack implement redundancy backup to improve device reliability and use inter-device link aggregation to improve link reliability. iStack provides strong network expansion capability, enables easy increase of ports, bandwidth, and processing capacity of a stack, and simplifies configuration and management.
- The S5720-EI is equipped with two removable power supplies that can work in 1+1 redundancy backup mode. Mixed installation of AC and DC power supplies is supported, allowing for flexible configuration of AC and DC power supplies according to service requirements. The S5720-EI provides two removable fan modules. The fan speed can be adjusted according to working temperatures of the device, improving device reliability.
- In addition to traditional STP, RSTP, and MSTP, the S5720-EI supports Huawei-developed Smart Ethernet Protection (SEP) technology and the latest Ethernet Ring Protection Switching (ERPS) standard. SEP is a ring protection protocol specific to the Ethernet link layer, and applies to various ring network topologies, such as open ring topology, closed ring topology, and cascading ring topology. This protocol is reliable and easy to maintain, and implements fast protection switching within 50 ms. ERPS is defined in ITU-T G.8032. It implements millisecond-level protection switching based on traditional Ethernet MAC and bridging functions.
- The S5720-EI supports Smart Link and Virtual Router Redundancy Protocol (VRRP), which implement backup of uplinks. One S5720-EI switch can connect to multiple aggregation switches through multiple links, significantly improving reliability of access devices.
- In addition, the S5720-EI provides multiple connection fault detection mechanisms, including Ethernet OAM (IEEE 802.3ah/802.1ag/ITU Y.1731) and Bidirectional Forwarding Detection (BFD).

Enhanced Service Processing Capability and Comprehensive Security Control Mechanisms

- The S5720-EI supports the multi-VPN-instance CE (MCE) function, which allows connection of users in different VPNs. The switch supports large multi-instance routing tables to isolate users in different VPNs. Users in multiple VPNs connect to a provider edge (PE) device through the same physical port on the switch, which reduces the cost on VPN network deployment. The S5720-EI supports Multiprotocol Label Switching (MPLS) L3VPN, MPLS L2VPN (VPWS\VPWS), MPLS-TE, and MPLS QoS. It is one of a few cost-effective MPLS-capable fixed switches.
- The S5720-EI provides excellent QoS capabilities and supports queue scheduling and congestion control algorithms. Additionally, it adopts innovative priority queuing and multi-level scheduling mechanisms to implement fine-grained scheduling of data flows, meeting service quality requirements of different user terminals and services.
- With enhanced network admission control (NAC) functions, the S5720-EI supports 802.1X authentication, MAC address authentication, Portal authentication, and hybrid authentication, and can dynamically deliver user policies such as VLANs, QoS policies, and access control lists (ACLs). It also supports user management based on user groups. You can specify authentication-free IP network segments and enable redirection of HTTP connection requests to realize fast deployment of clients. If clients do not support HTTP access, the S5720-EI can trigger Portal authentication for the clients.
- The S5720-EI provides a series of mechanisms to defend against DoS and user-targeted attacks. DoS attacks are targeted at switches and include SYN flood, Land, Smurf, and ICMP flood attacks. User-targeted attacks include bogus DHCP server attacks, IP/MAC address spoofing, DHCP request flood, and change of the DHCP CHADDR value.
- The S5720-EI sets up and maintains a DHCP snooping binding table, and discards the packets that do not match the table entries. You can specify DHCP snooping trusted and untrusted ports to ensure that users connect only to the authorized DHCP server.
- The S5720-EI supports strict ARP learning, which protects a network against ARP spoofing attacks to ensure normal network access.

Mature IPv6 Technologies

- The S5720-EI uses the mature, stable VRP software platform and supports IPv4/IPv6 dual stacks, IPv6 routing protocols (RIPng, OSPFv3, BGP4+, and IS-ISv6), and IPv6 over IPv4 tunnels (including manual, 6-to-4, and ISATAP tunnels). With these IPv6 features, the S5720-EI can be deployed on a pure IPv4 network, a pure IPv6 network, or a shared IPv4/IPv6 network, helping achieve IPv4-to-IPv6 transition.

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.

Perpetual PoE

- When a PoE switch is rebooted after 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.

Product Specifications

Functions and Features

The following table lists the functions and features available on the S5720-EI.

Function and feature metrics for the S5720-EI series

Function and Feature		Description	S5720-P-EI series	S5720-X-EI series	S5720-C-EI series	S5720-PC-EI series
Ethernet features	Ethernet basics	Full-duplex, half-duplex, and auto-negotiation	Yes	Yes	Yes	Yes
		Rate auto-negotiation on an interface	Yes	Yes	Yes	Yes
		Flow control on an interface	Yes	Yes	Yes	Yes
		Jumbo frames	Yes	Yes	Yes	Yes
		Link aggregation	Yes	Yes	Yes	Yes
		Load balancing among links of a trunk	Yes	Yes	Yes	Yes
		Transparent transmission of Layer 2 protocol packets	Yes	Yes	Yes	Yes
		Device Link Detection Protocol (DLDP)	Yes	Yes	Yes	Yes
		Link Layer Discovery Protocol (LLDP)	Yes	Yes	Yes	Yes
		Link Layer Discovery Protocol-Media Endpoint Discovery (LLDP-MED)	Yes	Yes	Yes	Yes
		Interface isolation	Yes	Yes	Yes	Yes
		Broadcast traffic suppression on an interface	Yes	Yes	Yes	Yes
		Multicast traffic suppression on an interface	Yes	Yes	Yes	Yes

Function and Feature		Description	S5720-P-EI series	S5720-X-EI series	S5720-C-EI series	S5720-PC-EI series
		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	4K	4K	4K	4K
		VLANIF interface specification	1K	1K	1K	1K
		Access mode	Yes	Yes	Yes	Yes
		Trunk mode	Yes	Yes	Yes	Yes
		Hybrid mode	Yes	Yes	Yes	Yes
		QinQ mode	Yes	Yes	Yes	Yes
		Default VLAN	Yes	Yes	Yes	Yes
		VLAN assignment based on interfaces	Yes	Yes	Yes	Yes
		VLAN assignment based on protocols	Yes	Yes	Yes	Yes
		VLAN assignment based on IP subnets	Yes	Yes	Yes	Yes
		VLAN assignment based on MAC addresses	Yes	Yes	Yes	Yes
		VLAN assignment based on MAC address + IP address	Yes	Yes	Yes	Yes
		VLAN assignment based on MAC address + IP address + interface number	Yes	Yes	Yes	Yes
		Adding double VLAN tags to packets based on interfaces	Yes	Yes	Yes	Yes
		Super-VLAN	Yes	Yes	Yes	Yes
		Super-VLAN specification	256	256	256	256
		Sub-VLAN	Yes	Yes	Yes	Yes
		Sub-VLAN specification	1K	1K	1K	1K
		VLAN mapping	Yes	Yes	Yes	Yes
		Selective QinQ	Yes	Yes	Yes	Yes
		MUX VLAN	Yes	Yes	Yes	Yes
		Voice VLAN	Yes	Yes	Yes	Yes

Function and Feature		Description	S5720-P-EI series	S5720-X-EI series	S5720-C-EI series	S5720-PC-EI series
		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	64K	64K	64K	64K
		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
		Configuring MAC address learning priorities for interfaces	Yes	Yes	Yes	Yes
		MAC address spoofing defense	Yes	Yes	Yes	Yes
		Port bridge	Yes	Yes	Yes	Yes
	ARP	Static ARP	Yes	Yes	Yes	Yes
		Dynamic ARP	Yes	Yes	Yes	Yes
		ARP entry	12K	12K	12K	12K
		ARP aging detection	Yes	Yes	Yes	Yes
		Intra-VLAN proxy ARP	Yes	Yes	Yes	Yes
		Inter-VLAN proxy ARP	Yes	Yes	Yes	Yes
		Routed proxy ARP	Yes	Yes	Yes	Yes
Multi-egress-interface 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

Function and Feature		Description	S5720-P-EI series	S5720-X-EI series	S5720-C-EI series	S5720-PC-EI series	
		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	
	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 VLAN			Yes	Yes	Yes	Yes	
URPF check			Yes	Yes	Yes	Yes	
Routing policies			Yes	Yes	Yes	Yes	
IPv4 routes			16K	16K	16K	16K	
RIPv1			Yes	Yes	Yes	Yes	
RIPv2			Yes	Yes	Yes	Yes	
OSPF			Yes	Yes	Yes	Yes	
BGP			Yes	Yes	Yes	Yes	
MBGP			Yes	Yes	Yes	Yes	
IS-IS	Yes	Yes	Yes	Yes			

