

S1700 Switch Datasheet (Detailed Version)



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1 Introduction

The S1700 series enterprise switches (S1700 for short) 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, a web-managed switch and Web/SNMP-based switches:

- Unmanaged switches include the S1700-24-AC, S1700-52R-2T2P-AC, S1724G, S1700-24GR and S1700-16G.
- The web-managed switches include the S1728GWR-4P, S1720-10GW-2P, S1720-10GW-PWR-2P, S1720-28GWR-4P, S1720-28GWR-4X, S1720-28GWR-PWR-4P, S1720-28GWR-PWR-4X, S1720-52GWR-4P, S1720-52GWR-4X, S1720-52GWR-PWR-4P, S1720-52GWR-PWR-4X, S1720-28GWR-PWR-4TP.
- Web/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, S1720-10GW-2P-E, S1720-10GW-PWR-2P-E, S1720-28GWR-4P-E, S1720-28GWR-4X-E, S1720-28GWR-PWR-4P-E, S1720-28GWR-PWR-4TP-E, S1720-28GWR-PWR-4X-E, S1720-52GWR-4P-E, S1720-52GWR-4X-E, S1720-52GWR-PWR-4P-E, S1720-52GWR-PWR-4X-E.

2 Product Overview

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

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

S1720-10GW-2P



- 8 Ethernet 10/100/1000 ports, 2 Gig SFP
- AC power supply
- Forwarding performance: 15Mpps
- Switching Capacity: 68Gbps

S1720-10GW-PWR-2P



- 8 Ethernet 10/100/1000 ports, 2 Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 15Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-4P



- 24 Ethernet 10/100/1000 ports, 4 Gig SFP
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-4X



- 24 Ethernet 10/100/1000 ports, 4 10 Gig SFP+
- AC power supply
- Forwarding performance: 96Mpps
- Switching Capacity: 168Gbps

S1720-28GWR-PWR-4P



- 24 Ethernet 10/100/1000 ports, 4 Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-PWR-4TP



- 24 Ethernet 10/100/1000, 4 Gig SFP and 2 combo 10/100/1000Base-T Ethernet ports
- 8-port PoE+
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-PWR-4X



- 24 Ethernet 10/100/1000 ports, 4 10 Gig SFP+
- PoE+
- AC power supply
- Forwarding performance: 96Mpps
- Switching Capacity: 168Gbps

S1720-52GWR-4P



- 48 Ethernet 10/100/1000 ports, 4 Gig SFP
- AC power supply
- Forwarding performance: 78Mpps
- Switching Capacity: 336Gbps

S1720-52GWR-4X



- 48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+
- AC power supply
- Forwarding performance: 132Mpps
- Switching Capacity: 336Gbps

S1720-52GWR-PWR-4P



- 48 Ethernet 10/100/1000 ports, 4 Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 78Mpps
- Switching Capacity: 336Gbps

S1720-52GWR-PWR-4X



- 48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+
- PoE+
- AC power supply
- Forwarding performance: 132Mpps
- Switching Capacity: 336Gbps

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



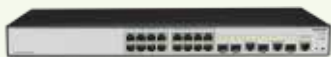
- 24 Ethernet 10/100/1000 ports, 4 Gig SFP
- AC power supply
- Forwarding performance: 42 Mpps
- Switching Capacity: 56Gbps

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, 4 Gig SFP ports, 2 combo 10/100/1000Base-T Ethernet ports
- AC power supply
- Forwarding performance: 30Mpps
- Switching Capacity: 128Gbps

S1720-28GFR-4TP



- 24 Ethernet 10/100/1000 ports, 4 Gig SFP ports, 2 combo 10/100/1000Base-T Ethernet ports
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 128Gbps

S1720-10GW-2P-E



- 8 Ethernet 10/100/1000 ports, 2 Gig SFP
- AC power supply
- Forwarding performance: 15Mpps
- Switching Capacity: 68Gbps

S1720-10GW-PWR-2P-E



- 8 Ethernet 10/100/1000 ports, 2 Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 15Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-4P-E



- 24 Ethernet 10/100/1000 ports, 4 Gig SFP
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-4X-E



- 24 Ethernet 10/100/1000 ports, 4 10 Gig SFP+
- AC power supply
- Forwarding performance: 96Mpps
- Switching Capacity: 168Gbps

S1720-28GWR-PWR-4P-E



- 24 Ethernet 10/100/1000 ports, 4 Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-PWR-4TP-E



- 24 Ethernet 10/100/1000, 4 Gig SFP and 2 combo 10/100/1000Base-T Ethernet ports
- 8-port PoE+
- AC power supply
- Forwarding performance: 42Mpps
- Switching Capacity: 68Gbps

S1720-28GWR-PWR-4X-E



- 24 Ethernet 10/100/1000 ports, 4 10 Gig SFP+
- PoE+
- AC power supply
- Forwarding performance: 96Mpps
- Switching Capacity: 168Gbps

