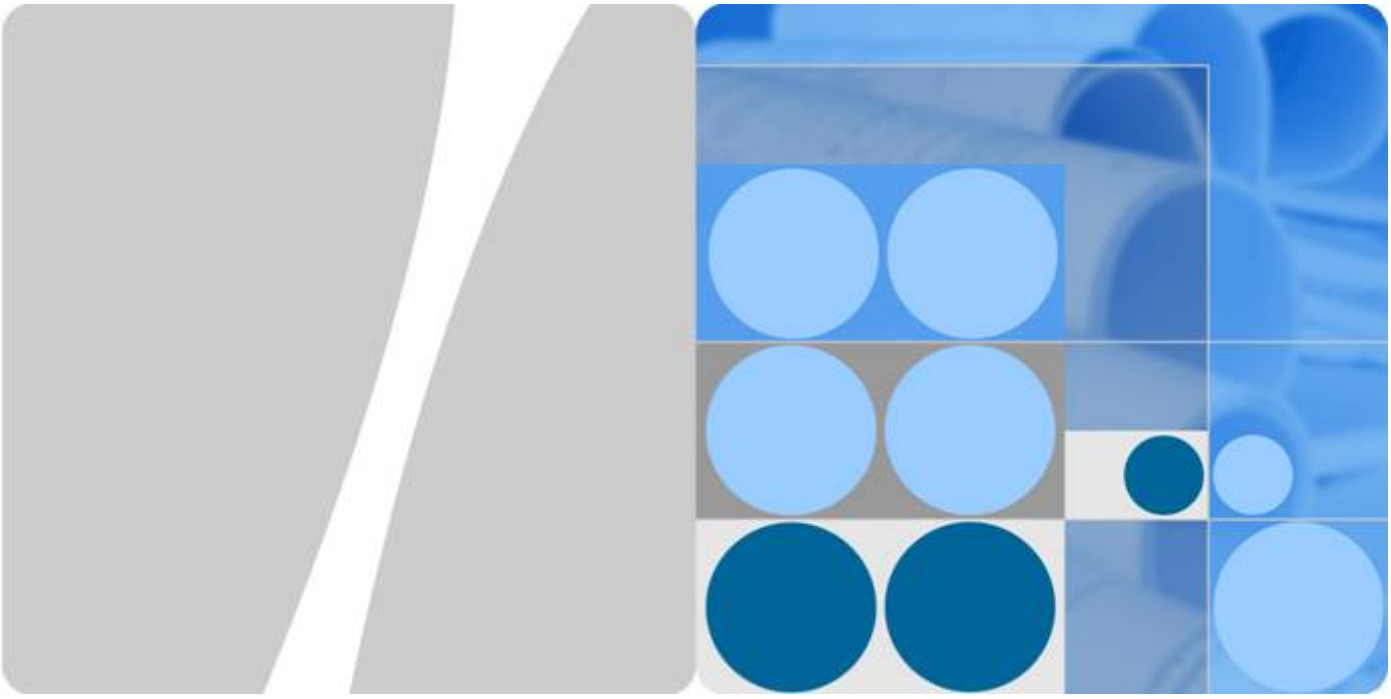

S1700 Unmanaged Series Ethernet Switches

Product Description

Issue 04

Date 2017-05-04

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About This Document

Intended Audience

Depending on management types, S1700 series switches are classified into unmanaged switches, Web managed switches, and SNMP managed switches.

This document describes the S1700 unmanaged switches, including positioning, features, hardware structure, application scenarios, and technical specifications.

This document is intended for:

- Network planning engineers
- Hardware installation engineers
- Software commissioning engineers
- Data configuration engineers
- On-site maintenance engineers
- Network monitoring engineers
- System maintenance 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.

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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. Therefore, the latest document version contains all updates made to previous versions.

Changes in Issue 04 (2017-05-04)

This is the fourth official release.

Changes in Issue 03 (2017-02-14)

This is the third official release.

Changes in Issue 02 (2016-12-31)

This is the second official release.