Function and Feature		Description	S5720-P-EI series	S5720-X-EI series	S5720-C-EI series	S5720-PC-EI series
		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	4K	4K	4K	4K
		IPv6 multicast routes	2K	2K	2K	2K
		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	8K	8K	8K	8K
		ND snooping	Yes	Yes	Yes	Yes
		DHCPv6 snooping	Yes	Yes	Yes	Yes
		RIPng	Yes	Yes	Yes	Yes
		DHCPv6 server	Yes	Yes	Yes	Yes
		DHCPv6 relay	Yes	Yes	Yes	Yes
		OSPFv3	Yes	Yes	Yes	Yes
		BGP4+	Yes	Yes	Yes	Yes
		IS-IS for IPv6	Yes	Yes	Yes	Yes
		IPv6 routes	8K	8K	8K	8K
		VRRP6	Yes	Yes	Yes	Yes
		MLDv1/v2	Yes	Yes	Yes	Yes
		PIM-DM for IPv6	Yes	Yes	Yes	Yes
		PIM-SM for IPv6	Yes	Yes	Yes	Yes
	IPv6 transition technology	IPv6 manual tunneling	Yes	Yes	Yes	Yes
	Layer 2 multicast features	-	IGMPv1/v2/v3 snooping	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
MPLS & VPN	MPLS basic	LDP protocol	Yes	Yes	Yes	Yes

Function and Feature		Description	S5720-P-EI series	S5720-X-EI series	S5720-C-EI series	S5720-PC-EI series
	functions	Double MPLS labels	Yes	Yes	Yes	Yes
		Mapping from 802.1p priorities to EXP priorities in MPLS packets	Yes	Yes	Yes	Yes
		Mapping from DSCP priorities to EXP priorities in MPLS packets	Yes	Yes	Yes	Yes
	MPLS TE	MPLS-TE tunnel establishment	Yes	Yes	Yes	Yes
		MPLS-TE tunnel specification	256	256	256	256
		MPLS-TE protection group	Yes	Yes	Yes	Yes
	VPN	MCE	Yes	Yes	Yes	Yes
		GRE tunneling	Yes	Yes	Yes	Yes
		GRE tunnel specification	512	512	512	512
		VLL	Yes	Yes	Yes	Yes
		PWE3	Yes	Yes	Yes	Yes
		VPLS	Yes	Yes	Yes	Yes
		MPLS L3VPN	Yes	Yes	Yes	Yes
Device reliability	BFD	Single-hop BFD	Yes	Yes	Yes	Yes
		BFD for static routes	Yes	Yes	Yes	Yes
		BFD for OSPF	Yes	Yes	Yes	Yes
		BFD for IS-IS	Yes	Yes	Yes	Yes
		BFD for BGP	Yes	Yes	Yes	Yes
		BFD for PIM	Yes	Yes	Yes	Yes
		BFD for VRRP	Yes	Yes	Yes	Yes
	Stacking	Stack card-based stacking	No	No	Yes	Yes
		Stack card-based stacking bandwidth (Unidirectional)	No	No	Up to 42 Gbit/s	Up to 42 Gbit/s
		Service interface-based stacking	Yes	Yes	Yes	Yes
		Service interface-based stacking bandwidth (Unidirectional)	Up to 40 Gbit/s			
		Maximum number of stacked devices	9	9	9	9
	VRRP	VRRP standard protocol	Yes	Yes	Yes	Yes

Function and Feature		Description	S5720-P-EI series	S5720-X-EI series	S5720-C-EI series	S5720-PC-EI series
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 priorities	Yes	Yes	Yes	Yes
		Matching the simple domains of packets	Yes	Yes	Yes	Yes
	Traffic behavior	Traffic filtering	Yes	Yes	Yes	Yes
		Traffic policing (CAR)	Yes	Yes	Yes	Yes
		Modifying the packet priorities	Yes	Yes	Yes	Yes
		Modifying the simple domains of packets	Yes	Yes	Yes	Yes
		Modifying the packet VLANs	Yes	Yes	Yes	Yes
	Traffic shaping	Traffic shaping on an egress interface	Yes	Yes	Yes	Yes
		Traffic shaping on queues on an interface	Yes	Yes	Yes	Yes
	Congestion avoidance	Weighted Random Early Detection (WRED) on interfaces	Yes	Yes	Yes	Yes
		WRED on queues	Yes	Yes	Yes	Yes
		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

Function and Feature		Description	S5720-P-EI series	S5720-X-EI series	S5720-C-EI series	S5720-PC-EI series
		Weighted Round Robin (WRR)	Yes	Yes	Yes	Yes
		PQ+WRR	Yes	Yes	Yes	Yes
	HQoS	HQoS	Yes	Yes	Yes	Yes
ACL	-	IPv4 ACL rule	4K	4K	4K	4K
		IPv6 ACL rule	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 group ACL	Yes	Yes	Yes	Yes
		User-defined ACL	Yes	Yes	Yes	Yes
Configuration and maintenance	Login and configuration management	Command line interface (CLI)-based configuration	Yes	Yes	Yes	Yes
		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
		EasyDeploy (commander)	Yes	Yes	Yes	Yes
		SVF	Yes	Yes	Yes	Yes
		Cloud management	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

Function and Feature		Description	S5720-P-EI series	S5720-X-EI series	S5720-C-EI series	S5720-PC-EI series
		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
		ARP gateway anti-collision	Yes	Yes	Yes	Yes
		Dynamic ARP Inspection (DAI)	Yes	Yes	Yes	Yes
		Static ARP Inspection (SAI)	Yes	Yes	Yes	Yes
		Egress ARP Inspection (EAI)	Yes	Yes	Yes	Yes
	IP security	ICMP attack defense	Yes	Yes	Yes	Yes
		IPSG for IPv4	Yes	Yes	Yes	Yes
		IPSG user capacity	3K	3K	3K	3K
		IPSG for IPv6	Yes	Yes	Yes	Yes
		IPSGv6 user capacity	1.5K	1.5K	1.5K	1.5K
	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

Function and Feature		Description	S5720-P-EI series	S5720-X-EI series	S5720-C-EI series	S5720-PC-EI series
		Defense against packet fragment attacks	Yes	Yes	Yes	Yes
		Local URPF	Yes	Yes	Yes	Yes
User access and authentication	AAA	Local authentication	Yes	Yes	Yes	Yes
		Local authorization	Yes	Yes	Yes	Yes
		RADIUS authentication	Yes	Yes	Yes	Yes
		RADIUS authorization	Yes	Yes	Yes	Yes
		RADIUS accounting	Yes	Yes	Yes	Yes
		HWTACACS authentication	Yes	Yes	Yes	Yes
		HWTACACS authorization	Yes	Yes	Yes	Yes
		HWTACACS accounting	Yes	Yes	Yes	Yes
	NAC	802.1X authentication	Yes	Yes	Yes	Yes
		MAC address authentication	Yes	Yes	Yes	Yes
		Portal authentication	Yes	Yes	Yes	Yes
		Hybrid authentication	Yes	Yes	Yes	Yes
	Policy association	Functioning as the access 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
		RMON2	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



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Hardware Specifications

The following table lists hardware specifications of the S5720-EI.

