Huawei S1700 Series Switches
Product Datasheet

HUAWEI TECHNOLOGIES CO., LTD.

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S1700 Switch Datasheet (Detailed Version)

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 S1700-16G、S1700-24-AC、S1700-24GR、S1724G-AC、S1700-52R-2T2P-AC

- Web-managed switches:

Include the S1720-10GW-2P、S1720-10GW-PWR-2P、S1720-28GWR-4P、S1720-28GWR-4X、S1720-28GWR-PWR-4P、S1720-28GWR-PWR-4TP、S1720-28GWR-PWR-4X、S1720-52GWR-4P、S1720-52GWR-4X、S1720-52GWR-PWR-4P、S1720-52GWR-PWR-4X、S1720X-16XWR、S1720X-32XWR.

- Web/SNMP-based switches:

Include the S1720-20GFR-4TP、S1700-28FR-2T2P-AC、 S1700-28GFR-4P-AC、S1720-28GFR-4TP、S1700-52FR-2T2P-AC、S1700-52GFR-4P-AC、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、S1720X-16XWR-E、S1720X-32XWR-E

Product Overview

Unmanaged switches

S1700-16G

- 16 Ethernet 10/100/1000 ports
- AC power supply

S1700-52R-2T2P-AC

- 24 Ethernet 10/100 ports
- AC power supply

S1700-24GR

- 24 Ethernet 10/100/1000 ports
- AC power supply

S1724G-AC

- 24 Ethernet 10/100/1000 ports
- AC power supply

S1700-52R-2T2P-AC

- 48 Ethernet 10/100 ports, 2 Ethernet 10/100/1000 ports, 2 Gig SFP ports
- AC power supply

Web-managed switches:

S1720-10GW-2P

- 8 Ethernet 10/100/1000 ports, 2 Gig SFP ports
- AC power supply

S1720-10GW-PWR-2P

- 8 Ethernet 10/100/1000 ports, 2 Gig SFP ports
- PoE+
- AC power supply

S1720-28GWR-4P

- 24 Ethernet 10/100/1000 ports, 4 Gig SFP ports
- AC power supply

S1720-28GWR-4X

- 24 Ethernet 10/100/1000 ports, 4 10 Gig SFP+
- AC power supply

S1720-28GWR-PWR-4P

- 24 Ethernet 10/100/1000 ports, 4 Gig SFP ports
- PoE+
- AC power supply

S1720-28GWR-PWR-4TP

- 24 Ethernet 10/100/1000 ports，2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- PoE+
- AC power supply

S1720-28GWR-PWR-4X

- 24 Ethernet 10/100/1000 ports，4 10 Gig SFP+
- supportPoE+
- AC power supply

S1720-52GWR-4P

- 48 Ethernet 10/100/1000 ports，4 Gig SFP ports
- AC power supply

S1720-52GWR-4X

- 48 Ethernet 10/100/1000 ports，4 10 Gig SFP+
- AC power supply

S1720-52GWR-PWR-4P

- 48 Ethernet 10/100/1000 ports，4 Gig SFP ports
- PoE+
- AC power supply

S1720-52GWR-PWR-4X

- 48 Ethernet 10/100/1000 ports，4 10 Gig SFP+
- PoE+
- AC power supply

S1720X-16XWR

- 16 10 Gig SFP+
- AC power supply

S1720X-32XWR

- 32 10 Gig SFP+
- AC power supply

Web/SNMP-based switches

S1700-28FR-2T2P-AC

- 24 Ethernet 10/100 ports, 2 Ethernet 10/100/1000 ports, 2 Gig SFP ports;
- AC power supply

S1700-52FR-2T2P-AC

- 48 Ethernet 10/100 ports, 2 Ethernet 10/100/1000 ports, 2 Gig SFP ports;
- AC power supply

S1700-28GFR-4P-AC

- 24 Ethernet 10/100/1000 ports, 4 Gig SFP ports;
- AC power supply

S1700-52GFR-4P-AC

- 48 Ethernet 10/100/1000 ports, 4 Gig SFP ports;
- AC power supply

S1700-28GFR-4P-AC

- 16 Ethernet 10/100/1000 ports, 4 Gig SFP ports, 2 of which are dual-purpose 10/100/1000 Base-t or SFP ports;
- AC power supply

