S1700 Series Enterprise Switches

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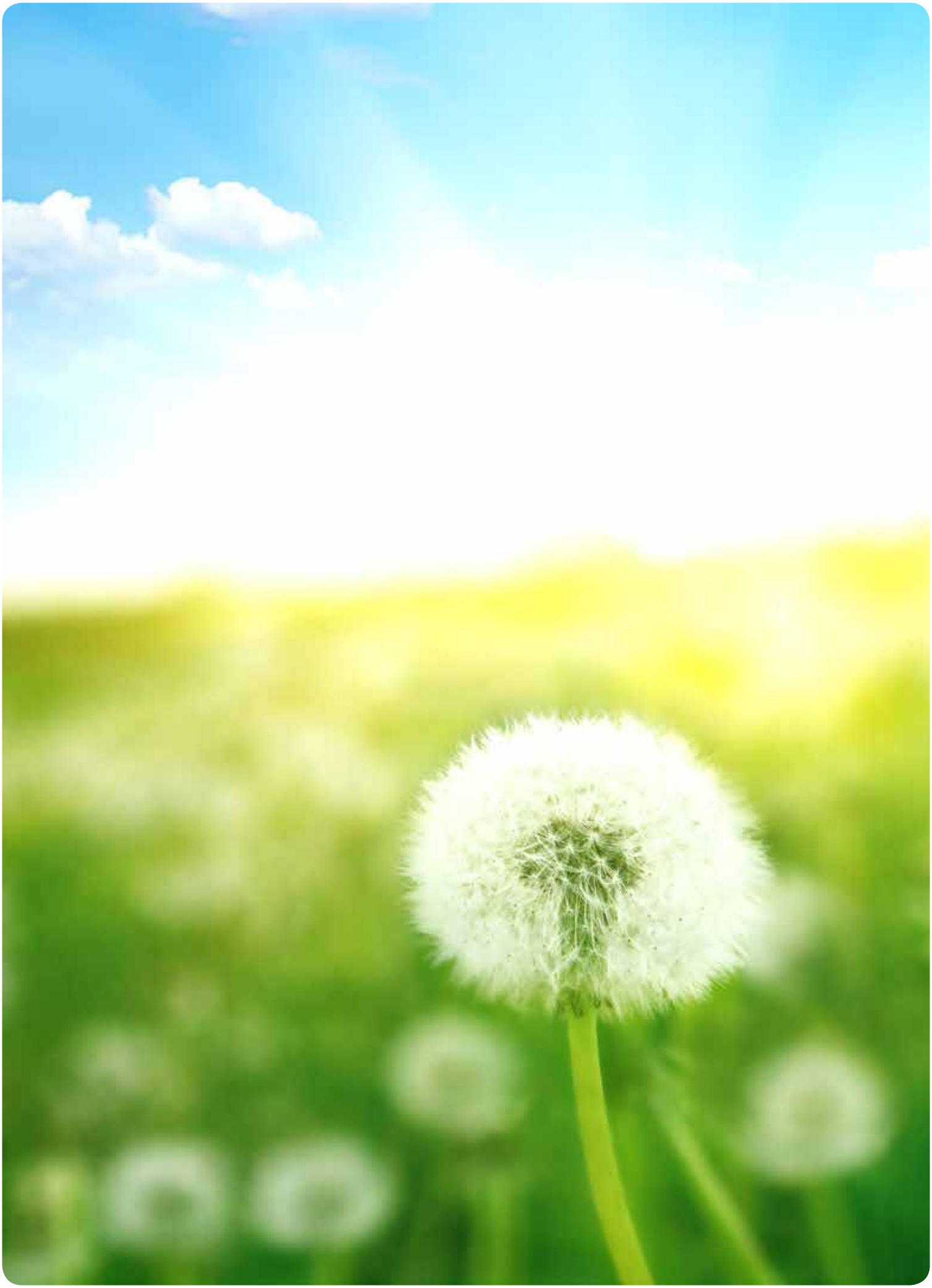


S1700 Series Enterprise Switches

Product Overview

The S1700 series enterprise switches (S1700s) are next-generation energy-saving Ethernet access switches. The S1700 uses high-performance hardware, which offers a wide array of features to help customers build secure, reliable, high-performance networks. The S1700 is easy to install and maintain, and is ideal for small-size and medium-size enterprises, Internet cafes, hotels, and schools.