Hardware specifications of the S5720-36C-EI or S5720-36PC-EI series

Item		S5720-36C-EI-28S-AC S5720-36C-EI-28S-DC	S5720-36C-EI-AC	S5720-36C-PWR-EI-AC	S5720-36PC-EI-AC
Physical specifications	Chassis dimensions (W x D x H, mm)	442 x 420 x 44.4			
	Chassis height	1 U	1 U	1 U	1 U
	Chassis weight (full configuration weight, including weight of packaging materials)	<ul style="list-style-type: none"> S5720-36C-EI-28S-AC: 9.88 kg S5720-36C-EI-28S-DC: 9.68 kg 	9.76 kg	9.92 kg	9.76 kg
Fixed port	GE port	24	24	24	32
	10GE port	4	4	4	NA
Flexible card	Card slot	1	1	1	1
	Card type	<ul style="list-style-type: none"> 2-port 10GE SFP+ interface card 2-port QSFP+ dedicated stack card 	<ul style="list-style-type: none"> 2-port 10GE SFP+ interface card 2-port QSFP+ dedicated stack card 	<ul style="list-style-type: none"> 2-port 10GE SFP+ interface card 2-port QSFP+ dedicated stack card 	<ul style="list-style-type: none"> 2-port 10GE SFP+ interface card 2-port QSFP+ dedicated stack card
	Card specification	For details about cards, see the section Card Types.	For details about cards, see the section Card Types.	For details about cards, see the section Card Types.	For details about cards, see the section Card Types.
Management port	ETH management port	Supported	Supported	Supported	Supported
	Console port (RJ45)	Supported	Supported	Supported	Supported
	Console port (Mini USB)	Supported	Supported	Supported	Supported
	USB port	USB 2.0	USB 2.0	USB 2.0	USB 2.0
CPU	Frequency	1 GHz	1 GHz	1 GHz	1 GHz
	Cores	2	2	2	2
Memory	Memory	2 GB	2 GB	2 GB	2 GB

Item		S5720-36C-EI-28S-AC S5720-36C-EI-28S-DC	S5720-36C-EI-AC	S5720-36C-PWR-EI-AC	S5720-36PC-EI-AC
	(RAM)				
	Flash memory	Hardware: 512 MB, of which 340 MB is available for users	Hardware: 512 MB, of which 340 MB is available for users	Hardware: 512 MB, of which 340 MB is available for users	Hardware: 512 MB, of which 340 MB is available for users
Power supply system	Power supply type	<ul style="list-style-type: none"> 150 W AC (pluggable) 150 W DC (pluggable) 	<ul style="list-style-type: none"> 150 W AC (pluggable) 150 W DC (pluggable) 	<ul style="list-style-type: none"> 500 W AC (pluggable) 650 W DC (pluggable) 	<ul style="list-style-type: none"> 150 W AC (pluggable) 150 W 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.	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	1+1	1+1	1+1
	Rated voltage range	<ul style="list-style-type: none"> AC: 100 V AC to 240 V AC; 50/60 Hz DC: -48 V DC to -60 V DC 	<ul style="list-style-type: none"> AC: 100 V AC to 240 V AC; 50/60 Hz DC: -48 V DC to -60 V DC 	<ul style="list-style-type: none"> AC: 100 V AC to 240 V AC; 50/60 Hz DC: -48 V DC to -60 V DC 	<ul style="list-style-type: none"> AC: 100 V AC to 240 V AC; 50/60 Hz DC: -48 V DC to -60 V DC
	Maximum voltage range	<ul style="list-style-type: none"> AC: 90 V AC to 264 V AC; 47-63 Hz DC: -36 V DC to -72 V DC 	<ul style="list-style-type: none"> AC: 90 V AC to 264 V AC; 47-63 Hz DC: -36 V DC to -72 V DC 	<ul style="list-style-type: none"> AC: 90 V AC to 264 V AC; 47-63 Hz DC: -38.4 V DC to -72 V DC 	<ul style="list-style-type: none"> AC: 90 V AC to 264 V AC; 47-63 Hz DC: -36 V DC to -72 V DC
	Maximum input current	<ul style="list-style-type: none"> 150 W AC: 3 A 150 W DC: 6 A 	<ul style="list-style-type: none"> 150 W AC: 3 A 150 W DC: 6 A 	<ul style="list-style-type: none"> 500 W AC: 7 A 650 W DC: 20 A 	<ul style="list-style-type: none"> 150 W AC: 3 A 150 W DC: 6 A
	Maximum power consumption of the device	83.9 W	75.8 W	<ul style="list-style-type: none"> Without PDs: 78 W With PDs: 864.3 W (PDs: 739.2 W) 	74.6 W
	Power consumption in the case of 30% traffic load ¹	<ul style="list-style-type: none"> 47.86 W (without cards) 55.35 W (with a 2-port 10GE optical card) 60.25 W (with a 2-port QSFP+ stack card) 	<ul style="list-style-type: none"> 39.5 W (without cards) 7.28 W (with a 2-port 10GE optical card) 52.17 W (with a 2-port QSFP+ stack card) 	<ul style="list-style-type: none"> 48.45 W (without cards) 56.14 W (with a 2-port 10GE optical card) 60.76 W (with a 2-port QSFP+ stack card) 	<ul style="list-style-type: none"> 39.5 W (without cards) 47.28 W (with a 2-port 10GE optical card) 52.17 W (with a 2-port QSFP+ stack card)
	Power consumption in the case of 100% traffic load ¹	<ul style="list-style-type: none"> 56.65 W (without cards) 64.06 W (with a 2-port 10GE optical card) 68.65 W (with a 2-port QSFP+ stack card) 	<ul style="list-style-type: none"> 46.4 W (without cards) 54.06 W (with a 2-port 10GE optical card) 59.36 W (with a 2-port QSFP+ stack card) 	<ul style="list-style-type: none"> 54.15 W (without cards) 61.85 W (with a 2-port 10GE optical card) 66.64 W (with a 2-port QSFP+ stack card) 	<ul style="list-style-type: none"> 46.4 W (without cards) 54.06 W (with a 2-port 10GE optical card) 59.36 W (with a 2-port QSFP+ stack card)

Item		S5720-36C-EI-28S-AC S5720-36C-EI-28S-DC	S5720-36C-EI-AC	S5720-36C-PWR-EI-AC	S5720-36PC-EI-AC
		stack card)	stack card)	stack card)	stack card)
PoE specification	Maximum PoE power output	NA	NA	<ul style="list-style-type: none"> Single power supply: 369.6 W Dual power supplies: 739.2 W 	NA
	Number of PoE+ ports ²	NA	NA	28	NA
	Maximum number of ports with maximum PoE power (15.4 W)	NA	NA	<ul style="list-style-type: none"> Single power supply: 24 Dual power supplies: 48 	NA
	Maximum number of ports with maximum PoE+ power (30 W)	NA	NA	<ul style="list-style-type: none"> Single power supply: 12 Dual power supplies: 24 	NA
Heat dissipation system	Heat dissipation mode	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment	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	Pluggable dual fans	Pluggable dual fans
	Airflow	Air flows in from the left and right sides as well as the front panel, and exhausts from the rear panel	Air flows in from the left and right sides as well as the front panel, and exhausts from the rear panel	Air flows in from the left and right sides as well as the front panel, and exhausts from the rear panel	Air flows in from the left and right sides as well as the front panel, and exhausts from the rear panel
	Maximum heat dissipation of the device (BTU/hour)	286	259	<ul style="list-style-type: none"> Without PoE output: 266 Full-load PoE: 2950 	259
Environment parameters	Long-term operating temperature	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m.
	Short-term operating temperature	<ul style="list-style-type: none"> 0-1800 m: -5°C to +50°C 1800-5000 m: The operating 	<ul style="list-style-type: none"> 0-1800 m: -5°C to +50°C 1800-5000 m: The operating 	<ul style="list-style-type: none"> 0-1800 m: -5°C to +50°C 1800-5000 m: The operating 	<ul style="list-style-type: none"> 0-1800 m: -5°C to +50°C 1800-5000 m: The operating

Item	S5720-36C-EI-28S-AC S5720-36C-EI-28S-DC	S5720-36C-EI-AC	S5720-36C-PWR-EI-AC	S5720-36PC-EI-AC
	<p>temperature decreases 1°C every time the altitude increases 220 m.</p> <p>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.</p>	<p>temperature decreases 1°C every time the altitude increases 220 m.</p> <p>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.</p>	<p>temperature decreases 1°C every time the altitude increases 220 m.</p> <p>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.</p>	<p>temperature decreases 1°C every time the altitude increases 220 m.</p> <p>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.</p>
Storage temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Relative humidity	5%–95% (non-condensing)	5%–95% (non-condensing)	5%–95% (non-condensing)	5%–95% (non-condensing)
Operating altitude	<ul style="list-style-type: none"> AC: 5000 m DC: 2000 m 	<ul style="list-style-type: none"> AC: 5000 m DC: 2000 m 	<ul style="list-style-type: none"> AC: 5000 m DC: 2000 m 	<ul style="list-style-type: none"> AC: 5000 m DC: 2000 m
Noise under normal temperature (sound power)	51.2 dB(A)	51.2 dB(A)	53.7 dB(A)	51.2 dB(A)
Noise under high temperature (sound power)	71 dB(A)	71 dB(A)	71.3 dB(A)	71 dB(A)
Noise under normal temperature (sound pressure)	37.5 dB(A)	37.5 dB(A)	40.0 dB(A)	37.5 dB(A)
Surge protection specification (RJ45 service port)	±8 kV in common mode			
Surge protection specification	<ul style="list-style-type: none"> AC power interface: ±6 kV in differential or 	<ul style="list-style-type: none"> AC power interface: ±6 kV in differential or 	<ul style="list-style-type: none"> AC power interface: ±6 kV in differential or 	<ul style="list-style-type: none"> AC power interface: ±6 kV in differential or