S1700-52GFR-4P-AC

- 24 Ethernet 10/100/1000 ports, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP
- AC power supply

S1720-10GW-2P-E

- 8 Ethernet 10/100/1000 ports, 2 Gig SFP ports
- AC power supply

S1720-10GW-PWR-2P-E

- 8 Ethernet 10/100/1000 ports，2 Gig SFP ports
- PoE+
- AC power supply

S1720-28GWR-4P-E

- 24 Ethernet 10/100/1000 ports，4 Gig SFP ports
- AC power supply

S1720-28GWR-4X-E

- 24 Ethernet 10/100/1000 ports，4 10 Gig SFP+
- AC power supply

S1720-28GWR-PWR-4P-E

- 24 Ethernet 10/100/1000 ports，4 Gig SFP ports
- PoE+
- AC power supply

S1720-28GWR-PWR-4TP-E

- 24 Ethernet 10/100/1000 ports，2 Gig SFP ports，2 of which are dual-purpose 10/100/1000 Base-t or SFP ports
- PoE+
- AC power supply

S1720-28GWR-PWR-4X-E

- 24 Ethernet 10/100/1000 ports，4 10 Gig SFP+
- supportPoE+
- AC power supply

S1720-52GWR-4P-E

- 48 Ethernet 10/100/1000 ports，4 Gig SFP ports
- AC power supply

S1720-52GWR-4X-E

- 48 Ethernet 10/100/1000 ports，4 10 Gig SFP+
- AC power supply

S1720-52GWR-PWR-4P-E

- 48 Ethernet 10/100/1000 ports，4 Gig SFP ports
- PoE+
- AC power supply

S1720-52GWR-PWR-4X-E

- 48 Ethernet 10/100/1000 ports，4 10 Gig SFP+
- PoE+
- AC power supply

S1720X-16XWR-E

- 16 10 Gig SFP+
- AC power supply

S1720X-32XWR-E

- 32 10 Gig SFP+
- AC power supply

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-managed S1720 models come with a web network management system, making it easy to configure switches.

Web/SNMP-based S1720/S1720-E models can support CLI 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 Note:You can upgrade the web-managed S1720 model to the web/SNMP-managed model by purchasing a license	SNMP Web system network management (HTTPS) DHCP client User password protection One-key restoration CLI configuration (S1720GFR,S1720GW-E, S1720GWR-E,S1720X-XWR-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 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 S1720X-16XWR/S1720X-32XWR/ S1720X-16XWR-E/S1720X-32XWR-E:1G
Flash memory	unmanaged switches: N/A S1700-28FR-2T2P-AC/S1700-28GFR-4P-AC/S1700-52FR-2T2P-AC/S1700-52GFR-4P-AC: 16M S1720-20GFR-4TP/S1720-28GFR-4TP: 200M 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/ S1720X-16XWR/S1720X-32XWR: 240M 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/ S1720X-16XWR-E/ S1720X-32XWR-E: 240M