The S1700 consists of unmanaged switches, SNMP-based switches, and a web-managed switch:

- Unmanaged switches include the S1700-8-AC, S1700-24-AC, S1700-52R-2T2P-AC, S1700-8G-AC, S1724G, S1700-24GR and S1700-16G.
- SNMP-based switches include the S1700-28FR-2T2P-AC, S1700-28GFR-4P-AC, S1700-52FR-2T2P-AC, S1700-52GFR-4P-AC, S1720-20GFR-4TP and S1720-28GFR-4TP.
- The web-managed switch is the S1728GWR-4P.

Product Appearance

S1700-8-AC

- 8 Ethernet 10/100 ports
- AC power supply
- Forwarding performance: 1.2 Mpps
- Switching Capacity: 1.6 Gbps

S1700-24-AC

- 24 Ethernet 10/100 ports
- AC power supply
- Forwarding performance: 3.6 Mpps
- Switching Capacity: 4.8 Gbps

S1700-52R-2T2P-AC

- 48 Ethernet 10/100 ports, 2 Ethernet 10/100/1000 ports and 2 Gig SFP
- AC power supply
- Forwarding performance: 13.2 Mpps
- Switching Capacity: 17.6 Gbps

S1700-8G-AC

- 8 Ethernet 10/100/1000 ports
- AC power supply
- Forwarding performance: 12 Mpps
- Switching Capacity: 16 Gbps

S1724G

- 24 Ethernet 10/100/1000 ports
- AC power supply
- Forwarding performance: 36 Mpps
- Switching Capacity: 48 Gbps

S1700-24GR

- 24 Ethernet 10/100/1000 ports
- AC power supply
- Forwarding performance: 36 Mpps
- Switching Capacity: 48 Gbps

S1700-16G

- 16 Ethernet 10/100/1000 ports
- AC power supply
- Forwarding performance: 24 Mpps
- Switching Capacity: 32 Gbps

S1728GWR-4P

- 24 Ethernet 10/100/1000 ports,4 Gig SFP
- AC power supply
- Forwarding performance: 42 Mpps
- Switching Capacity: 56 Gbps

S1700-28FR-2T2P-AC

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

S1700-52FR-2T2P-AC

- 48 Ethernet 10/100 ports, 2 Ethernet 10/100/1000 ports and 2 Gig SFP
- AC power supply
- Forwarding performance: 13.2Mpps
- Switching Capacity: 17.6Gbps

S1700-28GFR-4P-AC

- 24 Ethernet 10/100/1000 ports, 4 Gig SFP
- AC power supply
- Forwarding performance: 42 Mpps
- Switching Capacity: 56Gbps

S1700-52GFR-4P-AC

- 48 Ethernet 10/100/1000 ports,4 Gig SFP
- AC power supply
- Forwarding performance: 78 Mpps
- Switching Capacity: 104Gbps

S1720-20GFR-4TP

- 16 Ethernet 10/100/1000 ports,2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- Forwarding performance: 30 Mpps
- Switching Capacity: 128Gbps

S1720-28GFR-4TP

- 24 Ethernet 10/100/1000 ports,2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- AC power supply
- Forwarding performance: 42 Mpps
- Switching Capacity: 128Gbps

Product Features

Innovative energy-saving design

- All S1700 series switches are based on a fan-free design, which reduces power consumption and noise.
- The S1700 supports Energy Efficient Ethernet (EEE), which enables the switch to enter a power-saving mode when traffic is light.
- The S1700 can adjust the power output for transmissions based on the cable length. It can also set any ports that are not transmitting traffic to sleep mode.

Non-blocking and high-speed forwarding

- All S1700 ports provide Layer 2 wire-speed forwarding capabilities to ensure non-blocking packet forwarding. S1700 models provide optical and electrical GE uplink ports, which facilitate user access and are cost-effective.
- The S1700/S1720 MAC address table supports up to 8K/16K of MAC addresses, making it easy to expand networks and deploy new services. The S1700 support layer 3 static routing-forwarding which include IPv4 and IPv6 protocols.

Convenient management and maintenance

- The S1700 is easy to manage and maintain, being equipped with a one-key operation button on the front panel.
- Web-managed S1700 models come with a web network management system, making it easy to configure switches.
- SNMP-based S1700 models allow for the use of an SNMP-based NMS for centralized configuration and management.
- SNMP-based S1720 models can support CLI and console port configuration.

Powerful security performance

- The S1700 provides a range of security features, including 802.1x, RADIUS, Portal and NAC. The S1700 also supports packet filtering based on MAC addresses or ports in order to defend against hackers and virus attacks.

Great networking and bandwidth extensibility

- The S1700 provides LACP, STP, RSTP, and MSTP functions to implement link aggregation and backup. SNMP-based S1720 switches support up to 64 MSTP instances for flexible networking.