S1720-52GWR-4P-E



- 48 Ethernet 10/100/1000 ports, 4 Gig SFP
- AC power supply
- Forwarding performance: 78Mpps
- Switching Capacity: 336Gbps

S1720-52GWR-4X-E



- 48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+
- AC power supply
- Forwarding performance: 132Mpps
- Switching Capacity: 336Gbps

S1720-52GWR-PWR-4P-E



- 48 Ethernet 10/100/1000 ports, 4 Gig SFP
- PoE+
- AC power supply
- Forwarding performance: 78Mpps
- Switching Capacity: 336Gbps



- 48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+
- PoE+
- AC power supply
- Forwarding performance: 132Mpps
- Switching Capacity: 336Gbps

3 Power Supply

The models have a built-in AC power supply, which provides power for the entire switch.

4 Product Characteristics and Advantages

Innovative energy-saving design

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.

The models that use a fan-free design reduce power consumption and noise.

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/S1720-E MAC address table supports up to 8K/16K/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. The S1720-E support RIP, RIPng, OSPF.

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.

Web/SNMP-based S1700 models allow for the use of an SNMP-based NMS for centralized configuration and management.

Web/SNMP-based S1720/S1720-E 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. S1720 switches support up to 64 MSTP instances for flexible networking.

5 Product Specifications

5.1 Functions and Features

The following table describes the features of Web managed switches and Web/SNMP managed switches.

Feature	Web-managed switch	Web/SNMP-managed switch
Security features	Packet filtering based on MAC addresses MAC address authentication (S1720 Series) Port-based 802.1x authentication RADIUS authentication Portal authentication (S1720 Series) Port isolation Storm suppression (S1720 Series) DHCP snooping (S1720 Series)	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
VLAN	256 VLANs (S1720 Series : 4K) VLAN assignment based on access, trunk, and hybrid ports Management VLAN Voice VLAN	4 K VLANs VLAN assignment based on access, trunk, and hybrid ports Management VLAN Voice VLAN
QoS	PQ and WRR Four queues on each port (S1720 series: Eight) 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) MSTP(IEEE 802.1s) (S1720 series)	STP(IEEE 802.1d) RSTP(IEEE 802.1w) MSTP(IEEE 802.1s)
Multicast	IGMP snooping and a maximum of 256 multicast groups 1K multicast groups(S1720 series) Fast leave (S1720 series)	IGMP snooping and a maximum of 256 multicast groups 1K multicast groups(S1720 series) Fast leave
Routing feature	IPv4 and IPv6 static routing (S1720 series)	IPv4 and IPv6 static routing RIP,RIPng,OSPF(S1720-E series)
Link aggregation	12 link aggregation groups (LAGs) with a maximum of eight ports in each LAG 64 link aggregation groups(S1720 series) Static LACP	12 link aggregation groups (LAGs) with a maximum of eight ports in each LAG 64 link aggregation groups(S1720 series) 120 link aggregation groups(S1720-E series) Static LACP
Port mirroring	Port-based bidirectional flow mirroring	Port-based bidirectional flow mirroring Configuring a trunk as a mirrored interface

Feature	Web-managed switch	Web/SNMP-managed switch
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/S1720-E series) Console port (S1720/S1720-E 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)

5.2 Hardware Specifications

The following table lists the S1700 hardware specifications.

Item	Specification
Memory (RAM)	unmanaged switches: N/A S1728GWR-4P/S1700-28FR-2T2P-AC/S1700-28GFR-4P-AC/S1700-52FR-2T2P-AC/S1700-52GFR-4P-AC: 128M S1720-20GFR-4TP/S1720-28GFR-4TP: 256M S1720-10GW-2P/S1720-10GW-PWR-2P/S1720-28GWR-4P/S1720-28GWR-4X/S1720-28GWR-PWR-4P/S1720-28GWR-PWR-4X/S1720-52GWR-4P/S1720-52GWR-4X/S1720-52GWR-PWR-4P/S1720-52GWR-PWR-4X/S1720-28GWR-PWR-4TP: 512M S1720-10GW-2P-E/S1720-10GW-PWR-2P-E/S1720-28GWR-4P-E/S1720-28GWR-4X-E/S1720-28GWR-PWR-4P-E/S1720-28GWR-PWR-4X-E/S1720-52GWR-4P-E/S1720-52GWR-4X-E/S1720-52GWR-PWR-4P-E/S1720-52GWR-PWR-4X-E/S1720-28GWR-PWR-4TP-E: 512M