Item	Specification
Switching capacity	S1700-24-AC: 4.8 Gbps S1700-16G: 32 Gbps S1700-52R-2T2P-AC: 17.6 Gbps S1700-24GR: 48 Gbps S1724G-AC: 48 Gbps S1700-28FR-2T2P-AC: 12.8 Gbps S1700-28GFR-4P-AC: 56 Gbps S1700-52FR-2T2P-AC: 17.6 Gbps S1700-52GFR-4P-AC: 104 Gbps S1720-20GFR-4TP: 128 Gbps S1720-28GFR-4TP: 128 Gbps S1720-10GW-2P/ S1720-10GW-2P-E: 68 Gbps S1720-10GW-PWR-2P/ S1720-10GW-PWR-2P-E: 68 Gbps S1720-28GWR-4P/ S1720-28GWR-4P-E: 68 Gbps S1720-28GWR-4X/ S1720-28GWR-4X-E: 168 Gbps S1720-28GWR-PWR-4P/ S1720-28GWR-PWR-4P-E: 68 Gbps S1720-28GWR-PWR-4TP/ S1720-28GWR-PWR-4TP-E: 68 Gbps S1720-28GWR-PWR-4X/ S1720-28GWR-PWR-4X-E: 168 Gbps S1720-52GWR-4P/ S1720-52GWR-4P-E: 336 Gbps S1720-52GWR-4X/ S1720-52GWR-4X-E: 336 Gbps S1720-52GWR-PWR-4P/ S1720-52GWR-PWR-4P-E: 336 Gbps S1720-52GWR-PWR-4X/ S1720-52GWR-PWR-4X-E: 336 Gbps S1720X-16XWR/ S1720X-16XWR-E:680 Gbps S1720X-32XWR/ S1720X-32XWR-E:680 Gbps
Forwarding performance	S1700-24-AC: 3.6 Mpps S1700-16G: 24 Mpps S1700-52R-2T2P-AC: 13.2 Mpps S1700-24GR: 36 Mpps S1724G-AC: 36 Mpps S1700-28FR-2T2P-AC: 9.6 Mpps S1700-28GFR-4P-AC: 42 Mpps S1700-52FR-2T2P-AC: 13.2 Mpps S1700-52GFR-4P-AC: 78 Mpps S1720-20GFR-4TP: 30 Mpps S1720-28GFR-4TP: 42 Mpps S1720-10GW-2P/ S1720-10GW-2P-E: 15 Mpps S1720-10GW-PWR-2P/ S1720-10GW-PWR-2P-E: 15 Mpps S1720-28GWR-4P/ S1720-28GWR-4P-E: 42 Mpps S1720-28GWR-4X/ S1720-28GWR-4X-E: 96 Mpps S1720-28GWR-PWR-4P/ S1720-28GWR-PWR-4P-E: 42 Mpps S1720-28GWR-PWR-4TP/ S1720-28GWR-PWR-4TP-E: 42 Mpps S1720-28GWR-PWR-4X/ S1720-28GWR-PWR-4X-E: 96 Mpps S1720-52GWR-4P/ S1720-52GWR-4P-E: 78 Mpps S1720-52GWR-4X/ S1720-52GWR-4X-E: 132 Mpps S1720-52GWR-PWR-4P/ S1720-52GWR-PWR-4P-E: 78 Mpps S1720-52GWR-PWR-4X/ S1720-52GWR-PWR-4X-E: 132 Mpps S1720X-16XWR/ S1720X-16XWR-E:240 Mbps S1720X-32XWR/ S1720X-32XWR-E:252 Mbps

