

**S1700 Unmanaged Series Switches
V100R007C02**

Product Description

Issue	01
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About This Document

Purpose

This document describes the product positioning, product characteristics, product architecture, link features, service features, networking and applications, operation, maintenance and system technical specifications of S1700.

This document provides guides to get the information about how to construct a network.




Intended Audience



This document is intended for:

- Policy planning engineers
- Installation and commissioning engineers
- NM configuration engineers
- Technical support engineers
- FAE
- Network monitoring engineers
- System maintain engineers

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
 WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

Symbol	Description
 NOTICE	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results. NOTICE is used to address practices not related to personal injury.
 NOTE	Calls attention to important information, best practices and tips. NOTE is used to address information not related to personal injury, equipment damage, and environment deterioration.

Change History

Changes between document issues are cumulative. The latest document issue contains all the changes made in earlier issues.

Issue 01 (2013-12-06)

Initial field final release.

The S1700 product and the version upgrade

Product Version	Product Type	Description
V100R006C00	S1724G	Unmanaged Switches 24 10/100/1000BASE-T Ethernet interfaces
	S1728GWR-4P	Managed Switches 24 10/100/1000BASE-T Ethernet interfaces +4 1000BASE-X Ethernet optical interfaces
V100R007C00	S1700-8-AC	Unmanaged Switches 8 10/100BASE-T Ethernet interfaces
	S1700-8G-AC	Unmanaged Switches 8 10/100/1000BASE-T Ethernet interfaces
	S1700-24-AC	Unmanaged Switches 24 10/100BASE-T Ethernet interfaces
	S1700-52R-2T2P-AC	Unmanaged Switches 48 10/100BASE-T Ethernet interfaces +2 10/100/1000BASE-T Ethernet interfaces +2 1000BASE-X Ethernet optical interfaces
	S1700-28FR-2T2P-AC	Managed Switches 24 10/100BASE-T Ethernet interfaces +2 10/100/1000BASE-T Ethernet interfaces +2 1000BASE-X Ethernet optical interfaces
	S1700-28GFR-4P-AC	Managed Switches 24 10/100/1000BASE-T Ethernet interfaces +4 1000BASE-X Ethernet optical interfaces
	S1700-52FR-2T2P-AC	Managed Switches 48 10/100BASE-T Ethernet interfaces +2 10/100/1000BASE-T Ethernet interfaces +2 1000BASE-X Ethernet optical interfaces
	S1700-52GFR-4P-AC	Managed Switches 48 10/100/1000BASE-T Ethernet interfaces +4 1000BASE-X Ethernet optical interfaces
V100R007C02	S1700-24GR	Unmanaged Switches 24 10/100/1000BASE-T Ethernet interfaces

This manual only describes the version V100R007C02 contains unmanaged switches.

S1700 product naming rules

S1700-24GR
ABCD EFH

Table 1-1 Detail description of position meaning

Position	Meaning	Detail Description
A	A series of products (1)	S: switch series
B	Cassette type switch (1)	1: SMB
C	Sales range(1)	7: enterprise network market
D	Switch series (2)	10 said upgrades, such as 10/20/50 Upgrade bits according to individual specifications, such as 01/02/03
E	Port number(2)	Device has the total number of ports
F	Downstream port type(1)	no: downlink port MB, G: downward gigabit port, X: downlink port ten billion
G	Network type(1)	no, no network, W: WEB network management, F: all network management
H	Placement type(1)	no: desktop, R: frame type

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1 Product Positioning and Features

1.1 Product Positioning

The S1700 Series Ethernet switches provide the access and data transport functions. They are developed by Huawei to meet the requirements for reliable access and high-quality transmission of multiple services on the enterprise network.

Positioned for the access layer of the enterprise network, the S1700 provides large capacity, high port density, and cost-effective packet forwarding capabilities. In addition, With the S1700 unmanaged switches to build a highly reliable network topology, and has a good scalability.

This manual introduction the S1700 V100R007C02 Unmanaged Switches is S1700-24-GR.

1.2 Product Characteristics

1.2.1 Flexible Networking Capability

The S1700 unmanaged switches provides 24 10/100/1000BASE-T Ethernet electrical interfaces.

1.2.2 Energy-Saving Design

The S1700 unmanaged switches adopts the following measures to save energy:

- Adopts natural heat dissipation so that power consumed by fans is saved.
- The chip switches to the power saving mode when no connected device is detected on a service interface, that is, the interface is idle.
- It uses highly-integrated and energy-saving chips produced through advanced processing techniques. With the help of the intelligent device management system, the chips not only improve system performance but also greatly reduce power consumption of the entire system.