Changes in Issue 01 (2015-06-20)

This is the first official release.

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1 Naming Convention

Figure 1-1 shows the S1700 unmanaged switch naming conventions.

Figure 1-1 S1700 unmanaged switch naming conventions

Table 1-1 explains the S1700 unmanaged switch naming conventions.

Table 1-1 S1700 unmanaged switch naming convention description

Identifier	Meaning	Description
A	Product series (1 bit)	S: switch series
B	Fixed switch type (1 bit)	1: SMB
C	Target market (1 bit)	7: enterprise network market
D	Switch series (2 bits)	The leftmost one bit indicates the generation, for example, 10/20/50. The rightmost one bit indicates the specification upgrade, for example, 01/02/03.
E	Number of ports (2 bits)	Total number of uplink and downlink ports
F	Downlink port type (1 bit)	None: 100M downlink port G: 1000M downlink port X: 10GE downlink port

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Identifier	Meaning	Description
G	Network management type (1 bit)	None: unmanaged W: Web managed F: SNMP managed
H	Installation type (1 bit)	None: desktop R: rack installed
I	Number of ports (1 bit)	Number of uplink ports
J	Uplink port type (1 bit)	P: Uplink SFP T: Uplink RJ45 X: Uplink 10GE
K	Power type (2 bits)	None: AC by default AC: alternating current

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2 Product Overview

About This Chapter

2.1 Product Positioning

2.2 Product Features

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2.1 Product Positioning

S1700 unmanaged switches do not support Web-based or SNMP-based management.

The S1700 unmanaged switch is deployed at the access layer of an enterprise network to deliver cost-effective packet switching capability. It provides high-quality data transmission for enterprises. The S1700 unmanaged switch helps enterprises construct reliable networks that have high scalability.

This document applies to the S1700 unmanaged switches listed in **Table 2-1**.

NOTICE

The Quidway S1700 switches, except S1700-8-AC and S1700-8G-AC, are class A products. The switches that are operating may cause radio interference. Customers need to take prevention measures.

Table 2-1 S1700 unmanaged switches

Port Type	Product Model
100M uplink and downlink	S1700-8-AC
	S1700-24-AC
	S1700-16R
	S1700-24R
100M access, 1000M uplink	S1700-26R-2T
	S1700-52R-2T2P-AC
GE uplink and downlink	S1700-8G-AC
	S1700-16G
	S1700-24GR
	S1724G
1000M access, 10GE uplink	S1700-28GR-4X
	S1700-52GR-4X

2.2 Product Features

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Flexible Networking Capability

The S1700 unmanaged switch provides 10/100/1000BASE-T, 1000BASE-X, and 10GBASE-X ports.

The S1700 unmanaged switch provides swappable Small Form-Factor Pluggable (SFP) optical modules for GE optical fiber connections. The S1700 unmanaged switch provides swappable Small Form-Factor Pluggable Plus (SFP+) optical modules for 10GE optical fiber connections. The length of optical fibers can be selected according to the transmission distance.

Energy-Saving Design

- The S1700 unmanaged switch adopts natural heat dissipation so that power consumed by fans is saved and noise is reduced.
- The chip switches to the power saving mode when no connected device is detected on a service port, that is, the port is idle.
- The switch uses energy-saving chips. 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.

NOTE

The S1700-52GR-4X has a fan and use forced air cooling.

Cutting-Edge Surge Protection Capability

The S1700 unmanaged switch adopts the Huawei patented surge protection technology to protect the equipment. The 6kV or 7KV surge protection capability (only the S1700-28GR-4X and S1700-52GR-4X) reduces the probability of damages caused by lightning, even when the equipment cannot be grounded.