Item	Specification
Mean Time Between Failures (MTBF),years	S1700-24-AC: 24.65 S1700-52R-2T2P-AC: 24.65 S1700-24GR: 22.33 S1724G-AC: 45.53 S1700-28FR-2T2P-AC: 24.65 S1700-28GFR-4P-AC: 24.65 S1700-52FR-2T2P-AC: 24.65 S1700-52GFR-4P-AC: 24.65 S1720-20GFR-4TP: 67 S1720-28GFR-4TP: 65.66 S1720-10GW-2P/S1720-10GW-2-E: 23.8 S1720-10GW-PWR-2P/S1720-10GW-PWR-2P-E: 23.8 S1720-28GWR-4P/S1720-28GWR-4P-E: 45 S1720-28GWR-4X/ S1720-28GWR-4X-E: 45 S1720-28GWR-PWR-4P/ S1720-28GWR-PWR-4P-E: 41 S1720-28GWR-PWR-4TP/ S1720-28GWR-PWR-4TP-E: 42 S1720-28GWR-PWR-4X/ S1720-28GWR-PWR-4X-E: 41 S1720-52GWR-4P/ S1720-52GWR-4P-E: 41 S1720-52GWR-4X/ S1720-52GWR-4X-E: 41 S1720-52GWR-PWR-4P/ S1720-52GWR-PWR-4P-E: 38 S1720-52GWR-PWR-4X/ S1720-52GWR-PWR-4X-E:38 S1720X-16XWR/ S1720X-16XWR-E:37.9 S1720X-32XWR/ S1720X-32XWR-E:42.8
Mean Time To Repair (MTTR), hours	2
Dimensions (W x D x H)	S1700-24-AC/S1700-16G/S1724G-AC: 320 mm x 208 mm x 43.6 mm S1720-10GW-2P/S1720-10GW-2-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-4P -E/S1720-28GWR-PWR-4X/ S1720-28GWR-PWR-4X -E/S1720-52GWR-PWR-4P/ S1720-52GWR-PWR-4P-E/S1720-52GWR-PWR-4X/ 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
Weight (without optical modules)	S1700-24-AC: 1.63 kg S1700-52R-2T2P-AC: 2.54 kg S1700-24GR: 2.50 kg S1724G-AC: 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/S1720-10GW-2-E: 1.29 kg S1720-10GW-PWR-2P/S1720-10GW-PWR-2P-E: 2.17 kg S1720-28GWR-4P/S1720-28GWR-4P-E: 4.75 kg S1720-28GWR-4X/S1720-28GWR-4X-E: 4.75kg S1720-28GWR-PWR-4P/ S1720-28GWR-PWR-4P-E: 5.9 kg S1720-28GWR-PWR-4TP/ S1720-28GWR-PWR-4TP-E: 3.6 kg S1720-28GWR-PWR-4X/ S1720-28GWR-PWR-4X-E: 5.9 kg S1720-52GWR-4P/ S1720-52GWR-4P-E: 3.4 kg S1720-52GWR-4X/ S1720-52GWR-4X-E: 3.4 kg S1720-52GWR-PWR-4P/ S1720-52GWR-PWR-4P-E: 5.9 kg S1720-52GWR-PWR-4X/ S1720-52GWR-PWR-4X -E: 5.9 kg S1720X-16XWR/S1720X-16XWR-E:4.07 kg S1720X-32XWR/ S1720X-32XWR-E:4.23 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/S1720-10GW-2-E: 11.86W S1720-10GW-PWR-2P/S1720-10GW-PWR-2P-E: without PD :14.63W; with PD: 159.2W(PoE:123.2W) S1720-28GWR-4P/S1720-28GWR-4P-E: 20.2W S1720-28GWR-4X/S1720-28GWR-4X-E: 27.9W S1720-28GWR-PWR-4P/ S1720-28GWR-PWR-4P-E: without PD: 40.4W; with PD: 446.7W(PoE: 369.6W) S1720-28GWR-PWR-4TP/ S1720-28GWR-PWR-4TP-E: without PD:24.4W; with PD:165.528W(PoE: 123.2W) S1720-28GWR-PWR-4X/ S1720-28GWR-PWR-4X-E: without PD:42.7W; with PD: 448.5W(PoE: 369.6W) S1720-52GWR-4P/ S1720-52GWR-4P-E: 47.3W S1720-52GWR-4X/ S1720-52GWR-4X-E: 50.3W S1720-52GWR-PWR-4P/ S1720-52GWR-PWR-4P-E: without PD: 61.7W; with PD: 461.8W(PoE: 369.6W) S1720-52GWR-PWR-4X/ S1720-52GWR-PWR-4X-E: without PD: 63.5W; with PD: 464.3W(PoE: 369.6W) S1720X-16XWR/ S1720X-16XWR-E:63.1 W S1720X-32XWR/ S1720X-32XWR-E:103.6 W
Operating temperature		0-1800m:0° C-45° C 1800-5000 m: decrease 1℃ when the altitude increases every 220 m
Noise under normal temperature (sound power)		S1700-52GFR-4P-AC: < 63 dBA S1720-28GWR-PWR-4P/ S1720-28GWR-PWR-4P-E: 44.2dBA S1720-28GWR-PWR-4X/ S1720-28GWR-PWR-4X-E: 44.2dBA S1720-52GWR-4P/S1720-52GWR-4P-E: 35.1dBA S1720-52GWR-4X/ S1720-52GWR-4X-E: 35.1dBA S1720-52GWR-PWR-4P/S1720-52GWR-PWR-4P-E: 43.1dBA S1720-52GWR-PWR-4X/S1720-52GWR-PWR-4X-E: 43.1dBA S1720X-16XWR/ S1720X-16XWR-E:34.6 dBA S1720X-32XWR/ S1720X-32XWR-E:34.6 dBA Others: Silent (no fan)