Natural heat dissipation has the following advantages:

- The product reliability is high.
- There is no noise pollution.
- You do not need to maintain the fans, which saves the maintenance cost.

- The system does not have additional power consumption generated by fans, which improves the power efficiency.
- Boards are prevented from being eroded.

1.2.3 Advanced Lightning Protection Technologies

The S1700 unmanaged switches adopts the Huawei patented lightning protection technologies to protect the equipment. The lightning protection technologies reduce the probability of damages caused by lightning, thus greatly improving the device reliability.

2 Product Architecture

2.1 Overview

S1700-24GR adopts an integrated hardware platform. Its hardware system consists of the chassis, power supply and main board.

The S1700 V100R007C02 version includes 1 unmanaged series switches is S1700-24GR.


2.2 Device Structure

This section describes the structure of the S1700 unmanaged switches.

2.2.1 S1700 Appearances

Table 2-1 shows the front views of S1700 unmanaged switches.

Table 2-1 S1700 unmanaged switches front views

Model	Image
S1700-24GR	

No	Description
1	Power/Run LED
2	1-24 10/100/1000BAS-T Ethernet interfaces LEDs
3	24 10/100/1000BASE-T Ethernet interfaces

Table 2-2 shows the rear views of S1700 unmanaged switches.

Table 2-2 S1700 unmanaged switches rear views

Model	Image
S1700-24GR	 The image shows the rear panel of an S1700-24GR switch. It is a black, horizontal unit. On the left side, there is a ground screw labeled '2'. On the right side, there is an AC power jack labeled '1' and a power cable grommet hole labeled '3'.

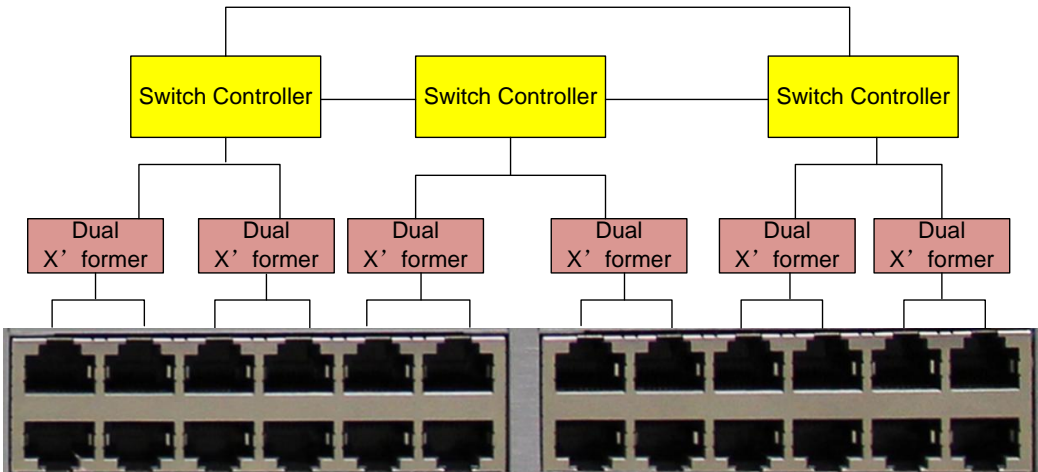
No	Description
1	AC jack
2	Ground screw
3	Power cable grommet hole

 **NOTE**
This separate protective earthing terminal (ground screw) must be permanently connected to earth.

2.3 Hardware Modules

Figure 2-1 shows the logical structure of hardware modules of the S1700-24GR.

Figure 2-1 Logical structure of hardware modules of the S1700-24GR



2.3.2 Power Supply

S1700-24GR only supports the AC power supply.

