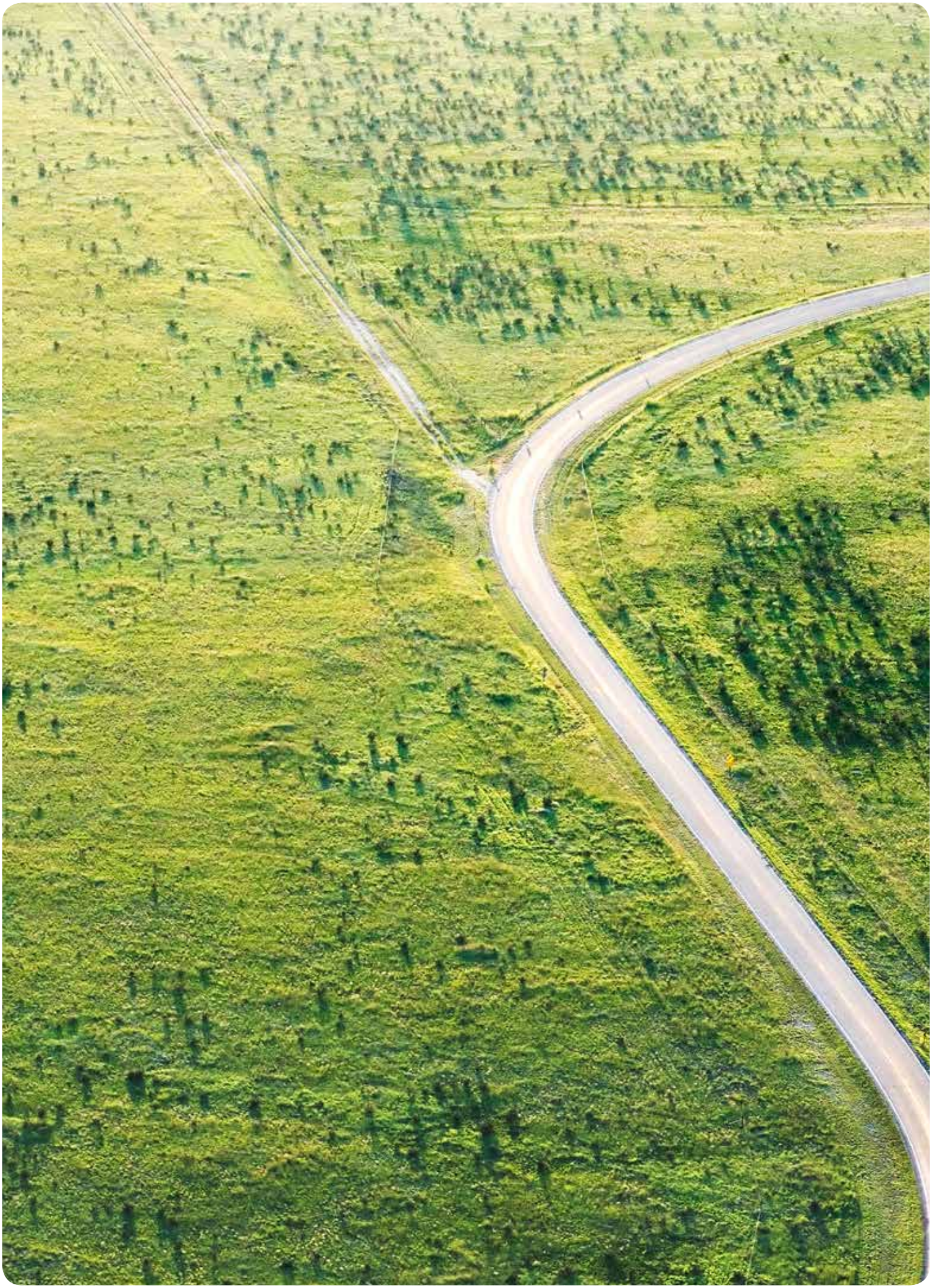
Huawei S2700 Series Switches
Product Brochure



HUAWEI TECHNOLOGIES CO., LTD.