Item		S5720-36C-EI-28S-AC S5720-36C-EI-28S-DC	S5720-36C-EI-AC	S5720-36C-PWR-EI-AC	S5720-36PC-EI-AC
	(power port)	common mode <ul style="list-style-type: none"> DC power interface: ±1 kV in differential; ±2 kV in common mode 	common mode <ul style="list-style-type: none"> DC power interface: ±1 kV in differential; ±2 kV in common mode 	common mode <ul style="list-style-type: none"> DC power interface: ±2 kV in differential; ±4 kV in common mode 	common mode <ul style="list-style-type: none"> DC power interface: ±1 kV in differential; ±2 kV in common mode
Reliability	MTBF (year) ³	<ul style="list-style-type: none"> Without cards: 85.45 With a 2-port 10GE SFP+ card: 78.2 With a stack card: 76.05 	<ul style="list-style-type: none"> Without cards: 80.05 With a 2-port 10GE SFP+ card: 73.65 With a stack card: 71.74 	<ul style="list-style-type: none"> Without cards: 60.72 With a 2-port 10GE SFP+ card: 56.97 With a stack card: 55.82 	<ul style="list-style-type: none"> Without cards: 80.05 With a 2-port 10GE SFP+ card: 73.65 With a stack card: 71.74
	MTTR (hour)	2	2	2	2
	Availability	> 0.99999	> 0.99999	> 0.99999	> 0.99999
Certification		<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification For details about certifications, see the section Safety and Regulatory Compliance.	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification For details about certifications, see the section Safety and Regulatory Compliance.	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification For details about certifications, see the section Safety and Regulatory Compliance.	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification For details about certifications, see the section Safety and Regulatory Compliance.

Hardware specifications of the S5720-56C-EI or S5720-56PC-EI series

Item		S5720-56C-EI-48S-AC S5720-56C-EI-48S-DC	S5720-56C-EI-AC S5720-56C-EI-DC	S5720-56C-PWR-EI-AC S5720-56C-PWR-EI-DC	S5720-56C-PWR-EI-AC1	S5720-56PC-EI-AC
Physical specifications	Chassis dimensions (W x D x H, mm)	442 x 420 x 44.4	442 x 420 x 44.4	442 x 420 x 44.4	442 x 507 x 44.4	442 x 420 x 44.4
	Chassis height	1 U	1 U	1 U	1 U	1 U
	Chassis weight (full configuration weight, including weight of packaging materials)	<ul style="list-style-type: none"> S5720-56C-EI-48S-AC: 10.10 kg S5720-56C-EI-48S-DC: 9.9 kg 	<ul style="list-style-type: none"> S5720-56C-EI-AC: 9.92 kg S5720-56C-EI-DC: 9.72 kg 	<ul style="list-style-type: none"> S5720-56C-PWR-EI-AC: 10.32 kg S5720-56C-PWR-EI-DC: 10.3 kg 	10.9 kg	9.92 kg
Fixed port	GE port	48	48	48	48	52

Item		S5720-56C-EI-48S-AC S5720-56C-EI-48S-DC	S5720-56C-EI-AC S5720-56C-EI-DC	S5720-56C-PWR-EI-AC S5720-56C-PWR-EI-DC	S5720-56C-PWR-EI-AC1	S5720-56PC-EI-AC
	10GE port	4	4	4	4	NA
Flexible card	Card slot	1	1	1	1	1
	Card type	<ul style="list-style-type: none"> 2-port 10GE SFP+ interface card 2-port QSFP+ dedicated stack card 	<ul style="list-style-type: none"> 2-port 10GE SFP+ interface card 2-port QSFP+ dedicated stack card 	<ul style="list-style-type: none"> 2-port 10GE SFP+ interface card 2-port QSFP+ dedicated stack card 	<ul style="list-style-type: none"> 2-port 10GE SFP+ interface card 2-port QSFP+ dedicated stack card 	<ul style="list-style-type: none"> 2-port 10GE SFP+ interface card 2-port QSFP+ dedicated stack card
	Card specification	For details about cards, see the section Card Types.	For details about cards, see the section Card Types.	For details about cards, see the section Card Types.	For details about cards, see the section Card Types.	For details about cards, see the section Card Types.
Management port	ETH management port	Supported	Supported	Supported	Supported	Supported
	Console port (RJ45)	Supported	Supported	Supported	Supported	Supported
	Console port (Mini USB)	Supported	Supported	Supported	Supported	Supported
	USB port	USB 2.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0
CPU	Frequency	1 GHz	1 GHz	1 GHz	1 GHz	1 GHz
	Cores	2	2	2	2	2
Memory	Memory (RAM)	2 GB	2 GB	2 GB	2 GB	2 GB
	Flash memory	Hardware: 512 MB, of which 340 MB is available for users	Hardware: 512 MB, of which 340 MB is available for users	Hardware: 512 MB, of which 340 MB is available for users	Hardware: 512 MB, of which 340 MB is available for users	Hardware: 512 MB, of which 340 MB is available for users
Power supply system	Power supply type	<ul style="list-style-type: none"> 150 W AC (pluggable) 150 W DC (pluggable) 	<ul style="list-style-type: none"> 150 W AC (pluggable) 150 W DC (pluggable) 	<ul style="list-style-type: none"> 500 W AC (pluggable) 650 W DC (pluggable) 	1150 W AC (pluggable) NOTE Dual power slots are provided. By default, a 1150 W AC power supply is delivered with the switch, so another 1150 W AC power supply needs	<ul style="list-style-type: none"> 150 W AC (pluggable) 150 W DC (pluggable)

Item	S5720-56C-EI-48S-AC	S5720-56C-EI-AC	S5720-56C-PWR-EI-AC	S5720-56C-PWR-EI-AC1	S5720-56PC-EI-AC
	S5720-56C-EI-48S-DC	S5720-56C-EI-DC	S5720-56C-PWR-EI-DC		
				to be configured.	
Power supply specification	For details about power supplies, see the section Power Supply.	For details about power supplies, see the section Power Supply.	For details about power supplies, see the section Power Supply.	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	1+1	1+1	1+1	1+1
Rated voltage range	<ul style="list-style-type: none"> AC: 100 V AC to 240 V AC; 50/60 Hz DC: -48 V DC to -60 V DC 	<ul style="list-style-type: none"> AC: 100 V AC to 240 V AC; 50/60 Hz DC: -48 V DC to -60 V DC 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> AC: 100 V AC to 240 V AC; 50/60 Hz DC: -48 V DC to -60 V DC
Maximum voltage range	<ul style="list-style-type: none"> AC: 90 V AC to 264 V AC; 47-63 Hz DC: -36 V DC to -72 V DC 	<ul style="list-style-type: none"> AC: 90 V AC to 264 V AC; 47-63 Hz DC: -36 V DC to -72 V DC 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> AC: 90 V AC to 264 V AC; 47-63 Hz DC: -36 V DC to -72 V DC
Maximum input current	<ul style="list-style-type: none"> 150 W AC: 3 A 150 W DC: 6 A 	<ul style="list-style-type: none"> 150 W AC: 3 A 150 W DC: 6 A 	<ul style="list-style-type: none"> 500 W AC: 7 A 650 W DC: 20 A 	1150 W AC: 10 A	<ul style="list-style-type: none"> 150 W AC: 3 A 150 W DC: 6 A
Maximum power consumption of the device	104 W	86.9 W	<ul style="list-style-type: none"> Without PDs: 91.6 W With PDs: 889.4 W (PDs: 739.2 W) 	<ul style="list-style-type: none"> Without PDs: 91.6 W With PDs: 1564.8 W (PDs: 1440 W) 	85.7 W
Power consumption in the case of 30% traffic load ¹	<ul style="list-style-type: none"> 68.82 W (without cards) 76.55 W (with a 2-port 10GE optical card) 81.23 W (with a 2-port QSFP+ stack card) 	<ul style="list-style-type: none"> 40.45 W (without cards) 47.78 W (with a 2-port 10GE optical card) 52.87 W (with a 2-port QSFP+ stack card) 	<p>S5720-56C-PWR-EI-AC:</p> <ul style="list-style-type: none"> 53.5 W (without cards) 61.12 W (with a 2-port 10GE optical card) 65.85 W (with a 2-port QSFP+ stack card) <p>S5720-56C-PWR-EI-DC:</p> <ul style="list-style-type: none"> 56.68 W 	<ul style="list-style-type: none"> 53.5 W (without cards) 61.12 W (with a 2-port 10GE optical card) 65.85 W (with a 2-port QSFP+ stack card) 	<ul style="list-style-type: none"> 40.45 W (without cards) 47.78 W (with a 2-port 10GE optical card) 52.87 W (with a 2-port QSFP+ stack card)