Item	Specification
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 Others: 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: 0 m-3500 m Others: 0 m-5000 m

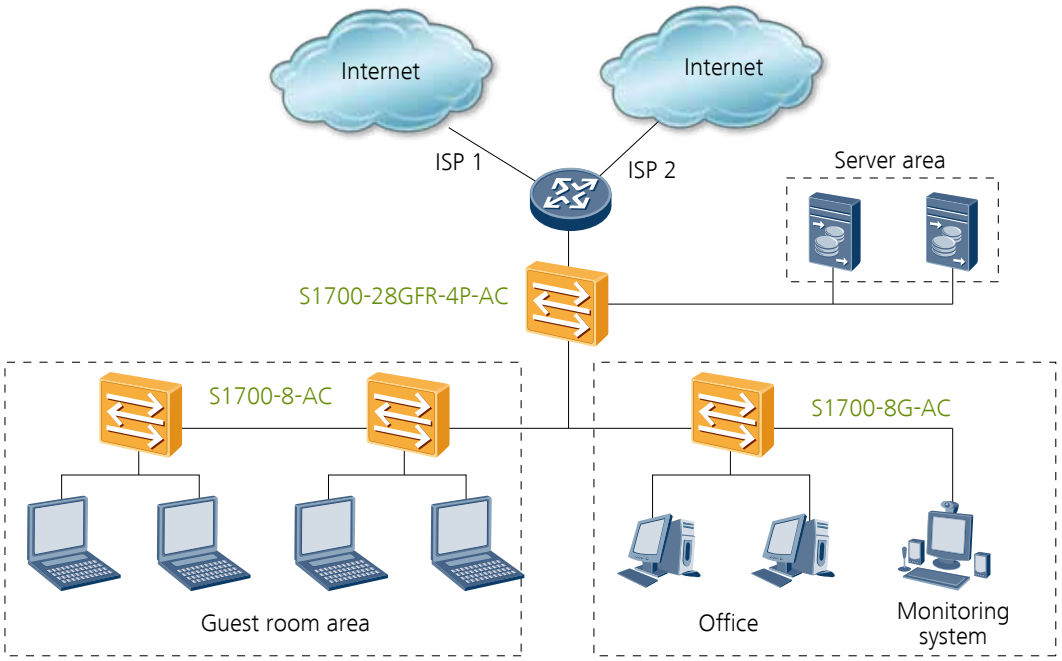
NOTE:

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.