Table 2-3 S1700 unmanaged switches Power supply

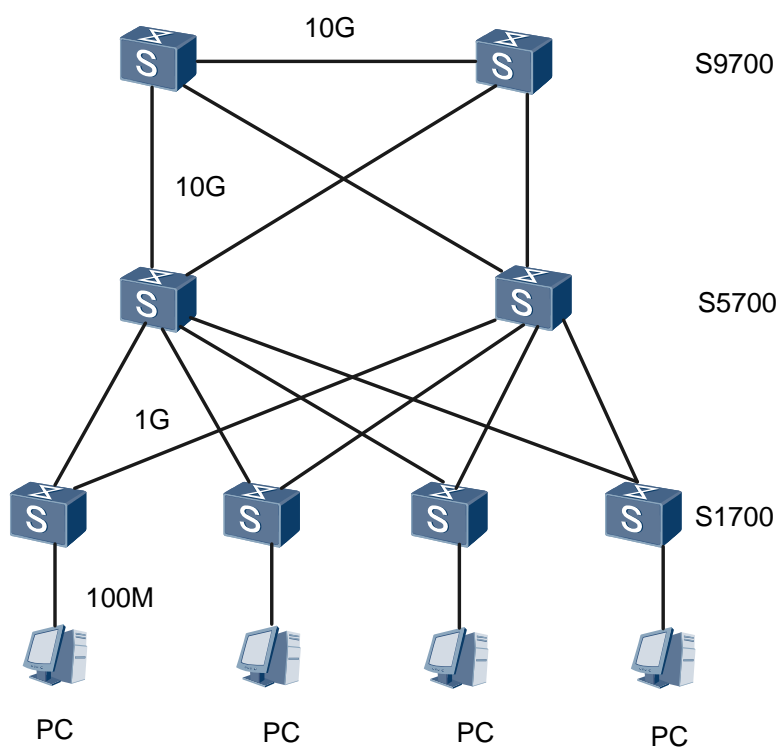
Device Name	AC	DC
S1700-24GR	Y	N

3 Networking and Applications

3.1 Access on an Enterprise Network

In an enterprise network and a campus network, the S1700 unmanaged switches access to end users through the Fast/Gigabit copper port, in order to constitute the Fast/Gigabit to desktop total solution to meet customers high-bandwidth, multi-service requirements.

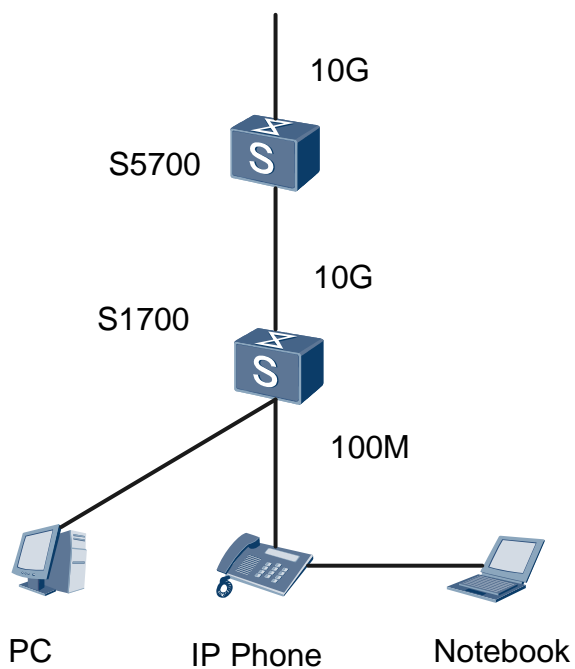
Figure 3-1 Networking diagram of the S1700-24GR



3.2 Desktop Access

With the S1700 unmanaged switches compact design; it is easily to provide a variety of desktop access.

Figure 3-2 Desktop Access of the S1700-24GR



4 System Technical Specifications

4.1 Physical Specifications

Table 4-1 Physical specifications

Item		Description
Dimensions (width x depth x height)		S1700-24GR: 442.0mm×220.0mm×43.6mm
Maximum power (full configuration)		S1700-24GR: 15.3W
Weight		≤ 3 kg
AC input voltage	Rated voltage	~100-240V AC; 50/60Hz
	Maximum voltage	~90-264V AC; 47/63Hz
Temperature	operating temperature	0 °C to 45 °C
	Storage temperature	-20 °C to 70 °C
Relative humidity		5%RH to 95%RH
Altitude	Long-term altitude	0 m to 2000 m
	Storage altitude	Altitude of 1800m to 5000m above sea level for every 220m, reducing 1 °C temperature specification.

4.2 System Configuration

Table 4-2 System configuration

Item	Parameter
Switching capacity	S1700-24GR: 48Gbit/s

Item	Parameter
Packet forwarding capacity	S1700-24GR: 35.71Mpps
Switching mode	Store and forward mode
message buffering	Each piece of equipment is not less than 512K bytes port static occupy satisfy basic message forwarding cache ports can be dynamically shared cache system