HUAWEI



S2700 Series Enterprise Switches

Product Overview

The S2700 series enterprise switches (S2700 for short), including S2710,S2720, S2750, and S2751 series, are next-generation energy-saving intelligent 100M Ethernet switches developed by Huawei. The S2700 utilizes cutting-edge switching technologies and Huawei Versatile Routing Platform (VRP) software to meet the demand for multi-service provisioning and access on Ethernet networks. It is easy to install and maintain. With its flexible network deployment, comprehensive security and quality of service (QoS) policies, and energy-saving technologies, the S2700 helps enterprise customers build next-generation IT networks.

The S2700 is a box device that is 1 U (44.45 mm or 1.75 in.) high. It is available in a standard version (SI) or an enhanced version (EI).

Product Appearance

S2700-9TP-SI-AC



S2700-9TP-EI-AC



S2700-9TP-EI-DC



- 8 Ethernet 10/100 ports, 1 dual-purpose 10/100/1000 or SFP
- AC or DC power supply for the EI version; AC power supply for the SI version
- Forwarding performance: 2.7 Mpps
- Switching Capacity: 32Gbps

S2700-9TP-PWR-EI



- 8 Ethernet 10/100 ports, 1 dual-purpose 10/100/1000 or SFP
- AC power supply
- PoE+
- Forwarding performance: 2.7 Mpps
- Switching Capacity: 32Gbps

S2700-18TP-SI-AC



S2700-18TP-EI-AC



- 16 Ethernet 10/100 ports, 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- Forwarding performance: 5.4 Mpps
- Switching Capacity: 32Gbps

S2700-26TP-SI-AC



S2700-26TP-EI-AC



S2700-26TP-EI-DC



- 24 Ethernet 10/100 ports, 2 dual-purpose 10/100/1000 or SFP
- AC or DC power supply for the EI version; AC power supply for the SI version
- Forwarding performance: 6.6 Mpps
- Switching Capacity: 32Gbps

S2700-26TP-PWR-EI



- 24 Ethernet 10/100 ports, 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- PoE+
- Forwarding performance: 6.6 Mpps
- Switching Capacity: 32Gbps

S2710-52P-SI-AC



- 48 Ethernet 10/100 ports, 4 Gig SFP
- AC power supply
- Forwarding performance: 13.2 Mpps
- Switching Capacity: 32Gbps

S2700-52P-EI-AC



- 48 Ethernet 10/100 ports, 4 Gig SFP
- AC power supply
- Forwarding performance: 13.2 Mpps
- Switching Capacity: 32Gbps

S2700-52P-PWR-EI



- 48 Ethernet 10/100 ports, 4 Gig SFP
- AC power supply
- PoE+
- Forwarding performance: 13.2 Mpps
- Switching Capacity: 32Gbps

S2750-20TP-PWR-EI-AC



- 16 Ethernet 10/100 ports, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- PoE+
- Forwarding performance: 8.4 Mpps
- Switching Capacity: 64Gbps

S2750-28TP-EI-AC



- 24 Ethernet 10/100 ports, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- Forwarding performance: 9.6 Mpps
- Switching Capacity: 64Gbps

S2750-28TP-PWR-EI-AC



- 24 Ethernet 10/100 ports, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- PoE+
- Forwarding performance: 9.6 Mpps
- Switching Capacity: 64Gbps

S2751-28TP-PWR-EI-AC



- 24 Ethernet 10/100 ports, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- PoE+
- Forwarding performance: 9.6 Mpps
- Switching Capacity: 64Gbps

S2720-28TP-EI-AC



- 24 Ethernet 10/100 ports,2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- Forwarding performance: 9.6 Mpps
- Switching Capacity: 12.8Gbps