Item	Specification
Mean Time Between Failures (MTBF),years	S1700-24-AC: 24.8 S1700-52R-2T2P-AC: 24.8 S1700-24GR: -22.3 S1724G: 45.5 S1700-28FR-2T2P-AC: 24.8 S1700-28GFR-4P-AC: 24.8 S1700-52FR-2T2P-AC: 24.8 S1700-52GFR-4P-AC: 24.8 S1728GWR-4P: 44.3 S1720-20GFR-4TP:67 S1720-28GFR-4TP: 65 S1720-10GW-2P: 23.8 S1720-10GW-PWR-2P: 23.8 S1720-28GWR-4P: 23.8 S1720-28GWR-4X: 23.8 S1720-28GWR-PWR-4P: 23.8 S1720-28GWR-PWR-4TP: 23.8 S1720-28GWR-PWR-4X: 23.8 S1720-52GWR-4P: 23.8 S1720-52GWR-4X: 23.8 S1720-52GWR-PWR-4P: 23.8 S1720-52GWR-PWR-4X: 23.8 S1720-10GW-2P-E: 23.8 S1720-10GW-PWR-2P-E: 23.8 S1720-28GWR-4P-E: 45 S1720-28GWR-4X-E: 45 S1720-28GWR-PWR-4P-E: 41 S1720-28GWR-PWR-4TP-E: 42 S1720-28GWR-PWR-4X-E: 41 S1720-52GWR-4P-E: 41 S1720-52GWR-4X-E: 41 S1720-52GWR-PWR-4P-E: 38 S1720-52GWR-PWR-4X-E: 38
Mean Time To Repair (MTTR), hours	2
Dimensions (W x D x H)	S1700-24-AC: 320.0 mm x 208.0 mm x 43.60 mm S1700-16G: 320.0 mm x 208.0 mm x 43.6 mm S1724G: 330.0 mm x 208.0 mm x 43.6 mm S1720-10GW-2P/ S1720-10GW-2P-E: 250 mm x 180 mm x 43.6 mm S1720-10GW-PWR-2P/ S1720-10GW-PWR-2P-E: 320 mm x 220 mm x 43.6 mm S1720-28GWR-PWR-4P/S1720-28GWR-PWR-4X/S1720-52GWR-PWR-4P /S1720-52GWR-PWR-4X/S1720-28GWR-PWR-4P-E/S1720-28GWR-PWR-4X-E/S1720-52GWR-PWR-4P-E /S1720-52GWR-PWR-4X-E: 442 mm x 310 mm x 43.6 mm Others: 442.0 mm x 220.0 mm x 43.6 mm

Item	Specification
Weight (without optical modules)	S1700-24-AC: 1.63 kg S1700-52R-2T2P-AC: 2.54 kg S1700-24GR: 2.50 kg S1724G: 1.71 kg S1700-16G: 1.59 kg S1700-28GFR-4P-AC: <3 kg S1700-52GFR-4P-AC: <4 kg S1700-28FR-2T2P-AC: <3 kg S1700-52FR-2T2P-AC: <3 kg S1728GWR-4P: <3 kg S1720-20GFR-4TP: <5 kg S1720-28GFR-4TP: <5 kg S1720-10GW-2P: 1.29 kg S1720-10GW-PWR-2P: 2.17 kg S1720-28GWR-4P: 4.75 kg S1720-28GWR-4X: 4.75kg S1720-28GWR-PWR-4P: 5.9 kg S1720-28GWR-PWR-4TP: 3.6 kg S1720-28GWR-PWR-4X: 5.9 kg S1720-52GWR-4P: 3.4 kg S1720-52GWR-4X: 3.4 kg S1720-52GWR-PWR-4P: 5.9 kg S1720-52GWR-PWR-4X: 5.9 kg S1720-10GW-2P-E: 1.29 kg S1720-10GW-PWR-2P-E: 2.17 kg S1720-28GWR-4P-E: 4.75 kg S1720-28GWR-4X-E: 4.75kg S1720-28GWR-PWR-4P-E: 5.9 kg S1720-28GWR-PWR-4TP-E: 3.6 kg S1720-28GWR-PWR-4X-E: 5.9 kg S1720-52GWR-4P-E: 3.4 kg S1720-52GWR-4X-E: 3.4 kg S1720-52GWR-PWR-4P-E: 5.9 kg S1720-52GWR-PWR-4X-E: 5.9 kg
Weight (without optical modules)	S1720-10GW-2P: 1.29 kg S1720-10GW-PWR-2P: 2.17 kg S1720-28GWR-4P: 4.75 kg S1720-28GWR-4X: 4.75kg S1720-28GWR-PWR-4P: 5.9 kg S1720-28GWR-PWR-4TP: 3.6 kg S1720-28GWR-PWR-4X: 5.9 kg S1720-52GWR-4P: 3.4 kg S1720-52GWR-4X: 3.4 kg S1720-52GWR-PWR-4P: 5.9 kg S1720-52GWR-PWR-4X: 5.9 kg