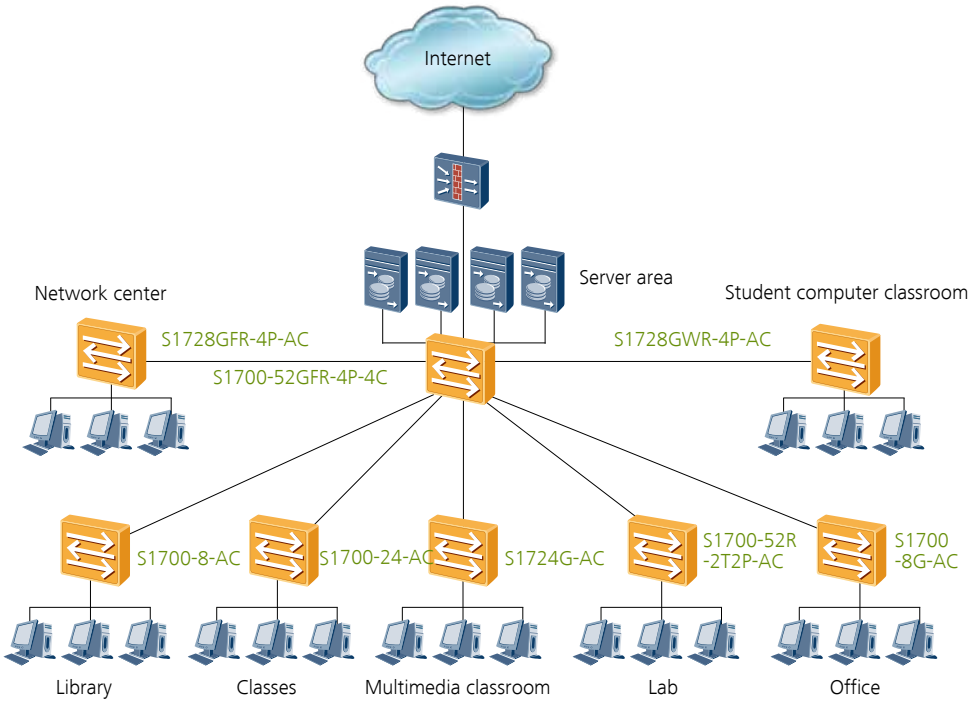
Forwarding performance: This index indicates the wire-speed forwarding capability of a switch when the switch processes 64-byte packets (plus an 8-byte preamble and a 12-byte IFG). It represents the packet header processing capability.

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 Series switches

Port	Optical Module
100 BASE-X Ethernet port	SFP-FE-SX-MM1310 eSFP-FE-LX-SM1310 S-SFP-FE-LH40-SM1310 S-SFP-FE-LH80-SM1550 SFP-FE-LX-SM1310-BIDI(single-mode bidirectional fiber) SFP-FE-LX-SM1550-BIDI(single-mode bidirectional fiber)
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) LE2MGSC40ED0(single-mode bidirectional fiber) SFP-GE-ZBXD1(single-mode bidirectional fiber) SFP-GE-ZBXU1(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 DWDM-SFPGE-1560-61 SFP-1000BaseT

Port	Optical Module
1000BASE-X Ethernet port	SFP-10G-USR OMXD30000 SFP-10G-iLR OSX010000 OSX040N01 SFP-10G-ER-1310 SFP-10G-ZR SFP-10G-BXU1 (single-mode bidirectional fiber) SFP-10G-BXD1(single-mode bidirectional fiber) SFP-10G-ER-SM1330-BIDI(single-mode bidirectional fiber) SFP-10G-ER-SM1270-BIDI(single-mode bidirectional fiber) SFP-10G-ZCW1471 SFP-10G-ZCW1491 SFP-10G-ZCW1511 SFP-10G-ZCW1531 SFP-10G-ZCW1551 SFP-10G-ZCW1571 SFP-10G-ZCW1591 SFP-10G-ZCW1611 SFP-10G-ZDWT

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
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

Certification Category	Description
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