Product Features and Highlights

Easy Operation

- The S2700 supports Huawei Easy Operation function. Thanks to this function, the S2700 implements easy installation, configuration, monitoring, and troubleshooting, greatly reduces initial installation and configuration costs, improves upgrade efficiency and lowers engineering costs. It provides a Web network management system (NMS) with a user-friendly graphical user interface (GUI) to implement alarm management and visual configuration, facilitating operation and maintenance. In addition, it supports faulty device replacement without configuration.
- The S2700 offers a new application-specific integrated circuit (ASIC) switching technique and a fan-free design. This design reduces mechanical faults and protects the device against damages caused by condensed water and dust.

Flexible service control

- The S2700-EI supports various ACLs. ACL rules can be applied to VLANs to flexibly control ports and schedule VLAN resources.
- The S2700 supports port-based VLAN assignment, MAC address-based VLAN assignment, protocol-based VLAN assignment, and network segment-based VLAN assignment. These secure and flexible VLAN assignment modes are used in networks where users move frequently.
- The S2700 supports GARP VLAN Registration Protocol (GVRP), which dynamically distributes, registers, and propagates VLAN attributes to ensure correct VLAN configuration and reduce network administrator workloads. In addition, the S2700 supports SSH v2, HWTACACS, RMON, and port-based traffic statistics. The network quality analyzing (NQA) function assists users with network planning and upgrades.

Excellent security features

- The S2700 supports DHCP snooping, which generates user binding entries based on users' access interfaces, MAC addresses, IP addresses, IP address leases, VLAN IDs. The DHCP snooping function protects enterprises from common attacks such as bogus IP packet attacks, man-in-the-middle attacks, and bogus DHCP server attacks.
- The S2700 can limit the number of MAC addresses that can be learned on an interface to prevent attackers from exhausting MAC address entries by using bogus source MAC addresses. This function minimizes packet flooding, which occurs when users' MAC addresses cannot be found in the MAC address table. The S2700 can also limit the number of ARP entries to prevent ARP spoofing attacks. In addition, it provides an IP source check function to prevent malicious users from using spoofed IP addresses to initiate DoS attacks.
- The S2700 supports centralized MAC address authentication and 802.1x authentication. It authenticates users based on statically or dynamically bound user information such as IP address, MAC address, VLAN ID, access interface. VLANs, QoS policies, and ACLs can be dynamically applied to users.

PoE function

- The S2700 PWR series support improved Power over Ethernet (PoE) solutions and you can determine whether a PoE port provides power and the time a PoE port provides power. The S2700 PWR can use PoE power supplies with different power levels to provide the PoE function. Powered devices (PDs) such as IP Phones, WLAN APs, and Bluetooth APs can be connected to the S2700 PWR through network cables. The S2700 PWR provides -48V DC power for the PDs.
- In its role as power sourcing equipment (PSE), the S2700 PWR complies with IEEE 802.3af and 802.3at (PoE+), and can work with PDs that are incompatible with 802.3af or 802.3at (PoE+). Each port provides a maximum of 30 W of power, complying with IEEE 802.3at. The PoE+ function increases the maximum power available on each port and implements intelligent power management for high-power consumption applications. This process facilitates the ease of PD use. PoE ports are still able to work while in power-saving mode.

High scalability

- The S2700 uses Intelligent Stack (iStack) to virtualize multiple switches into a single logical device to ease user management and configuration and expand the system switching capacity. iStack improves switching capacity, reliability, and scalability. Additionally, after the stack is established, all the member switches in a stack use the same IP address. You can use a single IP address to manage and maintain the switches uniformly. This greatly reduces system operation and maintenance (O&M) costs.
- The iStack stacking architecture is designed for rapid failover capability with n-1 master redundancy, distributed Layer 2 and Layer 3 switching, link aggregation across the stack, and within 200 millisecond failover for path failure and hitless master/backup failover.