Item		Specification
AC input voltage	Rated voltage range	100V AC to 240V AC; 50/60 Hz
	Maximum voltage range	90V AC to 264V AC; 47 Hz to 63 Hz
Maximum power consumption (100% throughput, full speed of fans)		S1700-24-AC: 3.9 W S1700-52R-2T2P-AC: 22.6 W S1700-24GR: 14.2 W S1724G: 14.2 W S1700-16G: 12.8 W S1700-28FR-2T2P-AC: 25 W S1700-28GFR-4P-AC: 30 W S1700-52FR-2T2P-AC: 35 W S1700-52GFR-4P-AC: 55 W S1728GWR-4P: 15 W S1720-20GFR-4TP: 20.7 W S1720-28GFR-4TP: 24.3 W S1720-10GW-2P: 11.86W S1720-10GW-PWR-2P: without PD :14.63W; with PD: 159.2W(PoE:123.2W) S1720-28GWR-4P: 20.2W S1720-28GWR-4X: 27.9W S1720-28GWR-PWR-4P: without PD: 40.4W; with PD: 446.7W(PoE 369.6W) S1720-28GWR-PWR-4TP: without PD:24.4W; with PD:165.528W(PoE 123.2W) S1720-28GWR-PWR-4X: without PD:42.7W; with PD: 448.5W(PoE 369.6W) S1720-52GWR-4P: 47.3W S1720-52GWR-4X: 50.3W S1720-52GWR-PWR-4P: without PD: 61.7W; with PD: 461.8W(PoE 369.6W) S1720-52GWR-PWR-4X: without PD: 63.5W; with PD: 464.3W(PoE 369.6W)
Temperature	Operating temperature	S1720-20GFR-4TP/S1720-28GFR-4TP: 0°C-50°C Others: 0°C-45°C
	Storage temperature	S1700-28GFR-4P-AC/S1700-52GFR-4P-AC/S1700-28FR-2T2P-AC/S1700-52FR-2T2P-AC: -20°C-70°C Others : -40°C-70°C

Item	Specification
Noise under normal temperature (sound power)	S1700-52GFR-4P-AC: < 63 dBA S1720-28GWR-PWR-4P: 44.2dBA S1720-28GWR-PWR-4X: 44.2dBA S1720-52GWR-4P: 35.1dBA S1720-52GWR-4X: 35.1dBA S1720-52GWR-PWR-4P: 43.1dBA S1720-52GWR-PWR-4X: 43.1dBA S1720-28GWR-PWR-4P-E: 44.2dBA S1720-28GWR-PWR-4X-E: 44.2dBA S1720-52GWR-4P-E: 35.1dBA S1720-52GWR-4X-E: 35.1dBA S1720-52GWR-PWR-4P-E: 43.1dBA S1720-52GWR-PWR-4X-E: 43.1dBA Others: Silent (no fan)
Relative humidity	S1700-52R-2T2P-AC/ S1700-28GFR-4P-AC/S1700-52GFR-4P-AC/S1700-28FR-2T2P-AC/ S1700-52FR-2T2P-AC: 10%RH-90%RH S1728GWR-4P: 5%RH-90%RH S1700-24-AC /S1700-24GR/S1724G / S1700-16G /S1720-20GFR-4TP/ S1720-28GFR-4TP/S1720-10GW-2P/S1720-10GW-PWR-2P/S1720-28GWR-4P/S1720-28GWR-4X/S1720-28GWR-PWR-4P/S1720-28GWR-PWR-4X/S1720-52GWR-4P/S1720-52GWR-4X/S1720-52GWR-PWR-4P/S1720-52GWR-PWR-4X/S1720-28GWR-PWR-4TP/S1720-10GW-2P-E /S1720-10GW-PWR-2P-E /S1720-28GWR-4P-E /S1720-28GWR-4X-E /S1720-28GWR-PWR-4P-E /S1720-28GWR-PWR-4X-E /S1720-52GWR-4P-E /S1720-52GWR-4X-E /S1720-52GWR-PWR-4P-E /S1720-52GWR-PWR-4X-E /S1720-28GWR-PWR-4TP-E: 5%RH-95%RH
Operating altitude	S1700-52R-2T2P-AC/S1700-28GFR-4P-AC/S1700-52GFR-4P-AC/S1700-28FR-2T2P-AC/ S1700-52FR-2T2P-AC/S1728GWR-4P: 0 m-3500 m S1700-24-AC/S1700-16G/S1700-24GR/ S1724G/S1720-20GFR-4TP/ S1720-28GFR-4TP/S1720-10GW-2P/S1720-10GW-PWR-2P/S1720-28GWR-4P/S1720-28GWR-4X/S1720-28GWR-PWR-4P/S1720-28GWR-PWR-4X/S1720-52GWR-4P/S1720-52GWR-4X/S1720-52GWR-PWR-4P/S1720-52GWR-PWR-4X/S1720-28GWR-PWR-4TP/S1720-10GW-2P-E /S1720-10GW-PWR-2P-E /S1720-28GWR-4P-E /S1720-28GWR-4X-E /S1720-28GWR-PWR-4P-E /S1720-28GWR-PWR-4X-E /S1720-52GWR-4P-E /S1720-52GWR-4X-E /S1720-52GWR-PWR-4P-E /S1720-52GWR-PWR-4X-E /S1720-28GWR-PWR-4TP-E: 0 m-5000 m