Item		S5720-56C-EI-48S-AC	S5720-56C-EI-AC	S5720-56C-PWR-EI-AC	S5720-56C-PWR-EI-AC1	S5720-56PC-EI-AC
		S5720-56C-EI-48S-DC	S5720-56C-EI-DC	S5720-56C-PWR-EI-DC		
				(without cards) <ul style="list-style-type: none"> 63.63 W (with a 2-port 10GE optical card) 68.56 W (with a 2-port QSFP+ stack card) 		
	Power consumption in the case of 100% traffic load ¹	<ul style="list-style-type: none"> 70.25 W (without cards) 77.65 W (with a 2-port 10GE optical card) 82.67 W (with a 2-port QSFP+ stack card) 	<ul style="list-style-type: none"> 60.1 W (without cards) 67.72 W (with a 2-port 10GE optical card) 72.55 W (with a 2-port QSFP+ stack card) 	S5720-56C-PWR-EI-AC: <ul style="list-style-type: none"> 62.24 W (without cards) 69.75 W (with a 2-port 10GE optical card) 74.55 W (with a 2-port QSFP+ stack card) S5720-56C-PWR-EI-DC: <ul style="list-style-type: none"> 69.23 W (without cards) 76.23 W (with a 2-port 10GE optical card) 81.48 W (with a 2-port QSFP+ stack card) 	<ul style="list-style-type: none"> 62.24 W (without cards) 69.75 W (with a 2-port 10GE optical card) 74.55 W (with a 2-port QSFP+ stack card) 	<ul style="list-style-type: none"> 60.1 W (without cards) 67.72 W (with a 2-port 10GE optical card) 72.55 W (with a 2-port QSFP+ stack card)
PoE specification	Maximum PoE power output	NA	NA	<ul style="list-style-type: none"> Single power supply: 369.6 W Dual power supplies: 739.2 W 	<ul style="list-style-type: none"> Dual 1150 W power supplies: 1440 W (220 V input) Dual 1150 W power supplies: 893.2 W (110 V input) 	NA
	Number of PoE+ ports ²	NA	NA	48	48	NA
	Maximum number of	NA	NA	<ul style="list-style-type: none"> Single power supply: 24 	<ul style="list-style-type: none"> Single power supply (220 	NA

Item		S5720-56C-EI-48S-AC S5720-56C-EI-48S-DC	S5720-56C-EI-AC S5720-56C-EI-DC	S5720-56C-PWR-EI-AC S5720-56C-PWR-EI-DC	S5720-56C-PWR-EI-AC1	S5720-56PC-EI-AC
	ports with maximum PoE power (15.4 W)			<ul style="list-style-type: none"> • Dual power supplies: 48 	V input): 48 <ul style="list-style-type: none"> • Single power supply (110 V input): 29 • Dual power supplies (220 V input): 48 • Dual power supplies (110 V input): 48 	
	Maximum number of ports with maximum PoE+ power (30 W)	NA	NA	<ul style="list-style-type: none"> • Single power supply: 12 • Dual power supplies: 24 	<ul style="list-style-type: none"> • Single power supply (220 V input): 26 • Single power supply (110 V input): 14 • Dual power supplies (220 V input): 48 • Dual power supplies (110 V input): 29 	NA
Heat dissipation system	Heat dissipation mode	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment	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	Pluggable dual fans	Pluggable dual fans	Pluggable dual fans
	Airflow	Air flows in from the left and right sides as well as the front panel, and exhausts from the rear panel	Air flows in from the left and right sides as well as the front panel, and exhausts from the rear panel	Air flows in from the left and right sides as well as the front panel, and exhausts from the rear panel	Air flows in from the left and right sides as well as the front panel, and exhausts from the rear panel	Air flows in from the left and right sides as well as the front panel, and exhausts from the rear panel
	Maximum heat dissipation of the device (BTU/hour)	355	297	<ul style="list-style-type: none"> • Without PoE output: 313 • Full-load PoE: 3035 • Without PoE output: 334 • Full-load PoE: 3116 	<ul style="list-style-type: none"> • Without PoE output: 313 • Full-load PoE: 5341 	297
Environment	Long-term	• 0-1800 m:	• 0-1800 m:	• 0-1800 m:	• 0-1800 m:	• 0-1800 m:

Item		S5720-56C-EI-48S-AC S5720-56C-EI-48S-DC	S5720-56C-EI-AC S5720-56C-EI-DC	S5720-56C-PWR-EI-AC S5720-56C-PWR-EI-DC	S5720-56C-PWR-EI-AC1	S5720-56PC-EI-AC
parameters	operating temperature	0°C to 45°C <ul style="list-style-type: none"> 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. 	0°C to 45°C <ul style="list-style-type: none"> 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. 	0°C to 45°C <ul style="list-style-type: none"> 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. 	0°C to 45°C <ul style="list-style-type: none"> 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. 	0°C to 45°C <ul style="list-style-type: none"> 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m.
	Short-term operating temperature	<ul style="list-style-type: none"> 0-1800 m: -5°C to +50°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. <p>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.</p>	<ul style="list-style-type: none"> 0-1800 m: -5°C to +50°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. <p>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.</p>	<ul style="list-style-type: none"> 0-1800 m: -5°C to +50°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. <p>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.</p>	<ul style="list-style-type: none"> 0-1800 m: -5°C to +50°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. <p>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.</p>	<ul style="list-style-type: none"> 0-1800 m: -5°C to +50°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. <p>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.</p>
	Storage temperature	-40°C to +70°C				
	Relative humidity	5%-95% (non-condensing)				
	Operating altitude	<ul style="list-style-type: none"> AC: 5000 m DC: 2000 m 	<ul style="list-style-type: none"> AC: 5000 m DC: 2000 m 	5000 m	5000 m	<ul style="list-style-type: none"> AC: 5000 m DC: 2000 m
Noise under	51.2 dB(A)	51.2 dB(A)	53.7 dB(A)	61.7 dB(A)	51.2 dB(A)	

Item		S5720-56C-EI-48S-AC	S5720-56C-EI-AC	S5720-56C-PWR-EI-AC	S5720-56C-PWR-EI-AC1	S5720-56PC-EI-AC
		S5720-56C-EI-48S-DC	S5720-56C-EI-DC	S5720-56C-PWR-EI-DC		
	normal temperature (sound power)					
	Noise under high temperature (sound power)	71 dB(A)	71 dB(A)	71.3 dB(A)	72.1 dB(A)	71 dB(A)
	Noise under normal temperature (sound pressure)	37.5 dB(A)	37.5 dB(A)	40.0 dB(A)	47.9 dB(A)	37.5 dB(A)
	Surge protection specification (RJ45 service port)	NA	±8 kV in common mode	±8 kV in common mode	±8 kV in common mode	±8 kV in common mode
	Surge protection specification (power port)	<ul style="list-style-type: none"> AC power port: ±6 kV in differential or common mode DC power port: ±1 kV in differential mode; ±2 kV in common mode 	<ul style="list-style-type: none"> AC power port: ±6 kV in differential or common mode DC power port: ±1 kV in differential mode; ±2 kV in common mode 	<ul style="list-style-type: none"> AC power port: ±6 kV in differential or common mode DC power port: ±2 kV in differential mode; ±4 kV in common mode 	<ul style="list-style-type: none"> Differential mode: ±2 kV Common mode: ±4 kV 	<ul style="list-style-type: none"> AC power port: ±6 kV in differential or common mode DC power port: ±1 kV in differential mode; ±2 kV in common mode
Reliability	MTBF (year) ³	<ul style="list-style-type: none"> Without cards: 73.91 With a 2-port 10GE SFP+ card: 68.42 With a stack card: 66.77 	<ul style="list-style-type: none"> Without cards: 71.18 With a 2-port 10GE SFP+ card: 66.07 With a stack card: 64.53 	<ul style="list-style-type: none"> Without cards: 51.34 With a 2-port 10GE SFP+ card: 48.63 With a stack card: 47.79 	<ul style="list-style-type: none"> Without cards: 51.34 With a 2-port 10GE SFP+ card: 48.63 With a stack card: 47.79 	<ul style="list-style-type: none"> Without cards: 71.18 With a 2-port 10GE SFP+ card: 66.07 With a stack card: 64.53
	MTTR (hour)	2	2	2	2	2
	Availability	> 0.99999	> 0.99999	> 0.99999	> 0.99999	> 0.99999
Certification		<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification For details about certifications,	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification For details about certifications,	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification For details about certifications,	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification For details about certifications,	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification For details about certifications,

Item	S5720-56C-EI-48S-AC	S5720-56C-EI-AC	S5720-56C-PWR-EI-AC	S5720-56C-PWR-EI-AC1	S5720-56PC-EI-AC
	S5720-56C-EI-48S-DC	S5720-56C-EI-DC	S5720-56C-PWR-EI-DC		
	see the section Safety and Regulatory Compliance.				