- Besides traditional STP, RSTP, and MSTP, the S2700 supports enhanced Ethernet technologies such as Smart Link and RRPP, implements millisecond-level protection switchover for links, and ensures the network quality.
- The S2700 supports Smart Ethernet Protection (SEP) protocol, a ring network protocol applied to the link layer of an Ethernet network. SEP provides millisecond-level service switchovers and ensures nonstop forwarding of services. In addition, SEP features simplicity, high reliability, high switchover performance, convenient maintenance, and flexible topology and enables users to manage and plan networks conveniently.
- The S2700 supports G.8032 Ethernet Ring Protection Switching (ERPS). The ERPS is based on traditional Ethernet MAC and bridging functions. It uses the mature Ethernet OAM and Ring Automatic Protection Switching (Ring APS or R-APS) technologies to implement millisecond-level protection switching on Ethernet. ERPS supports various services and flexible networking and lowers operating expense (OPEX) and capital expenditure (CAPEX) of users.

Comprehensive QoS policies

- The S2700 supports complex traffic classification based on packets' TCP/UDP port numbers, VLAN IDs, source MAC/IP addresses, destination MAC/IP addresses, IP protocols, or priorities. By limiting the traffic rate based on traffic classification results, the S2700 implements line-speed forwarding on each port to ensure high-quality voice, video, and data services. Each port supports a maximum of eight queues and multiple queue scheduling algorithms, such as WRR, SP, and WRR+SP.

Powerful surge protection capability

- The S2700 uses the Huawei patented surge protection technique that supports 7 kV surge protection capability on service ports. This effectively protects switches against over lightning induced overvoltage. The Huawei patented surge protection technique greatly reduces the possibility of equipment being damaged by lightning, even in extreme situations or in scenarios where grounding is not feasible.

Quiet operation, energy conservation, and low radiation

- The S2700 uses an energy-saving integrated circuit design to ensure even heat dissipation. Idle ports can enter a sleep mode to further reduce power consumption. The S2700 generates no sound because it does not contain any fans. Radiation produced by the S2700 is within the standard range for electric appliances and causes no harm to the human body.

Product Specifications

Item	S2700-SI/S2710-SI*	S2700-EI	S2750-EI/S2751-EI/ S2720-EI
Downlink ports	S2700-9TP-SI**/S2700-9TP-EI/S2700-9TP-PWR-EI: 8 10/100Base-TX Ethernet ports S2700-18TP-SI/S2700-18TP-EI/S2750-20TP-PWR-EI-AC: 16 10/100Base-TX Ethernet ports S2700-26TP-SI/S2700-26TP-EI/S2700-26TP-PWR-EI/S2750-28TP-EI-AC/S2750-28TP-PWR-EI-AC/S2751-28TP-PWR-EI-AC/S2720-28TP-EI-AC: 24 10/100Base-TX Ethernet ports S2710-52P-SI/S2700-52P-EI: 48 10/100Base-TX Ethernet ports		
Uplink ports	S2700-9TP-SI/S2700-9TP-EI/S2700-9TP-PWR-EI/: 1 dual-purpose 10/100/1000 or SFP S2700-18TP-EI /S2700-18TP-SI /S2700-26TP-EI /S2700-26TP-EI /S2700-26TP-PWR-EI/ S2700-26TP-SI: 2 dual-purpose 10/100/1000 or SFP S2710-52P-SI/S2700-52P-EI: 4 gigabit SFP S2750-20TP-PWR-EI /S2750-28TP-EI-AC/S2750-28TP-PWR-EI/S2751-28TP-PWR-EI/S2720-28TP-EI-AC: 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP		