Item	Product Description
1	S1700-16G (16 Ethernet 10/100/1000 ports,AC 110/220V)
2	S1700-24-AC (24 Ethernet 10/100 ports, AC 110/220V)
3	S1724G (24 Ethernet 10/100/1000 ports, AC 110/220V)
4	S1700-24GR (24 Ethernet 10/100/1000 ports, AC 110/220V)
5	S1700-52R-2T2P-AC (48 Ethernet 10/100 ports, 2 Ethernet 10/100/1000 ports and 2 Gig SFP,AC 110/220V)
6	S1720-10GW-2P(8 Ethernet 10/100/1000 ports,2 Gig SFP,AC 110/220V)
7	S1720-10GW-PWR-2P(8 Ethernet 10/100/1000 PoE+ ports,2 Gig SFP,AC 110/220V)
8	S1720-28GWR-4P(24 Ethernet 10/100/1000 ports,4 Gig SFP,AC 110/220V)
9	S1720-28GWR-4X(24 Ethernet 10/100/1000 ports,4 10 Gig SFP+,AC 110/220V)
10	S1720-28GWR-PWR-4P(24 Ethernet 10/100/1000 PoE+ ports,4 Gig SFP,370W POE AC 110/220V)
11	S1720-28GWR-PWR-4X(24 Ethernet 10/100/1000 PoE+ ports,4 10 Gig SFP+,370W POE AC 110/220V)
12	S1720-52GWR-4P(48 Ethernet 10/100/1000 ports,4 Gig SFP,AC 110/220V)
13	S1720-52GWR-4X(48 Ethernet 10/100/1000 ports,4 10 Gig SFP+,AC 110/220V)
14	S1720-52GWR-PWR-4P(48 Ethernet 10/100/1000 PoE+ ports,4 Gig SFP,370W POE AC 110/220V)
15	S1720-52GWR-PWR-4X(48 Ethernet 10/100/1000 PoE+ ports,4 10 Gig SFP+,370W POE AC 110/220V)
16	S1720-28GWR-PWR-4TP(24 Ethernet 10/100/1000,2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP,8 ports PoE+,124W POE AC)
17	S1720X-16XWR(16 10Gig SFP+,AC110/220V)
18	S1720X-32XWR(32 10Gig SFP+,AC110/220V)
19	S1700-28FR-2T2P-AC (24 Ethernet 10/100 ports, 2 Ethernet 10/100/1000 ports and 2 Gig SFP,AC 110/220V)
20	S1700-28GFR-4P-AC (24 Ethernet 10/100 ports, 4 Gig SFP, AC 110/220V)
21	S1700-52FR-2T2P-AC (48 Ethernet 10/100 ports, 2 Ethernet 10/100/1000 ports and 2 Gig SFP,AC 110/220V)
22	S1700-52GFR-4P-AC (48 Ethernet 10/100/1000 ports, 4 Gig SFP, AC 110/220V)
23	S1720-20GFR-4TP (16 Ethernet 10/100/1000 ports, 2 Gig SFP ports, 2 of which are dual-purpose 10/100/1000 Base-t or SFP ports, AC 110/220V)
24	S1720-28GFR-4TP (24 Ethernet 10/100/1000 ports, 2 Gig SFP ports, 2 of which are dual-purpose 10/100/1000 Base-t or SFP ports, AC 110/220V)

Item	Product Description
25	S1720-10GW-2P-E(8 Ethernet 10/100/1000 ports,2 Gig SFP,with license,AC 110/220V)
26	S1720-10GW-PWR-2P-E(8 Ethernet 10/100/1000 PoE+ ports,2 Gig SFP,with license,AC 110/220V)
27	S1720-28GWR-4P-E(24 Ethernet 10/100/1000 ports,4 Gig SFP, with license,AC 110/220V)
28	S1720-28GWR-4X-E(24 Ethernet 10/100/1000 ports,4 10 Gig SFP+, with license,AC 110/220V)
29	S1720-28GWR-PWR-4P-E(24 Ethernet 10/100/1000 ports,4 Gig SFP,PoE+, with license,370W POE AC 110/220V)
30	S1720-28GWR-PWR-4X-E(24 Ethernet 10/100/1000 ports,4 10 Gig SFP+, PoE+,with license,370W POE AC 110/220V)
31	S1720-52GWR-4P-E(48 Ethernet 10/100/1000 ports,4 Gig SFP, with license,AC 110/220V)
32	S1720-52GWR-4X-E(48 Ethernet 10/100/1000 ports,4 10 Gig SFP+, with license,AC 110/220V)
33	S1720-52GWR-PWR-4P-E(48 Ethernet 10/100/1000 ports,4 Gig SFP,PoE+, with license,370W POE AC 110/220V)
34	S1720-52GWR-PWR-4X-E(48 Ethernet 10/100/1000 ports,4 10 Gig SFP+, PoE+,with license,370W POE AC 110/220V)
35	S1720-28GWR-PWR-4TP-E(24 Ethernet 10/100/1000,2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, 8 ports PoE+,with license,124W POE AC,front access)
36	S1720X-16XWR-E(16 10Gig SFP+,with license,AC110/220V)
37	S1720X-32XWR-E(32 10Gig SFP+,with license,AC110/220V)

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

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