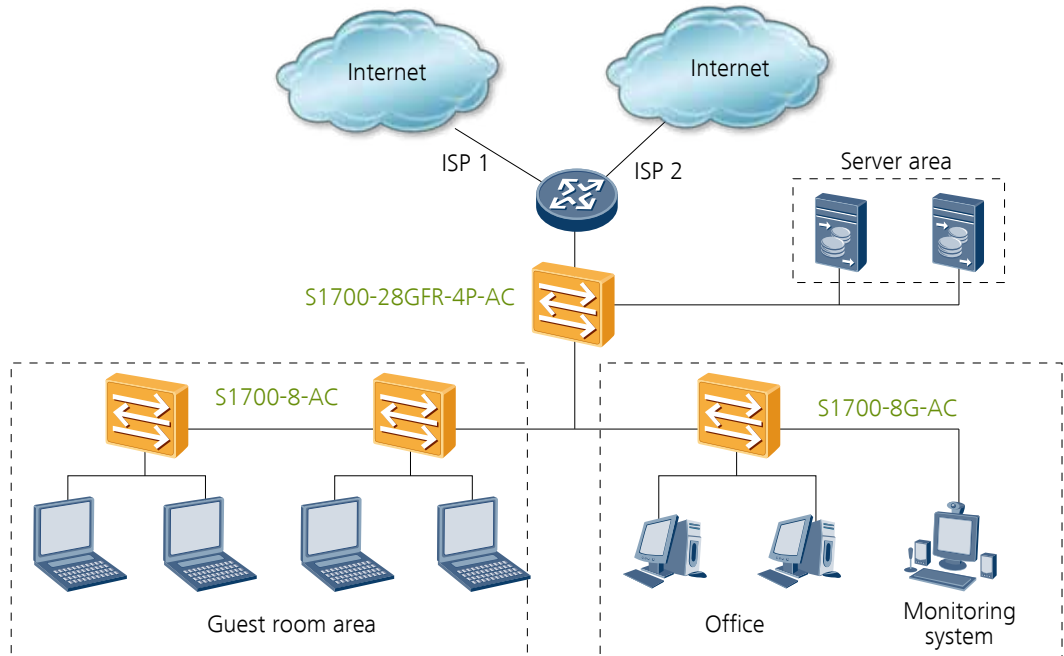
NOTE:

Switching capacity: also called switching bandwidth. It refers to the maximum volume of bidirectional traffic that can be transferred between the switching chip and data bus. This index indicates the data transferring capability of a switch.

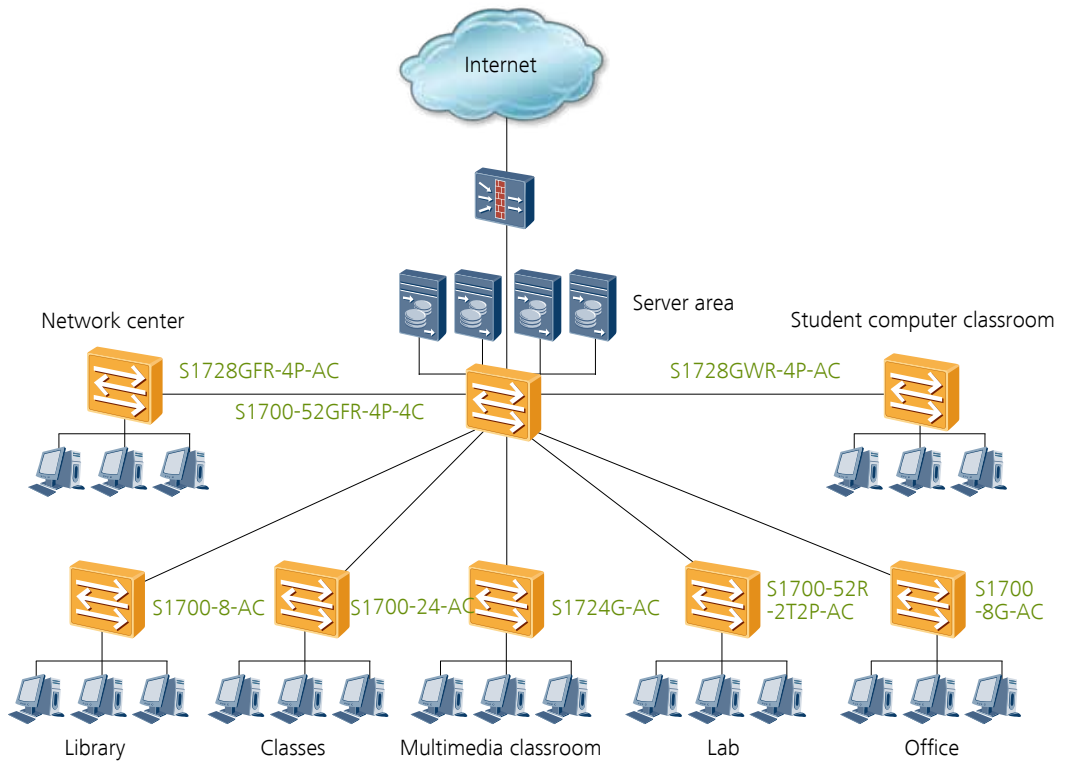
Forwarding performance: This index indicates the wire-speed forwarding capability of a switch when the switch processes 64-byte packets (plus an 8-byte preamble and a 12-byte IFG). It represents the packet header processing capability.