Product Specifications

S1700 hardware specifications

Type	Unmanaged Switch				
Model	S1700-8-AC	S1700-24-AC	S1700-52R-2T2P-AC	S1700-8G-AC	S1724G
Downlink port	8 Ethernet 10/100 ports	24 Ethernet 10/100 ports	48 Ethernet 10/100 ports	8 Ethernet 10/100/1000 ports	24 Ethernet 10/100/1000 ports
Uplink port	Shared with downlink ports	Shared with downlink ports	2 Ethernet 10/100/1000 ports and 2 Gig SFP	Shared with downlink ports	Shared with downlink ports
MAC address table	8 K MAC				
Dimensions mm (W*D *H)	160*134*30	320*208*43.6	442*220*43.6	160*134*32.8	320*208*43.6
Input voltage	Rated AC power: 100-240V AC; 50/60Hz Max AC voltage: 90-264V AC; 47/63Hz				
EEE	NA				
Power consumption	<4.3W	<3.9W	<22.6W	<4.6W	<14.2W
Operating temperature	0°C to 45°C				
Humidity (non-condensing)	10% ~ 90%	5% ~ 95%	10% ~ 90%	5% ~ 95%	
Heat dissipation	Fan-free natural heat dissipation				

Type	Unmanaged Switch	
Model	S1700-24GR	S1700-16G
Downlink port	24 Ethernet 10/100/1000 ports	16 Ethernet 10/100/1000 ports
Uplink port	Shared with downlink ports	
MAC address table	8 K MAC	
Dimensions mm (W*D *H)	442*220*43.6	320*208*43.6
Input voltage	Rated AC power: 100-240V AC;50/60Hz Max AC voltage: 90-264V AC;47/63Hz	
EEE	NA	
Power consumption	<14.2W	<10W
Operating temperature	0-1800 m: 0-45℃ 1800-4000 m: decrease 1℃ when the altitude increases every 220 m	
Humidity (non-condensing)	5% ~ 95%	
Heat dissipation	Fan-free natural heat dissipation	

Type	Web-managed Switch	SNMP-based Switch			
Model	S1728GWR-4P	S1700-28FR-2T2P-AC	S1700-52FR-2T2P-AC	S1700-28GFR-4P-AC	S1700-52GFR-4P-AC
Downlink port	24 Ethernet 10/100/1000 ports	24 Ethernet 10/100 ports	48 Ethernet 10/100 ports	24 Ethernet 10/100/1000 ports	48 Ethernet 10/100/1000 ports
Uplink port	4 Gig SFP	2 Ethernet 10/100/1000 ports and 2 Gig SFP	2 Ethernet 10/100/1000 ports and 2 Gig SFP	4 Gig SFP	4 Gig SFP
MAC address table	8 K MAC				
Dimensions mm (W*D *H)	442*220*43.6 mm				
Input voltage	100 V to 240 V AC, 50/60 Hz				
EEE	Support	NA	NA	Support	Support
Power consumption	<15W	<25W	<35W	<30W	<55W
Operating temperature	0°C to 45°C				
Humidity (non-condensing)	5% ~ 90%	10% to 90%			
Heat dissipation	Fan-free natural heat dissipation				Heat dissipation using fans supporting intelligent speed adjustment

Type	SNMP-based Switch	
Model	S1720-20GFR-4TP	S1720-28GFR-4TP
Downlink port	16 Ethernet 10/100/1000 ports	24 Ethernet 10/100/1000 ports
Uplink port	2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP	2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP
MAC address table	16 K MAC	
Routing Feature	IPv4 and IPv6 static routing	
Dimensions mm (W*D *H)	442*220*43.6	
Input voltage	100 V to 240 V AC, 50/60 Hz	
EEE	support	
Power consumption	<20.7W	<24.3W
Operating temperature	0-1800m: 0-50°C 1800-4000m: decrease 1° C when the altitude increases every 220 m	
Humidity (non-condensing)	5% ~ 95%	
Heat dissipation	Fan-free natural heat dissipation	