Item	S2700-SI/S2710-SI*	S2700-EI	S2750-EI/S2751-EI/ S2720-EI
MAC address	8K MAC address entries Manual deletion of dynamic MAC address entries Aging time of MAC address configurable Blackhole MAC address entries	8K MAC address entries Manual deletion of dynamic MAC address entries Aging time of MAC address configurable Blackhole MAC address entries MAC address learning control which based on ports	16K MAC address entries Manual deletion of dynamic MAC address entries Aging time of MAC address configurable MAC address learning control which based on ports Blackhole MAC address entries
VLAN feature	4K active VLANs, complying with IEEE 802.1Q Port-based VLAN assignment		
	N/A	MAC address-based assignment Port-based QinQ	
QoS	Outbound-Port-based rate limiting and flow-based rate limiting 4 or 8 queues of different priorities on each port Mapping between 802.1p priorities and queues SP, WRR, and SP+WRR algorithms	Port-based rate limiting and flow-based rate limiting 4 or 8 queues of different priorities on each port Mapping between 802.1p priorities and queues SP, WRR, and SP+WRR algorithms	Port-based rate limiting and flow-based rate limiting 8 queues of different priorities on each port Mapping between 802.1p priorities and queues SP, WRR, and SP+WRR algorithms
	N/A		packet-based priority remark and packet redirection
IPv4 routing	Static routing RIP v1/v2（S2750-EI）		
IPv6 feature	IPv6 protocol Static IPv6 routes	IPv6 protocol Static IPv6 routes Supports MLD v1/v2 snooping.	
Multicast	IGMP v1/v2/v3 snooping Port-based rate limiting for multicast packets	MVLAN Controllable multicast IGMP v1/v2/v3 snooping Port-based rate limiting for multicast packets	
Reliability	S2700-SI:STP (IEEE 802.1d), RSTP (IEEE 802.1w) S2710-SI: STP (IEEE 802.1d), RSTP (IEEE 802.1w), MSTP (IEEE 802.1s)	STP (IEEE 802.1d), RSTP (IEEE 802.1w), MSTP (IEEE 802.1s), and RRPP topology and RRPP multi-instance	STP (IEEE 802.1d), RSTP (IEEE 802.1w), MSTP (IEEE 802.1s), and RRPP topology and RRPP multi-instance SEP and ERPS (G.8032) Smart Link tree topology and Smart Link multi-instance, implementing millisecond-level protective switchover
Traffic sampling	N/A		sFlow

Item	S2700-SI/S2710-SI*	S2700-EI	S2750-EI/S2751-EI/ S2720-EI
Security & access features	S2700-SI:Storm suppression S2710-SI: Storm suppression, IP Source Guard	802.1x authentication and limit on the number of users on an interface Storm suppression IP Source Guard	
	S2700-SI:Multiple authentication methods including AAA, RADIUS, and TACACS+; Port isolation; Suppression of multicast, broadcast, and unknown unicast packets; CPU defense S2710-SI: Multiple authentication methods including AAA, RADIUS, and TACACS+; Port isolation; Suppression of multicast, broadcast, and unknown unicast packets; CPU defense; DHCP snooping	Multiple authentication methods including AAA authentication, RADIUS authentication, and TACACS+ authentication 802.1x authentication, MAC address authentication, MAC bypass authentication DHCP snooping Port isolation and sticky MAC Packet filtering based on MAC addresses Suppression of multicast, broadcast, and unknown unicast packets Limit on the number of learned MAC addresses CPU defense S2750-EI/S2751-EI/S2720-EI:DHCP relay	
Surge protection	Surge protection capability of service ports: 7 kV		Surge protection capability of service ports: 7 kV
Management	Stack(S2710-52P-SI-AC, S2700-52P-EI-AC, S2700-52P-PWR-EI) Auto-Config CLI-based configuration Remote configuration using Telnet SNMP V1/V2/V3 SSHv2 Web-based device management		Stack Easy Operation CLI-based configuration Remote configuration using Telnet SNMP V1/V2/V3 SSHv2 Web-based device management
Interoperability	NA		Supports VBST (Compatible with PVST/PVST+/RPVST) Supports LNP (Similar to DTP) Supports VCMP (Similar to VTP)
Operating environment	Long-term operating temperature: –5°C to + 50°C Relative humidity: 10% to 90% (non-condensing)		Long-term operating temperature: –5°C to + 50°C Relative humidity: 5% to 95% (non-condensing)
Power	AC: Rated voltage range: 100 V to 240 V AC, 50/60 Hz Maximum voltage: 90 to 264 V AC, 50/60 Hz DC: Rated voltage range: –48 V to –60 V DC Maximum voltage range: –36 V to –72 V, DC Note: PoE models do not use DC power supplies.		