6 Networking and Applications

6.1 Hotels



6.2 Schools



7 Product Accessories

Optical Modules

The following table lists the optical modules supported by S1700-52R-2T2P-AC, S1700-28FR-2T2P-AC, S1700-52FR-2T2P-AC, S1700-28GFR-4P-AC, S1700-52GFR-4P-AC, S1728GWR-4P.

Port	Optical Module
1000BASE-X Ethernet port	eSFP-GE-SX-MM850
	SFP-GE-LX-SM1310
	S-SFP-GE-LH40-SM1310
	S-SFP-GE-LH40-SM1550
	S-SFP-GE-LH80-SM1550
	eSFP-GE-ZX100-SM1550
	SFP-GE-LX-SM1310-BIDI (single-mode bidirectional fiber)
	SFP-GE-LX-SM1490-BIDI (single-mode bidirectional fiber)
	CWDM-SFPGE-1471
	CWDM-SFPGE-1491
	CWDM-SFPGE-1511
	CWDM-SFPGE-1531
	CWDM-SFPGE-1551
	CWDM-SFPGE-1571
	CWDM-SFPGE-1611

The following table lists optical modules supported by S1720-20GFR-4TP, S1720-28GFR-4TP

Port	Optical Module
Combo optical port	SFP-FE-SX-MM1310
	eSFP-FE-LX-SM1310
	S-SFP-FE-LH40-SM1310
	S-SFP-FE-LH80-SM1550
	SFP-FE-LX-SM1310-BIDI
	SFP-FE-LX-SM1550-BIDI
	eSFP-GE-SX-MM850
	SFP-GE-LX-SM1310
	S-SFP-GE-LH40-SM1310
	S-SFP-GE-LH40-SM1550
	S-SFP-GE-LH80-SM1550
	eSFP-GE-ZX100-SM1550
	SFP-GE-LX-SM1310-BIDI (single-mode bidirectional fiber)
	SFP-GE-LX-SM1490-BIDI (single-mode bidirectional fiber)
	LE2MGSC40DE0 (single-mode bidirectional fiber)
	LE2MGSC40ED0 (single-mode bidirectional fiber)
	SFP-GE-BXU1-SC (single-mode bidirectional fiber)
	CWDM-SFPGE-1471
	CWDM-SFPGE-1491
	CWDM-SFPGE-1511
	CWDM-SFPGE-1531
	CWDM-SFPGE-1551
CWDM-SFPGE-1571	
CWDM-SFPGE-1611	
GE-DWDM optical module (1529.55-1560.61)	

Port	Optical Module
1000BASE-X Ethernet port	eSFP-GE-SX-MM850 SFP-GE-LX-SM1310 S-SFP-GE-LH40-SM1310 S-SFP-GE-LH40-SM1550 S-SFP-GE-LH80-SM1550 eSFP-GE-ZX100-SM1550 SFP-GE-LX-SM1310-BIDI (single-mode bidirectional fiber) SFP-GE-LX-SM1490-BIDI (single-mode bidirectional fiber) LE2MGSC40DE0 (single-mode bidirectional fiber) LE2MGSC40ED0 (single-mode bidirectional fiber) SFP-GE-BXU1-SC (single-mode bidirectional fiber) CWDM-SFPGE-1471 CWDM-SFPGE-1491 CWDM-SFPGE-1511 CWDM-SFPGE-1531 CWDM-SFPGE-1551 CWDM-SFPGE-1571 CWDM-SFPGE-1611 GE-DWDM optical module (1529.55-1560.61) GE copper transceiver module (SFP-1000BaseT)

8 Safety and Regulatory Compliance

Table 8-1 lists the safety and regulatory compliance of S1700.

Table 8-1 S1700 safety and regulatory compliance

Certification Category	Description
Safety	IEC 60950-1 EN 60950-1/A11/A12 UL 60950-1 CSA C22.2 No 60950-1 AS/NZS 60950.1 CNS 14336-1
Laser safety	IEC60825-1 IEC60825-2 EN60825-1 EN60825-2

Certification Category	Description
Electromagnetic Compatibility (EMC)	CISPR22 Class A CISPR24 EN55022 Class A EN55024 ETSI EN 300 386 Class A CFR 47 FCC Part 15 Class A ICES 003 Class A AS/NZS CISPR22 Class A VCCI Class A IEC61000-4-2 ITU-T K 20 ITU-T K 21 ITU-T K 44 CNS13438
Environment	RoHS REACH WEEE

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

9 MIB and Standards Compliance

9.1 Supported MIBs

Table 9-1 lists the MIBs supported by S1720.