Hardware specifications of the S5720-X-EI series

Item		S5720-32X-EI-24S-AC	S5720-32X-EI-AC	S5720-50X-EI-46S-AC	S5720-50X-EI-AC	S5720-52X-EI-AC
		S5720-32X-EI-24S-DC		S5720-50X-EI-46S-DC	S5720-50X-EI-DC	
Physical specifications	Chassis dimensions (W x D x H, mm)	442 x 220 x 43.6 (front-access)	442 x 220 x 43.6 (front-access)	442 x 220 x 43.6 (front-access)	442 x 220 x 43.6 (front-access)	442 x 220 x 43.6
	Chassis height	1 U	1 U	1 U	1 U	1 U
	Chassis weight (full configuration weight, including weight of packaging materials)	<ul style="list-style-type: none"> S5720-32X-EI-24S-AC: 4.44 kg S5720-32X-EI-24S-DC: 4.21 kg 	4.44 kg	<ul style="list-style-type: none"> S5720-50X-EI-46S-AC: 4.97 kg S5720-50X-EI-46S-DC: 4.74 kg 	<ul style="list-style-type: none"> S5720-50X-EI-AC: 4.88 kg S5720-50X-EI-DC: 4.65 kg 	4.66 kg
Fixed port	GE port	28	28	46	48	48
	10GE port	4	4	4	4	4
	Dedicated stack port	2	2	2	2	2
Management port	ETH management port	Supported	Supported	NA	NA	Supported
	Console port (RJ45)	Supported	Supported	Supported	Supported	Supported
	Console port (Mini USB)	Supported	Supported	NA	NA	Supported
	USB port	USB 2.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0
CPU	Frequency	1 GHz	1 GHz	1 GHz	1 GHz	1 GHz
	Cores	2	2	2	2	2
Memory	Memory (RAM)	2 GB	2 GB	2 GB	2 GB	2 GB
	Flash memory	Hardware: 512 MB, of which 340 MB is available for	Hardware: 512 MB, of which 340 MB is available for	Hardware: 512 MB, of which 340 MB is available for	Hardware: 512 MB, of which 340 MB is available for	Hardware: 512 MB, of which 340 MB is available for

Item		S5720-32X-EI-24S-AC	S5720-32X-EI-AC	S5720-50X-EI-46S-AC	S5720-50X-EI-AC	S5720-52X-EI-AC
		S5720-32X-EI-24S-DC		S5720-50X-EI-46S-DC	S5720-50X-EI-DC	
		users	users	users	users	users
Power supply system	Power supply type	<ul style="list-style-type: none"> S5720-32X-EI-24S-AC: AC (fixed) S5720-32X-EI-24S-DC: DC (fixed) 	AC (fixed)	<ul style="list-style-type: none"> S5720-50X-EI-46S-AC: AC (fixed) S5720-50X-EI-46S-DC: DC (fixed) 	<ul style="list-style-type: none"> S5720-50X-EI-AC: AC (fixed) S5720-50X-EI-DC: DC (fixed) 	AC (fixed)
	Power supply redundancy	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode
	RPS	Supported	Supported	Supported	Supported	Supported
	Rated voltage range	<ul style="list-style-type: none"> S5720-32X-EI-24S-AC: 100 V AC to 240 V AC, 50/60 Hz S5720-32X-EI-24S-DC: -48 V DC to -60 V DC 	AC: 100 V AC to 240 V AC, 50/60 Hz	<ul style="list-style-type: none"> S5720-50X-EI-46S-AC: 100 V AC to 240 V AC, 50/60 Hz S5720-50X-EI-46S-DC: -48 V DC to -60 V DC 	<ul style="list-style-type: none"> S5720-50X-EI-AC: 100 V AC to 240 V AC, 50/60 Hz S5720-50X-EI-DC: -48 V DC to -60 V DC 	AC: 100 V AC to 240 V AC, 50/60 Hz
	Maximum voltage range	<ul style="list-style-type: none"> S5720-32X-EI-24S-AC: 90 V AC to 264 V AC; 47-63 Hz S5720-32X-EI-24S-DC: -36 V DC to -72 V DC 	AC: 90 V AC to 264 V AC; 47-63 Hz	<ul style="list-style-type: none"> S5720-50X-EI-46S-AC: 90 V AC to 264 V AC; 47-63 Hz S5720-50X-EI-46S-DC: -36 V DC to -72 V DC 	<ul style="list-style-type: none"> S5720-50X-EI-AC: 90 V AC to 264 V AC; 47-63 Hz S5720-50X-EI-DC: -36 V DC to -72 V DC 	AC: 90 V AC to 264 V AC; 47-63 Hz
	Maximum input current	3 A	2 A	3 A	3 A	3 A
	Maximum power consumption of the device	58.9 W	51.9 W	81.5 W	55.3 W	61.5 W
	Power consumption in the case of 30% traffic load ¹	55.46 W	40.85 W	73.75 W	47.45 W	52.25 W
Power consumption in the case of 100% traffic load ¹	56.5 W	45.9 W	76.5 W	49.7 W	56.65 W	
Heat dissipation	Heat dissipation	Air-cooled heat dissipation and	Air-cooled heat dissipation and	Air-cooled heat dissipation and	Air-cooled heat dissipation and	Air-cooled heat dissipation and

Item		S5720-32X-EI-24S-AC S5720-32X-EI-24S-DC	S5720-32X-EI-AC	S5720-50X-EI-46S-AC S5720-50X-EI-46S-DC	S5720-50X-EI-AC S5720-50X-EI-DC	S5720-52X-EI-AC
system	mode	intelligent fan speed adjustment				
	Number of fan modules	1	1	2	1	1
	Airflow	Air flows in from the left side and front panel and exhausts from the right side	Air flows in from the left side and front panel and exhausts from the right side	Air flows in from the left side and front panel and exhausts from the right side	Air flows in from the left side and front panel and exhausts from the right side	Air flows in from the left side and front panel and exhausts from the right side
	Maximum heat dissipation of the device (BTU/hour)	201	177	278	189	210
Environment parameters	Long-term operating temperature	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m.
	Storage temperature	-40°C to +70°C				
	Relative humidity	5%-95% (non-condensing)				
	Operating altitude	<ul style="list-style-type: none"> S5720-32X-EI-24S-AC: 5000 m S5720-32X-EI-24S-DC: 2000 m 	5000 m	<ul style="list-style-type: none"> S5720-50X-EI-46S-AC: 5000 m S5720-50X-EI-46S-DC: 2000 m 	<ul style="list-style-type: none"> S5720-50X-EI-AC: 5000 m S5720-50X-EI-DC: 2000 m 	5000 m
	Noise under normal temperature (sound power)	49.3 dB(A)	49.3 dB(A)	51.1 dB(A)	49.3 dB(A)	49.3 dB(A)
	Noise under high temperature (sound power)	69.2 dB(A)	69.2 dB(A)	72.3 dB(A)	69.2 dB(A)	69.2 dB(A)
	Noise under	35.9 dB(A)	35.9 dB(A)	37.6 dB(A)	35.9 dB(A)	35.9 dB(A)