Item	S2700-SI/S2710-SI*	S2700-EI	S2750-EI/S2751-EI/ S2720-EI
Dimensions (W x D x H)	S2700-9TP-EI/SI: 250 × 180 × 43.6 S2700-9TP-PWR-EI: 320 × 220 × 43.6 S2700-18TP-EI/SI/ S2700-26TP-EI/SI/S2750-28TP-EI-AC/S2720-28TP-EI-AC: 442 × 220 × 43.6 S2700-26TP-PWR-EI: 442 × 420 × 43.6 S2710-52P-SI/S2700-52P-EI: 442 × 220 × 43.6 S2750-20TP-PWR-EI-AC/S2750-28TP-PWR-EI-AC/S2751-28TP-PWR-EI-AC: 442 × 310 × 43.6		
Weight	S2700-9TP-SI<1.4 kg S2700-18TP-SI<2.4 kg S2700-26TP-SI<2.4 kg S2710-52P-SI<3 kg	S2700-9TP-EI<1.4 kg S2700-9TP-PWR-EI<2.5 kg S2700-18TP-EI<2.4 kg S2700-26TP-EI<2.4 kg S2700-52P-EI<3 kg S2700-26TP-PWR-EI<4 kg (without power supply)	S2750-20TP-PWR-EI<4.5 kg S2750-28TP-EI<3 kg S2750-28TP-PWR-EI<4.5 kg S2751-28TP-PWR-EI-AC<4.5 kg S2720-28TP-EI-AC<3kg
Power consumption	S2700-9TP-SI<12.8 W S2700-18TP-SI<14.5 W S2700-26TP-SI<15.5 W S2710-52P-SI<38 W	S2700-9TP-EI<12.8 W S2700-9TP-PWR-EI<154 W (PoE: 124 W) S2700-18TP-EI<14.5 W S2700-26TP-EI<15.5 W S2700-52P-EI<38 W S2700-26TP-PWR-EI<808W (PoE: 740 W)	S2750-20TP-PWR-EI<435 W S2750-28TP-EI< 15.7 W S2750-28TP-PWR-EI< 445 W S2751-28TP-PWR-EI-AC<147 W S2720-28TP-EI-AC<15.7W

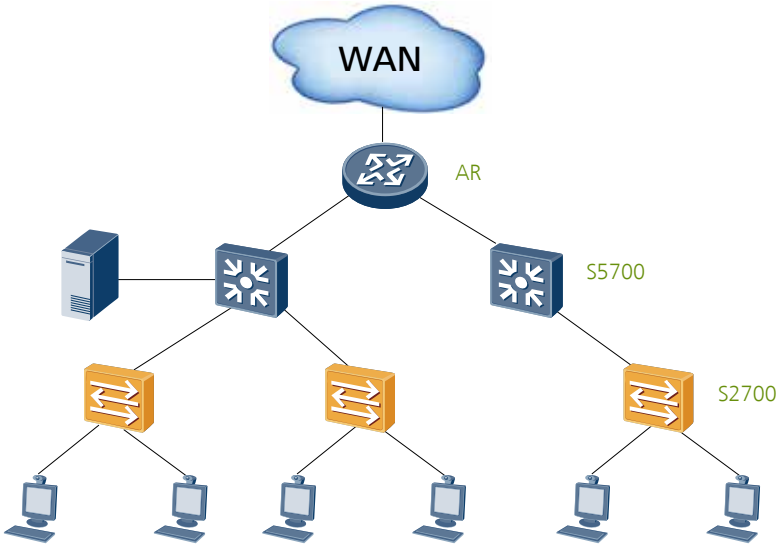
*: The S2700 is provided in the standard version (SI) and enhanced version (EI). The S2700 switches of the EI series are collectively called S2700-EI, and the S2700 switches of the SI series are collectively called S2700-SI. S2710-SI is a sub-series switch of S2700-SI. S2750-EI/S2751-EI are the sub-series switches of S2700-EI. S2720-EI are the sub-series switches of S2700-EI.