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3 Application Scenarios

About This Chapter

3.1 Enterprise Network Access

3.2 Desktop Access

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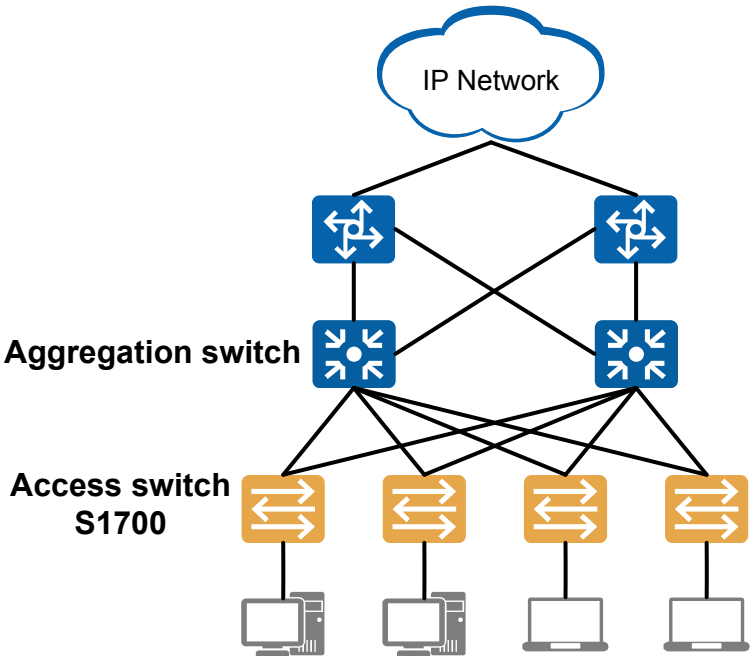
3.1 Enterprise Network Access

On an enterprise network or a campus network, S1700 unmanaged switches connect to terminals through 100M/1000M electrical ports to provide 100M/1000M-to-desktop solution to enterprises. The S1700 unmanaged switches meet the high-bandwidth and multi-service access requirements of enterprises.

Figure 3-1 S1700 at the access layer of enterprise network



3.2 Desktop Access

The S1700 unmanaged switch provides various desktop access functions with its compact design.

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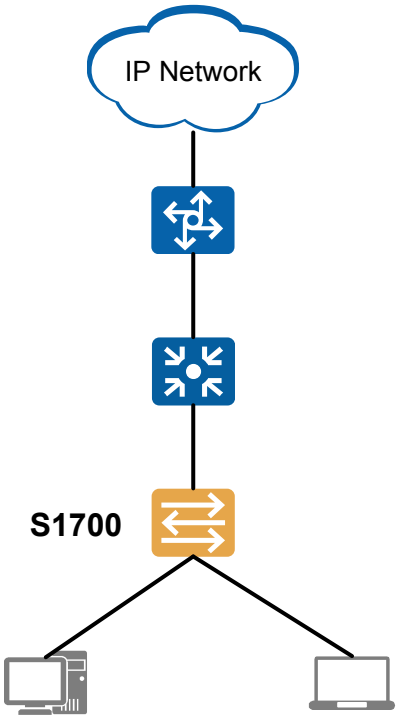
Figure 3-2 Desktop access



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4 Hardware Structure

About This Chapter

4.1 S1700-8-AC
4.2 S1700-8G-AC
4.3 S1700-16R
4.4 S1700-16G
4.5 S1700-24-AC
4.6 S1700-24R
4.7 S1724G
4.8 S1700-24GR
4.9 S1700-26R-2T
4.10 S1700-52R-2T2P-AC
4.11 S1700-28GR-4X
4.12 S1700-52GR-4X