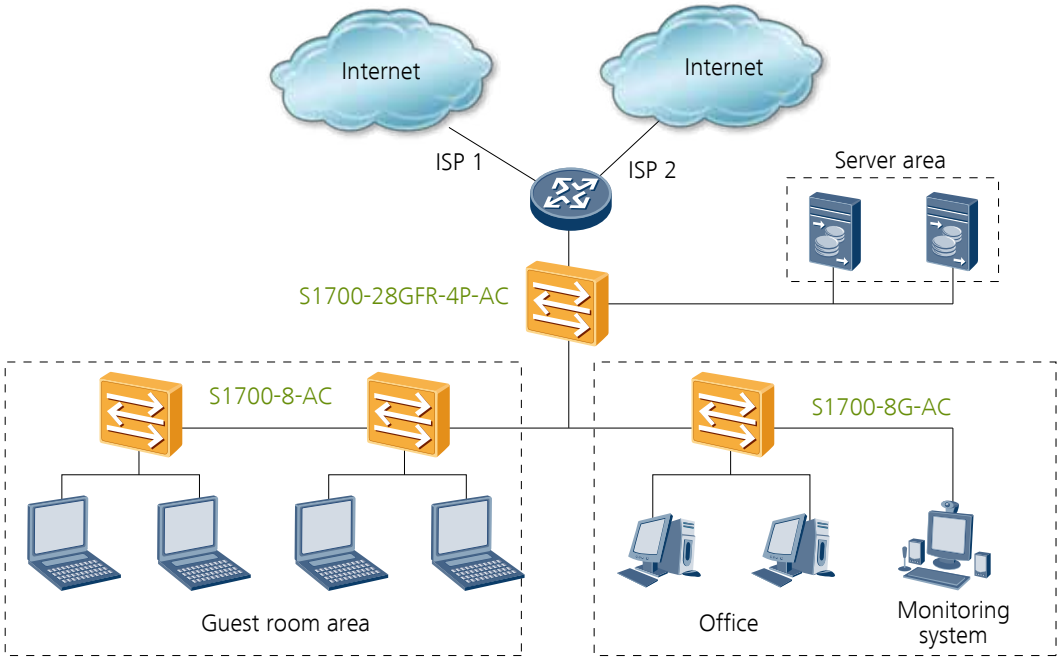
Service Features

Item	Web-managed Switch	SNMP-based Switch
Security features	Packet filtering based on MAC addresses Port-based 802.1x authentication RADIUS authentication Port isolation	Hardware ACL Packet filtering based on MAC addresses MAC address authentication Port-based 802.1x authentication. RADIUS authentication Portal authentication Port isolation Storm suppression Attack defense, which prevents broadcast traffic, ARP attacks, ICMP attacks, TCP attacks, worm viruses, and DoS attacks DHCP snooping
VLANs	256 VLANs Access port Trunk port Hybrid port Management VLAN Voice VLAN	4 K VLANs Access port Trunk port Hybrid port Management VLAN Voice VLAN