**: S2700-9TP-SI is short for S2700-9TP-SI-AC. As product versions are irrelevant to the power supply mode, the product names mentioned in product specifications do not contain AC or DC. This rule also applies to other product models.

Application

100 Mbit/s Access Rate for Terminals

The S2700 can function as a desktop access device that provides an access rate of 100 Mbit/s for terminals and 1000 Mbit/s uplink interfaces to communicate with uplink devices.



Product List

Product Description
S2700-9TP-EI-AC Mainframe(8 Ethernet 10/100 ports,1 dual-purpose 10/100/1000 or SFP,AC 110/220V)
S2700-9TP-EI-DC Mainframe(8 Ethernet 10/100 ports,1 dual-purpose 10/100/1000 or SFP,DC -48V)
S2700-9TP-SI-AC Mainframe(8 Ethernet 10/100 ports,1 dual-purpose 10/100/1000 or SFP,AC 110/220V)
S2700-18TP-EI-AC Mainframe(16 Ethernet 10/100 ports,2 dual-purpose 10/100/1000 or SFP,AC 110/220V)
S2700-18TP-SI-AC Mainframe(16 Ethernet 10/100 ports,2 dual-purpose 10/100/1000 or SFP,AC 110/220V)
S2700-26TP-EI-AC Mainframe(24 Ethernet 10/100 ports,2 dual-purpose 10/100/1000 or SFP,AC 110/220V)
S2700-26TP-EI-DC Mainframe(24 Ethernet 10/100 ports,2 dual-purpose 10/100/1000 or SFP,DC -48V)
S2700-26TP-SI-AC Mainframe(24 Ethernet 10/100 ports,2 dual-purpose 10/100/1000 or SFP,AC 110/220V)
S2700-52P-EI-AC Mainframe(48 Ethernet 10/100 ports,4 Gig SFP,AC 110/220V)
S2710-52P-SI-AC Mainframe(48 Ethernet 10/100 ports,4 Gig SFP,AC 110/220V)
S2700-9TP-PWR-EI Mainframe(8 Ethernet 10/100 ports, PoE+,1 dual-purpose 10/100/1000 or SFP,AC 110/220V)
S2700-26TP-PWR-EI Mainframe(24 Ethernet 10/100 ports,2 dual-purpose 10/100/1000 or SFP, PoE+,without power module)
S2700-52P-PWR-EI Mainframe(48 Ethernet 10/100 ports,4 Gig SFP,PoE+,Dual Slots of Power,Including Single 500W AC Power)
S2750-20TP-PWR-EI-AC Mainframe(16 Ethernet 10/100 ports,2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, PoE+,AC 110/220V)
S2750-28TP-EI-AC Mainframe(24 Ethernet 10/100 ports,2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP,AC 110/220V)
S2750-28TP-PWR-EI-AC Mainframe(24 Ethernet 10/100 ports,2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, PoE+,AC 110/220V)
S2751-28TP-PWR-EI-AC Mainframe(24 Ethernet 10/100 ports,2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, PoE+,AC 110/220V)
S2720-28TP-EI-AC Mainframe (24 Ethernet 10/100 ports,2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP,AC 110/220V)
500W PoE power supply unit

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

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