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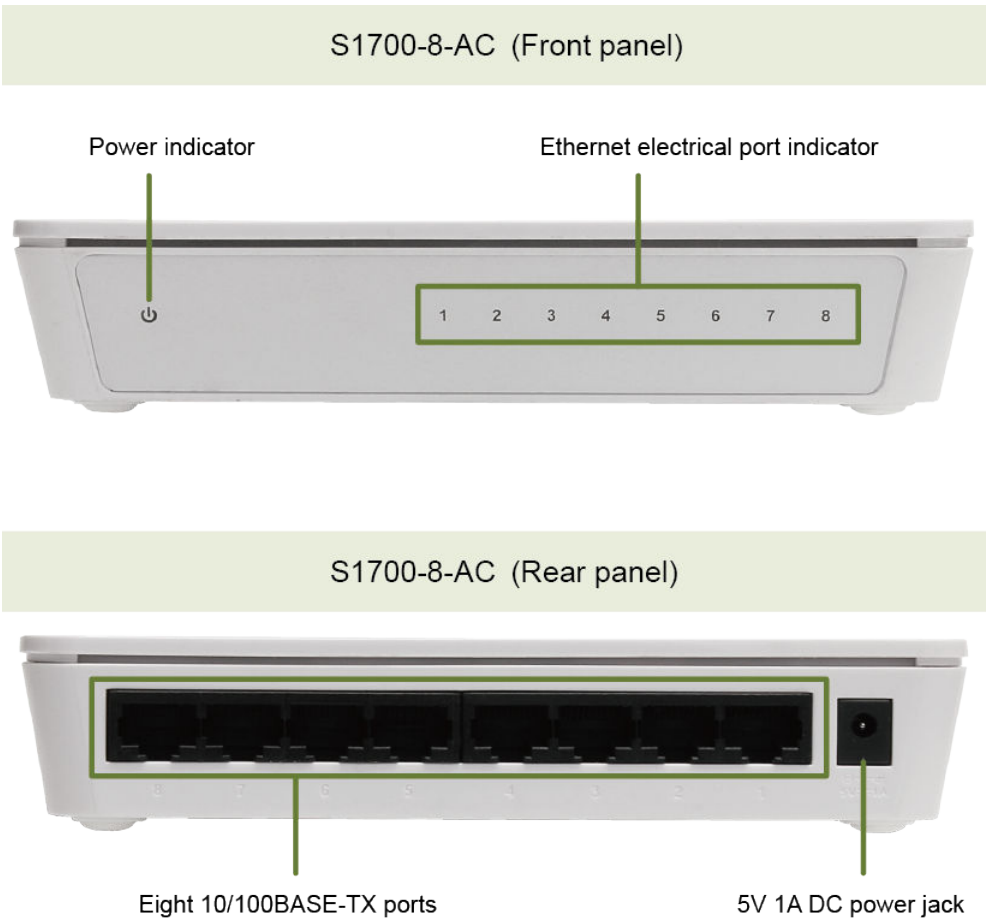
4.1 S1700-8-AC

Appearance

Figure 4-1 shows appearance of an S1700-8-AC.

Figure 4-1 Appearance of an S1700-8-AC



An S1700-8-AC supports only DC power input. It uses a power adapter to provide power for the entire switch.

Indicator

Table 4-1 Indicators of S1700-8-AC

Indicator	Status	Description
Power indicator	Steady green	The switch is powered on.
	Off	The switch is powered off.