Table 9-1 S1720 MIBs

Category	MIB
Public MIB	BRIDGE-MIB
	DISMAN-NSLOOKUP-MIB
	DISMAN-PING-MIB
	DISMAN-TRACEROUTE-MIB
	ENTITY-MIB
	EtherLike-MIB
	IF-MIB
	IP-FORWARD-MIB
	IPv6-MIB
	LAG-MIB
	LLDP-EXT-DOT1-MIB
	LLDP-EXT-DOT3-MIB
	LLDP-MIB
	NOTIFICATION-LOG-MIB
	NQA-MIB
	P-BRIDGE-MIB
	Q-BRIDGE-MIB
	RFC1213-MIB
	RMON-MIB
	SAVI-MIB
	SNMP-FRAMEWORK-MIB
	SNMP-MPD-MIB
	SNMP-NOTIFICATION-MIB
	SNMP-TARGET-MIB
	SNMP-USER-BASED-SM-MIB
	SNMPv2-MIB
SNMP-VIEW-BASED-ACM-MIB	
TCP-MIB	
UDP-MIB	
Huawei-proprietary MIB	HUAWEI-AAA-MIB
	HUAWEI-ACL-MIB
	HUAWEI-ALARM-MIB
	HUAWEI-ALARM-RELIABILITY-MIB
	HUAWEI-BASE-TRAP-MIB
	HUAWEI-BRAS-RADIUS-MIB
	HUAWEI-BRAS-SRVCFG-EAP-MIB
	HUAWEI-BRAS-SRVCFG-STATICUSER-MIB
	HUAWEI-CBQOS-MIB
	HUAWEI-CDP-COMPLIANCE-MIB

Category	MIB
Huawei-proprietary MIB	HUAWEI-CONFIG-MAN-MIB
	HUAWEI-CPU-MIB
	HUAWEI-DAD-TRAP-MIB
	HUAWEI-DATASYNC-MIB
	HUAWEI-DEVICE-MIB
	HUAWEI-DHCPR-MIB
	HUAWEI-DHCPS-MIB
	HUAWEI-DHCP-SNOOPING-MIB
	HUAWEI-DIE-MIB
	HUAWEI-DNS-MIB
	HUAWEI-DLDP-MIB
	HUAWEI-ERPS-MIB
	HUAWEI-ERRORDOWN-MIB
	HUAWEI-ENERGYMNGT-MIB
	HUAWEI-EASY-OPERATION-MIB
	HUAWEI-ENTITY-EXTENT-MIB
	HUAWEI-ENTITY-TRAP-MIB
	HUAWEI-ETHARP-MIB
	HUAWEI-FLASH-MAN-MIB
	HUAWEI-FWD-RES-TRAP-MIB
	HUAWEI-GARP-APP-MIB
	HUAWEI-GTL-MIB
	HUAWEI-HGMP-MIB
	HUAWEI-HWTACACS-MIB
	HUAWEI-IF-EXT-MIB
	HUAWEI-INFOCENTER-MIB
	HUAWEI-IPPOOL-MIB
	HUAWEI-IPV6-MIB
	HUAWEI-ISOLATE-MIB
	HUAWEI-L2IF-MIB
	HUAWEI-L2MAM-MIB
	HUAWEI-L2VLAN-MIB
	HUAWEI_LDT-MIB
	HUAWEI-LLDP-MIB
	HUAWEI-MAC-AUTHEN-MIB
	HUAWEI-MEMORY-MIB
	HUAWEI-MFF-MIB
	HUAWEI-MFLP-MIB
	HUAWEI-MSTP-MIB
	HUAWEI-MULTICAST-MIB
	HUAWEI-NTPV3-MIB
HUAWEI-PERFORMANCE-MIB	
HUAWEI-PERFMGMT-MIB	

Category	MIB
Huawei-proprietary MIB	HUAWEI-PORT-MIB HUAWEI-PORTAL-MIB HUAWEI-QINQ-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

9.2 Standard Compliance

Table 9-2 lists the standards the S1720 complies with.

Table 9-2 S1720 standards compliance

Standard Organization	Standard or Protocol
IETF	RFC 768 User Datagram Protocol (UDP) RFC 792 Internet Control Message Protocol (ICMP) RFC 793 Transmission Control Protocol (TCP) RFC 826 Ethernet Address Resolution Protocol (ARP) RFC 854 Telnet Protocol Specification RFC 951 Bootstrap Protocol (BOOTP) RFC 959 File Transfer Protocol (FTP) RFC 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)