Item		S5720-32X-EI-24S-AC S5720-32X-EI-24S-DC	S5720-32X-EI-AC	S5720-50X-EI-46S-AC S5720-50X-EI-46S-DC	S5720-50X-EI-AC S5720-50X-EI-DC	S5720-52X-EI-AC
	normal temperature (sound pressure)					
	Surge protection specification (RJ45 service port)	±8kV in common mode	±8kV in common mode	NA	±8kV in common mode	±8kV in common mode
	Surge protection specification (power port)	<ul style="list-style-type: none"> S5720-32X-EI-24S-AC: ±6kV in differential mode, ±6kV in common mode S5720-32X-EI-24S-DC: ±1kV in differential mode, ±2kV in common mode 	±6kV in differential mode, ±6kV in common mode	<ul style="list-style-type: none"> S5720-50X-EI-46S-AC: ±6kV in differential mode, ±6kV in common mode S5720-50X-EI-46S-DC: ±1kV in differential mode, ±2kV in common mode 	<ul style="list-style-type: none"> S5720-50X-EI-AC: ±6kV in differential mode, ±6kV in common mode S5720-50X-EI-DC: ±1kV in differential mode, ±2kV in common mode 	±6kV in differential mode, ±6kV in common mode
Reliability	MTBF (year) ³	82.54	80.32	67.59	74.31	73.12
	MTTR (hour)	2	2	2	2	2
	Availability	> 0.99999	> 0.99999	> 0.99999	> 0.99999	> 0.99999
Certification		<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>	<ul style="list-style-type: none"> EMC certification Safety certification Manufacturing certification <p>For details about certifications, see the section Safety and Regulatory Compliance.</p>

Hardware specifications of the S5720-P-EI series

Item		S5720-32P-EI-AC	S5720-52P-EI-AC
Physical specifications	Chassis dimensions (W x D x H, mm)	442 x 220 x 43.6 (front-access)	442 x 220 x 43.6
	Chassis height	1 U	1 U

Item		S5720-32P-EI-AC	S5720-52P-EI-AC
	Chassis weight (full configuration weight, including weight of packaging materials)	4.44 kg	4.66 kg
Fixed port	GE port	32	52
	Dedicated stack port	2	2
Management port	ETH management port	Supported	Supported
	Console port (RJ45)	Supported	Supported
	Console port (Mini USB)	Supported	Supported
	USB port	USB 2.0	USB 2.0
CPU	Frequency	1 GHz	1 GHz
	Cores	2	2
Memory	Memory (RAM)	2 GB	2 GB
	Flash memory	Hardware: 512 MB, of which 340 MB is available for users	Hardware: 512 MB, of which 340 MB is available for users
Power supply system	Power supply type	AC (fixed)	AC (fixed)
	Power supply redundancy	Built-in single power supply and RPS in 6:1 mode	Built-in single power supply and RPS in 6:1 mode
	RPS	Supported	Supported
	Rated voltage range	AC: 100 V AC to 240 V AC, 50/60 Hz	AC: 100 V AC to 240 V AC, 50/60 Hz
	Maximum voltage range	AC: 90 V AC to 264 V AC; 47-63 Hz	AC: 90 V AC to 264 V AC; 47-63 Hz
	Maximum input current	2 A	3 A
	Maximum power consumption of the device	50.7 W	60.3 W
	Power consumption in the case of 30% traffic load ¹	39.75 W	51.14 W
	Power consumption in the case of 100% traffic load ¹	44.7 W	55.65 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	1	1
	Airflow	Air flows in from the left side and front panel and exhausts from the right side	Air flows in from the left side and front panel and exhausts from the right side
	Maximum heat dissipation of the device (BTU/hour)	173	206
Environment parameters	Long-term operating temperature	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m. 	<ul style="list-style-type: none"> 0-1800 m: 0°C to 45°C 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m.

Item		S5720-32P-EI-AC	S5720-52P-EI-AC
	Storage temperature	-40°C to +70°C	-40°C to +70°C
	Relative humidity	5%-95% (non-condensing)	5%-95% (non-condensing)
	Operating altitude	5000 m	5000 m
	Noise under normal temperature (sound power)	49.3 dB(A)	49.3 dB(A)
	Noise under high temperature (sound power)	69.2 dB(A)	69.2 dB(A)
	Noise under normal temperature (sound pressure)	35.9 dB(A)	35.9 dB(A)
	Surge protection specification (RJ45 service port)	±8kV in common mode	±8kV in common mode
	Surge protection specification (power port)	±6kV in differential mode, ±6kV in common mode	±6kV in differential mode, ±6kV in common mode
Reliability	MTBF (year) ³	80.32	73.12
	MTTR (hour)	2	2
	Availability	> 0.99999	> 0.99999
Certification		<ul style="list-style-type: none"> • EMC certification • Safety certification • Manufacturing certification For details about certifications, see the section Safety and Regulatory Compliance.	<ul style="list-style-type: none"> • 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 number of working PoE+ ports depends on the maximum PoE power provided by the device and the maximum power consumption of PDs.

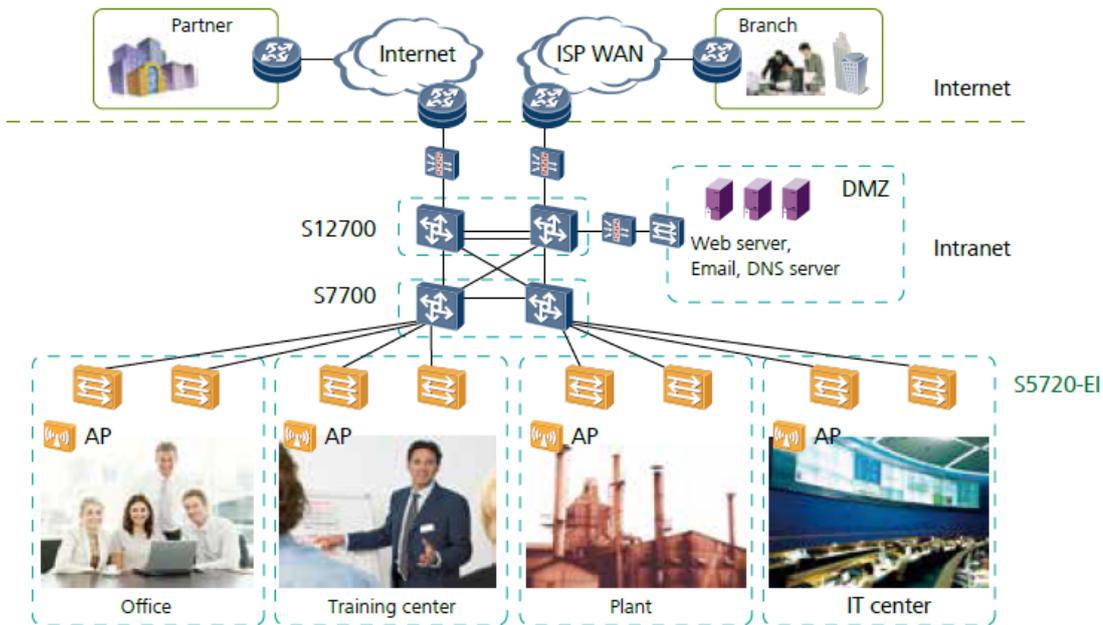
3: The reliability parameter values are calculated based on the typical configuration of the device. The parameter values vary according to the modules configured by the customer.

Networking and Applications

Large-scale Enterprise Networks

The S5720-EI can be used as an access switch in a large-sized enterprise network or as an aggregation device in a small- or medium-sized campus network. It supports link aggregation and dual-homing to improve network reliability.

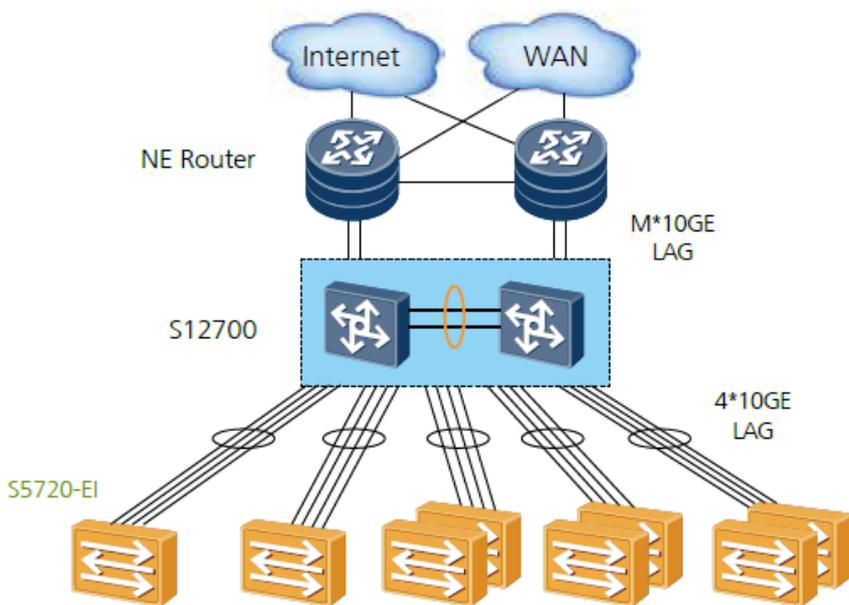
Position of the S5720-EI on a large-scale enterprise network



Data Center Networks

As shown in the following figure, the S5720-EI can be used in a data center to connect to gigabit servers. In a data center, S5720-EI switches connect to upstream aggregation switches through bundled links. If many servers are deployed in a rack, multiple S5720-EI switches can set up a stack system to simplify management and improve network reliability.