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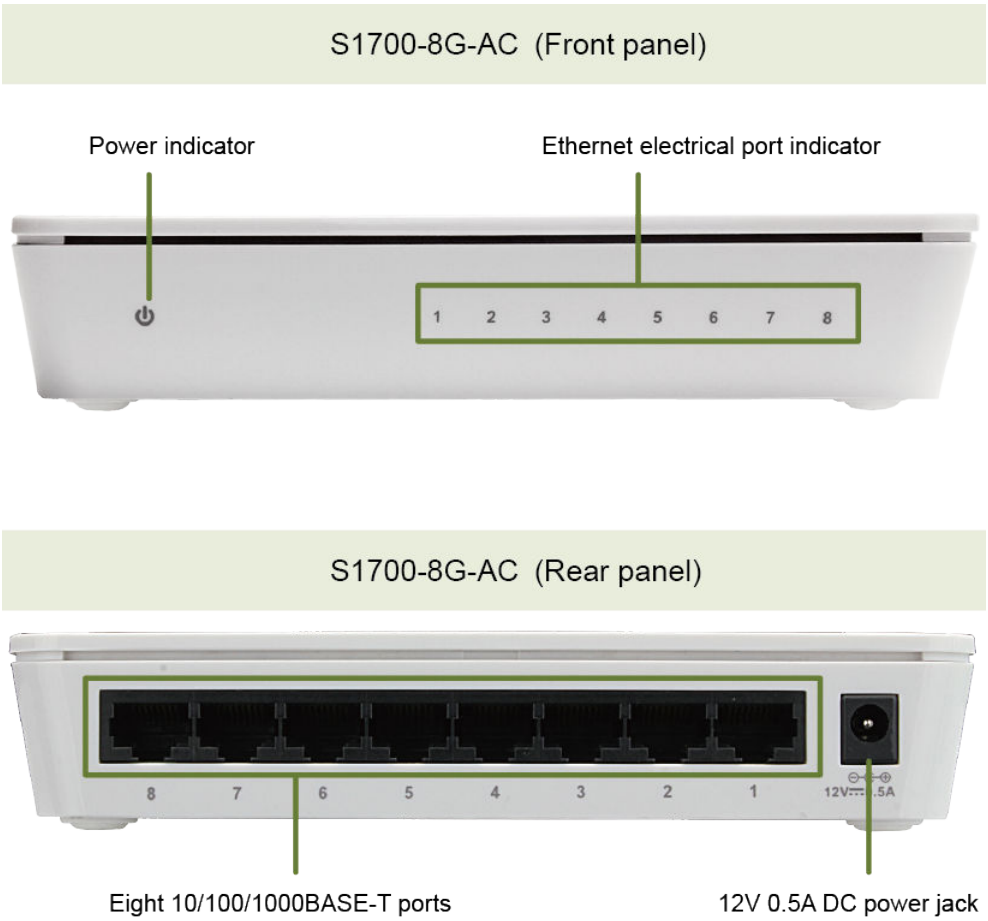
Indicator	Status	Description
Ethernet electrical port indicator	Steady green	The port is connected at the rate of 10/100 Mbit/s.
	Blinking green	The port is transmitting data.
	Off	The port is not connected.

4.2 S1700-8G-AC

Appearance

Figure 4-2 shows appearance of an S1700-8G-AC.

Figure 4-2 Appearance of an S1700-8G-AC



An S1700-8G-AC supports only DC power input. It uses a power adapter to provide power for the entire switch.

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Indicator

Table 4-2 Indicators of S1700-8G-AC

Indicator	Status	Description
Power indicator	Steady green	The switch is powered on.
	Off	The switch is powered off.
Ethernet electrical port indicator	Steady green	The port is connected at the rate of 1000 Mbit/s.
	Blinking green	The port is connected at the rate of 1000 Mbit/s and transmitting data.
	Steady yellow	The port is connected at the rate of 10/100 Mbit/s.
	Blinking yellow	The port is connected at the rate of 10/100 Mbit/s and transmitting data.
	Off	The port is not connected.

4.3 S1700-16R

Appearance

Figure 4-3 shows appearance of an S1700-16R.