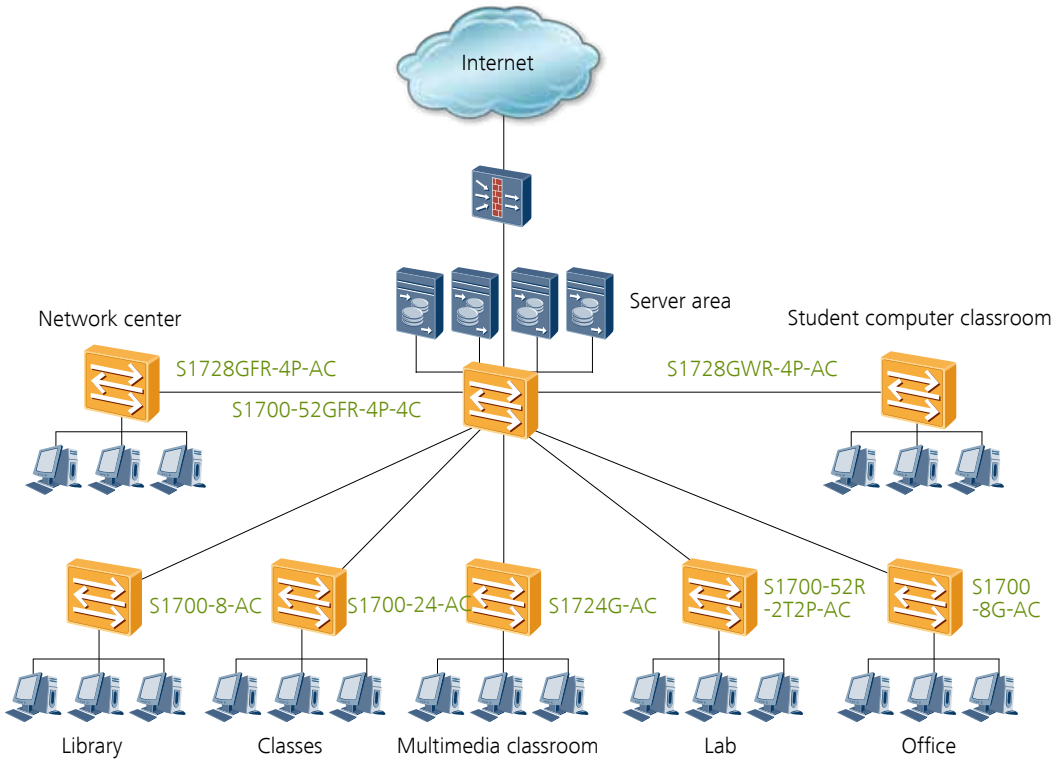
Item	Web-managed Switch	SNMP-based Switch
QoS	PQ and WRR Four queues on each port Queue scheduling based on 802.1p or DSCP priorities	PQ and WRR Eight queues on each port Queue scheduling based on 802.1p or DSCP priorities
STP	STP(IEEE 802.1d), RSTP(IEEE 802.1w)	STP(IEEE 802.1d), RSTP(IEEE 802.1w), and MSTP(IEEE 802.1s)
Multicast	IGMP snooping and a maximum of 256 multicast groups	IGMP snooping and a maximum of 256 multicast groups 1K multicast groups (S1720 series) Fast leave
Routing feature	NA	IPv4 and IPv6 static routing
Link aggregation	12 link aggregation groups (LAGs) with a maximum of eight ports in each LAG Static LACP	12 link aggregation groups (LAGs) with a maximum of eight ports in each LAG 64 link aggregation groups(S1720 series) Static LACP
Port mirroring	Port-based bidirectional flow mirroring	Port-based bidirectional flow mirroring Configuring a trunk as a mirrored interface
Bandwidth control	Rate limiting for incoming and outgoing packets, with a granularity of 64 kbps	Rate limiting for incoming and outgoing packets, with a granularity of 8 kbps
Broadcast storm suppression	Broadcast storm suppression based on the interface rate Alarm sending when the traffic rate reaches the upper limit	Broadcast storm suppression based on the interface rate Alarm sending when the traffic rate reaches the upper limit
Device management	Web system network management DHCP client One-key restoration	SNMP Web system network management (HTTPS) DHCP client User password protection One-key restoration CLI configuration (S1720 series) Console port (S1720 series)
Device maintenance	System log Ping Virtual Cable Test (VCT) Link Layer Discovery Protocol (LLDP)	Remote Network Monitoring (RMON) System log Ping and traceroute Virtual Cable Test (VCT) Link Layer Discovery Protocol (LLDP)

Applications

Hotels



Schools



Ordering Information

S1700 switch models

Product Description
S1700-8-AC (8 Ethernet 10/100 ports, AC 110/220V,China Power Adapter)
S1700-8-AC (8 Ethernet 10/100 ports, AC 110/220V,Europe Power Adapter)
S1700-8G-AC (8 Ethernet 10/100/1000 ports, AC 110/220V,China Power Adapter)
S1700-8G-AC (8 Ethernet 10/100/1000 ports, AC110/220V,Europe Power Adapter)
S1700-16G(16 Ethernet 10/100/1000 ports,AC 110/220V)
S1700-24-AC (24 Ethernet 10/100 ports, AC 110/220V)
S1724G (24 Ethernet 10/100/1000 ports, AC 110/220V)
S1700-24GR(24 Ethernet 10/100/1000 ports, AC 110/220V)
S1728GWR-4P (24 Ethernet 10/100/1000 ports,4 Gig SFP,AC 110/220V)
S1700-28FR-2T2P-AC (24 Ethernet 10/100 ports,2 Ethernet 10/100/1000 ports and 2 Gig SFP,AC 110/220V)
S1700-28GFR-4P-AC (24 Ethernet 10/100 ports,4 Gig SFP,AC 110/220V)
S1700-52R-2T2P-AC(48 Ethernet 10/100 ports,2 Ethernet 10/100/1000 ports and 2 Gig SFP,AC 110/220V)
S1700-52FR-2T2P-AC (48 Ethernet 10/100 ports,2 Ethernet 10/100/1000 ports and 2 Gig SFP,AC 110/220V)
S1700-52GFR-4P-AC (48 Ethernet 10/100/1000 ports,4 Gig SFP,AC 110/220V)
S1720-20GFR-4TP（16 Ethernet 10/100/1000 ports,2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, AC 110/220V）
S1720-28GFR-4TP（24 Ethernet 10/100/1000 ports,2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, AC 110/220V）

For more information, visit http://e.huawei.com/en or contact the Huawei local sales office.

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