Standard Organization	Standard or Protocol
IETF	RFC 2460 Internet Protocol, Version 6 Specification (IPv6) RFC 2461 Neighbor Discovery for IP Version 6 (IPv6) RFC 2462 IPv6 Stateless Address Auto configuration RFC 2463 Internet Control Message Protocol for IPv6 (ICMPv6) RFC 2474 Differentiated Services Field (DS Field) 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 3513 IP Version 6 Addressing Architecture RFC 3579 RADIUS Support For EAP draft-grant-tacacs-02 TACACS+
IEEE	IEEE 802.1D Media Access Control (MAC) Bridges IEEE 802.1p Virtual Bridged Local Area Networks IEEE 802.1Q Virtual Bridged Local Area Networks IEEE 802.1ad Provider Bridges IEEE 802.2 Logical Link Control IEEE Std 802.3 CSMA/CD IEEE Std 802.3ab 1000BASE-T specification IEEE Std 802.3ad Aggregation of Multiple Link Segments IEEE Std 802.3ae 10GE WEN/LAN Standard IEEE Std 802.3x Full Duplex and flow control IEEE Std 802.3z Gigabit Ethernet Standard IEEE802.1ax/IEEE802.3ad Link Aggregation IEEE 802.1ab 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
ITU	ITU SG13 QoS control Ethernet-Based IP Access
MEF	MEF 2 Requirements and Framework for Ethernet Service Protection MEF 9 Abstract Test Suite for Ethernet Services at the UNI MEF 11 UNI Requirements and Framework 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/en> or contact your local Huawei sales office.

10 Ordering Information

Table 10-1 Ordering list of S1700 series Ethernet switches

Product Description
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)
S1720-10GW-2P(8 Ethernet 10/100/1000 ports,2 Gig SFP, AC 110/220V)
S1720-10GW-PWR-2P(8 Ethernet 10/100/1000 PoE+ ports,2 Gig SFP, AC 110/220V)
S1720-28GWR-4P(24 Ethernet 10/100/1000 ports,4 Gig SFP, AC 110/220V)
S1720-28GWR-4X(24 Ethernet 10/100/1000 ports,4 10 Gig SFP+, AC 110/220V)
S1720-28GWR-PWR-4P(24 Ethernet 10/100/1000 PoE+ ports,4 Gig SFP, AC 110/220V)
S1720-28GWR-PWR-4X(24 Ethernet 10/100/1000 PoE+ ports,4 10 Gig SFP+, AC 110/220V)
S1720-52GWR-4P(48 Ethernet 10/100/1000 ports,4 Gig SFP, AC 110/220V)
S1720-52GWR-4X(48 Ethernet 10/100/1000 ports,4 10 Gig SFP+, AC 110/220V)
S1720-52GWR-PWR-4P(48 Ethernet 10/100/1000 PoE+ ports,4 Gig SFP, AC 110/220V)
S1720-52GWR-PWR-4X(48 Ethernet 10/100/1000 PoE+ ports,4 10 Gig SFP+, AC 110/220V)
S1720-28GWR-PWR-4TP(8 Ethernet 10/100/1000 PoE+,16 Ethernet 10/100/1000, 4 Gig SFP ports, 2 combo 10/100/1000Base-T Ethernet ports, 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, 4 Gig SFP ports, 2 combo 10/100/1000Base-T Ethernet ports, AC 110/220V)
S1720-28GFR-4TP (24 Ethernet 10/100/1000 ports, 4 Gig SFP ports, 2 combo 10/100/1000Base-T Ethernet ports, AC 110/220V)

Product Description

S1720-10GW-2P-E(8 Ethernet 10/100/1000 ports,2 Gig SFP, AC 110/220V)

S1720-10GW-PWR-2P-E(8 Ethernet 10/100/1000 PoE+ ports,2 Gig SFP, AC 110/220V)

S1720-28GWR-4P-E(24 Ethernet 10/100/1000 ports,4 Gig SFP, AC 110/220V)

S1720-28GWR-4X-E(24 Ethernet 10/100/1000 ports,4 10 Gig SFP+, AC 110/220V)

S1720-28GWR-PWR-4P-E(24 Ethernet 10/100/1000 PoE+ ports,4 Gig SFP, AC 110/220V)

S1720-28GWR-PWR-4X-E(24 Ethernet 10/100/1000 PoE+ ports,4 10 Gig SFP+, AC 110/220V)

S1720-52GWR-4P-E(48 Ethernet 10/100/1000 ports,4 Gig SFP, AC 110/220V)

S1720-52GWR-4X-E(48 Ethernet 10/100/1000 ports,4 10 Gig SFP+, AC 110/220V)

S1720-52GWR-PWR-4P-E(48 Ethernet 10/100/1000 PoE+ ports,4 Gig SFP, AC 110/220V)

S1720-52GWR-PWR-4X-E(48 Ethernet 10/100/1000 PoE+ ports,4 10 Gig SFP+, AC 110/220V)

S1720-28GWR-PWR-4TP-E(8 Ethernet 10/100/1000 PoE+,16 Ethernet 10/100/1000, 4 Gig SFP ports, 2 combo 10/100/1000Base-T Ethernet ports, AC 110/220V)

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