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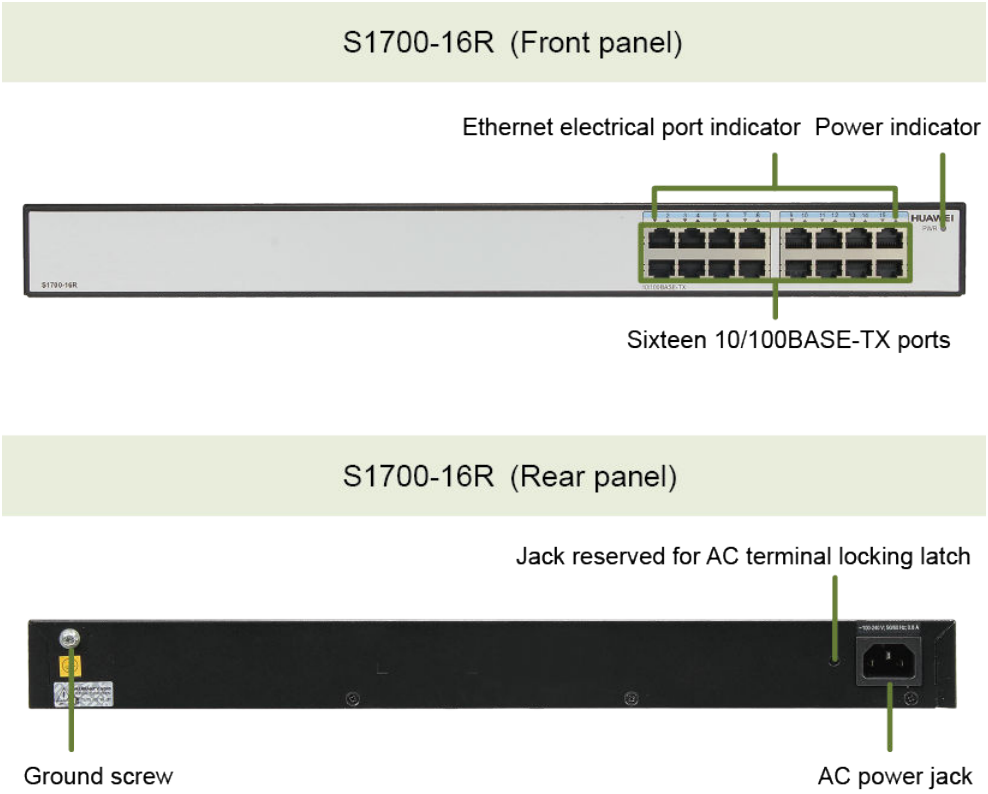
Figure 4-3 Appearance of an S1700-16R



An S1700-16R supports only AC power supply.

NOTE

The switch completes startup one minute after it is powered on.

Indicator

The indicator description for S1700-16R is the same as that for S1700-8-AC. For details, see the indicator description for **4.1 S1700-8-AC**.

4.4 S1700-16G

Appearance

Figure 4-4 shows appearance of an S1700-16G.

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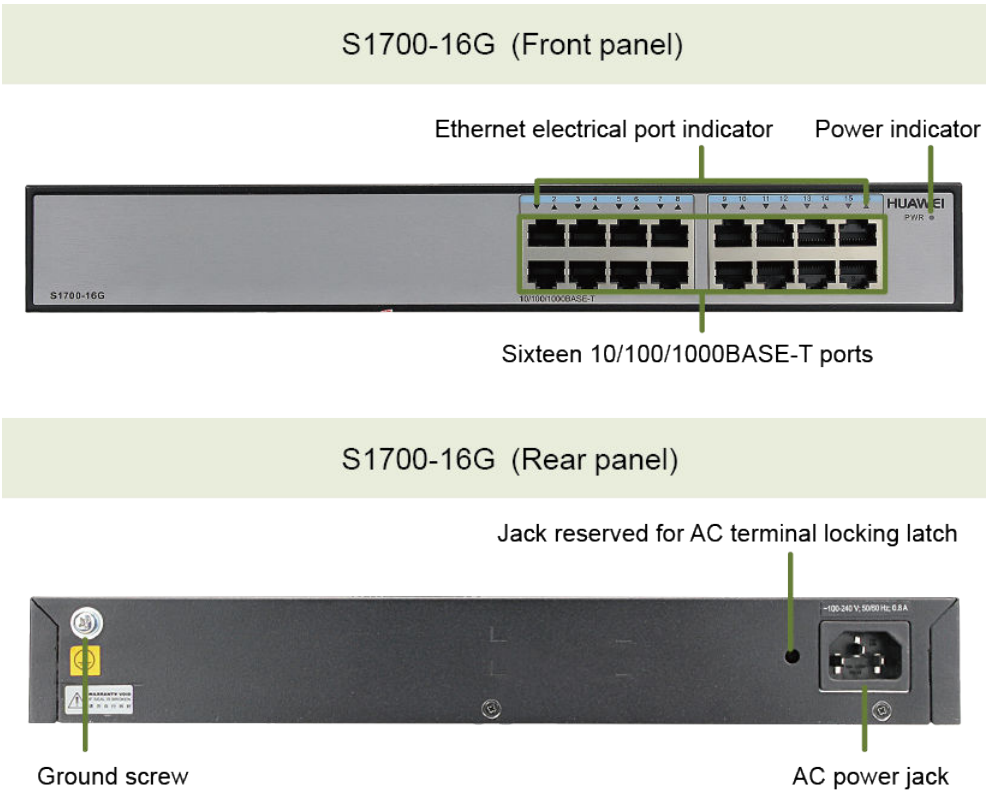
Figure 4-4 Appearance of an S1700-16G