Position of the S5720-EI on a data center network



Product Accessories

Optical Modules and Fibers

The S5720-EI 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+

Optical fibers fall into single-mode and multi-mode fibers. Single-mode optical modules use single-mode fibers, and multi-mode optical modules use multi-mode fibers. For a non-BIDI optical module, each optical interface must be configured with a Tx optical fiber and an Rx optical fiber of the same type. For a BIDI optical module, only one optical fiber needs to be configured.

NOTE

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

Stack Cables

The S5720-EI series switches support service port stacking and stack card stacking. The applicable stack cables are as follows:

- AOC cable

An active optical network (AOC) cable integrates an optical module and a 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 a fiber. The SFP+ high-speed cables are available in SFP-10G-CU1M, SFP-10G-CU3M, SFP-10G-CU5M, and SFP-10G-CU10M.

- Stack card

The stack card provides two QSFP+ optical ports for stack connection, and can be installed in the rear card slot of the S5720-C-EI and S5720-PC-EI series chassis.

The following table lists the stack cable types and connectors.

Stack cable types and connectors applicable to the S5720-EI series

Stack Cable	Model	Cable Length	Connector
AOC	SFP-10G-AOC3M	3 m	SFP+
	SFP-10G-AOC10M	5 m	SFP+
SFP+ high-speed	SFP-10G-CU1M	1 m	SFP+
	SFP-10G-CU3M	3 m	SFP+
	SFP-10G-CU5M	5 m	SFP+
	SFP-10G-CU10M	10 m	SFP+

NOTE

For more information about stack cables applicable to the S5720-EI 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 S5720-EI.

Safety and regulatory compliance of the S5720-EI series

Certification Category	Description
Safety	<ul style="list-style-type: none"> ● IEC 60950-1

Certification Category	Description
	<ul style="list-style-type: none"> • 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)	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • RoHS • REACH • WEEE

 **NOTE**

- EMC: electromagnetic compatibility
- CISPR: International Special Committee on Radio Interference
- EN: European Standard
- ETSI: European Telecommunications Standards Institute
- CFR: Code of Federal Regulations
- FCC: Federal Communication Commission
- IEC: International Electrotechnical Commission
- AS/NZS: Australian/New Zealand Standard
- VCCI: Voluntary Control Council for Interference
- UL: Underwriters Laboratories
- CSA: Canadian Standards Association
- IEEE: Institute of Electrical and Electronics Engineers
- RoHS: restriction of the use of certain hazardous substances
- REACH: Registration Evaluation Authorization and Restriction of Chemicals
- WEEE: Waste Electrical and Electronic Equipment

MIB and Standards Compliance

Supported MIBs

The following table lists the MIBs supported by the S5720-EI.

MIBs supported by the S5720-EI series

Category	MIB
Public MIB	<ul style="list-style-type: none">• 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• MPLS-FTN-STD-MIB• MPLS-L3VPN-STD-MIB• MPLS-LDP-GENERIC-STD-MIB• MPLS-LDP-STD-MIB• MPLS-LSR-STD-MIB• MPLS-TE-STD-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
Huawei-proprietary MIB	<ul style="list-style-type: none">• HUAWEI-AAA-MIB

Category	MIB
	<ul style="list-style-type: none"> • 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-DHCP-S-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

Category	MIB
	<ul style="list-style-type: none"> • 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 S5720-EI series, visit <https://support.huawei.com/enterprise/en/switches/s5700-pid-6691579?category=reference-guides&subcategory=mib-reference>.

Standard Compliance

The following table lists the standards that the S5720-EI complies with.

Standard compliance list of the S5720-EI series

Standard Organization	Standard or Protocol
IETF	<ul style="list-style-type: none"> • 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)

Standard Organization	Standard or Protocol
	<ul style="list-style-type: none"> • 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 • draft-grant-tacacs-02 TACACS+
IEEE	<ul style="list-style-type: none"> • 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

Standard Organization	Standard or Protocol
	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> ITU SG13 Y.17ethoam ITU SG13 QoS control Ethernet-Based IP Access ITU-T Y.1731 ETH OAM performance monitor
ISO	<ul style="list-style-type: none"> ISO 10589 IS-IS Routing Protocol
MEF	<ul style="list-style-type: none"> 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

NOTE

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

Ordering Information

Ordering information of the S5720-EI series

Item	Product Description
1	S5720-32P-EI-AC (24 Ethernet 10/100/1000 ports, 8 Gig SFP, AC 110/220 V, front access)
2	S5720-32X-EI-AC (24 Ethernet 10/100/1000 ports, 4 Gig SFP, 4 10 Gig SFP+, AC 110/220 V, front access)
3	S5720-32X-EI-24S-AC (24 Gig SFP, 4 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, AC 110/220 V, front access)
4	S5720-32X-EI-24S-DC (24 Gig SFP, 4 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, DC, front access)
5	S5720-36C-EI-AC (28 Ethernet 10/100/1000 ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, 1 interface slot, with 150 W AC)
6	S5720-36C-PWR-EI-AC (28 Ethernet 10/100/1000 PoE+ ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, with 500 W AC power)
7	S5720-36PC-EI-AC (28 Ethernet 10/100/1000 ports, 4 of which are dual-purpose 10/100/1000 or SFP, 4 Gig SFP,

Item	Product Description
	1 interface slot, with 150 W AC)
8	S5720-36C-EI-28S-AC (28 Gig SFP, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, with 1 interface slot, with 150 W AC power supply)
9	S5720-36C-EI-28S-DC (28 Gig SFP, 4 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, with 1 interface slot, with 150 W DC power supply)
10	S5720-50X-EI-AC (46 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, AC 110/220 V, front access)
11	S5720-50X-EI-DC (46 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, DC, front access)
12	S5720-50X-EI-46S-AC (46 Gig SFP, 4 10 Gig SFP+, AC 110/220 V, front access)
13	S5720-50X-EI-46S-DC (46 Gig SFP, 4 10 Gig SFP+, DC, front access)
14	S5720-52X-EI-AC (48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, AC 110/220 V)
15	S5720-52P-EI-AC (48 Ethernet 10/100/1000 ports, 4 Gig SFP, AC 110/220 V)
16	S5720-56C-EI-48S-AC (48 Gig SFP, 4 10 Gig SFP+, with 1 interface slot, with 150 W AC power supply)
17	S5720-56C-EI-48S-DC (48 Gig SFP, 4 10 Gig SFP+, with 1 interface slot, with 150 W DC power supply)
18	S5720-56C-EI-AC (48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, with 1 interface slot, with 150 W AC power supply)
19	S5720-56C-EI-DC (48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, with 1 interface slot, with 150 W DC power supply)
20	S5720-56PC-EI-AC (48 Ethernet 10/100/1000 ports, 4 Gig SFP, with 1 interface slot, with 150 W AC power supply)
21	S5720-56C-PWR-EI-AC (48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, with 1 interface slot, with 500 W AC power supply)
22	S5720-56C-PWR-EI-DC (48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, with 1 interface slot, with 650 W DC power supply)
23	S5720-56C-PWR-EI-AC1 (48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, with 1 interface slot, with 1150 W AC power supply)
24	2 10 Gig SFP+ Interface Card (used in S5720EI series)
25	Dedicated stack card with 2*QSFP+ interface (Including one PCS of 1M QSFP+ cable, Used in S5720EI series)
26	RPS1800 redundant power supply
27	S5720-EI Fan box (F, FAN panel side intake)
28	150 W AC Power Module
29	150 W DC Power Module
30	500 W AC PoE Power Module
31	650 W DC PoE Power Module
32	1150 W AC PoE Power Module
33	1000 W 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

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