An S1700-16G supports only AC power supply.

Indicator

The indicator description for S1700-16G is the same as that for S1700-8G-AC. For details, see the indicator description for **4.2 S1700-8G-AC**.

4.5 S1700-24-AC

Appearance

Figure 4-5 shows appearance of an S1700-24-AC.

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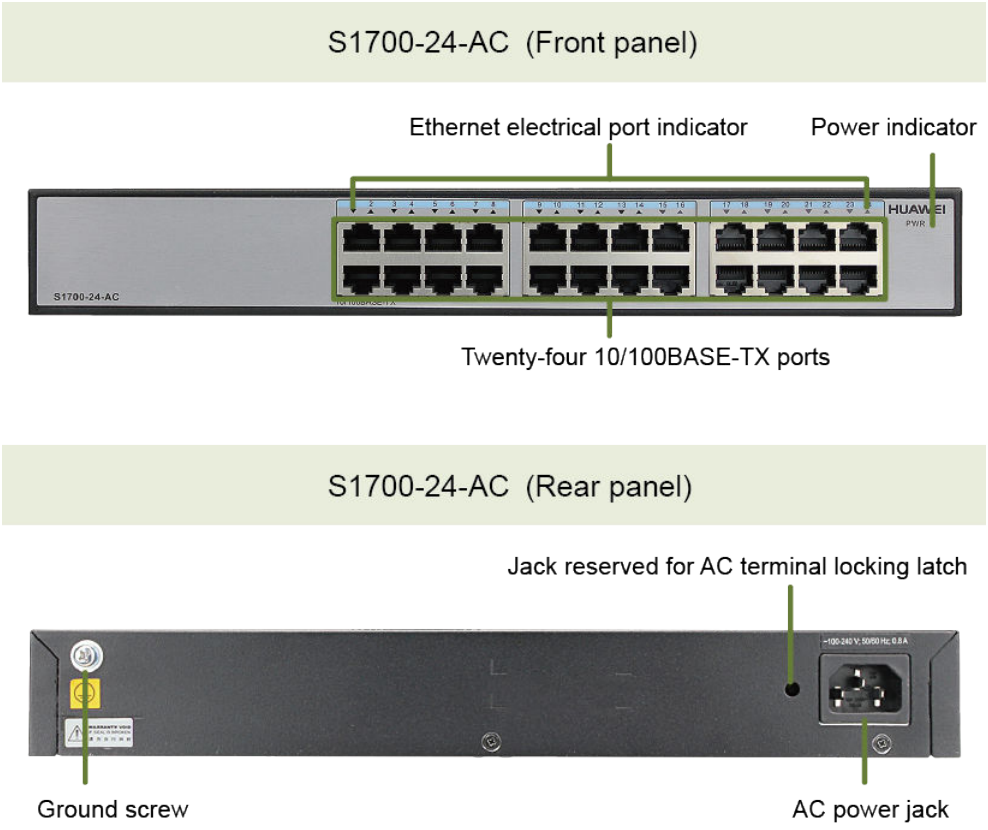
Figure 4-5 Appearance of an S1700-24-AC



An S1700-24-AC supports only AC power supply.

Indicator

The indicator description for S1700-24-AC is the same as that for S1700-8-AC. For details, see the indicator description for **4.1 S1700-8-AC**.

4.6 S1700-24R

Appearance

Figure 4-6 shows appearance of an S1700-24R.

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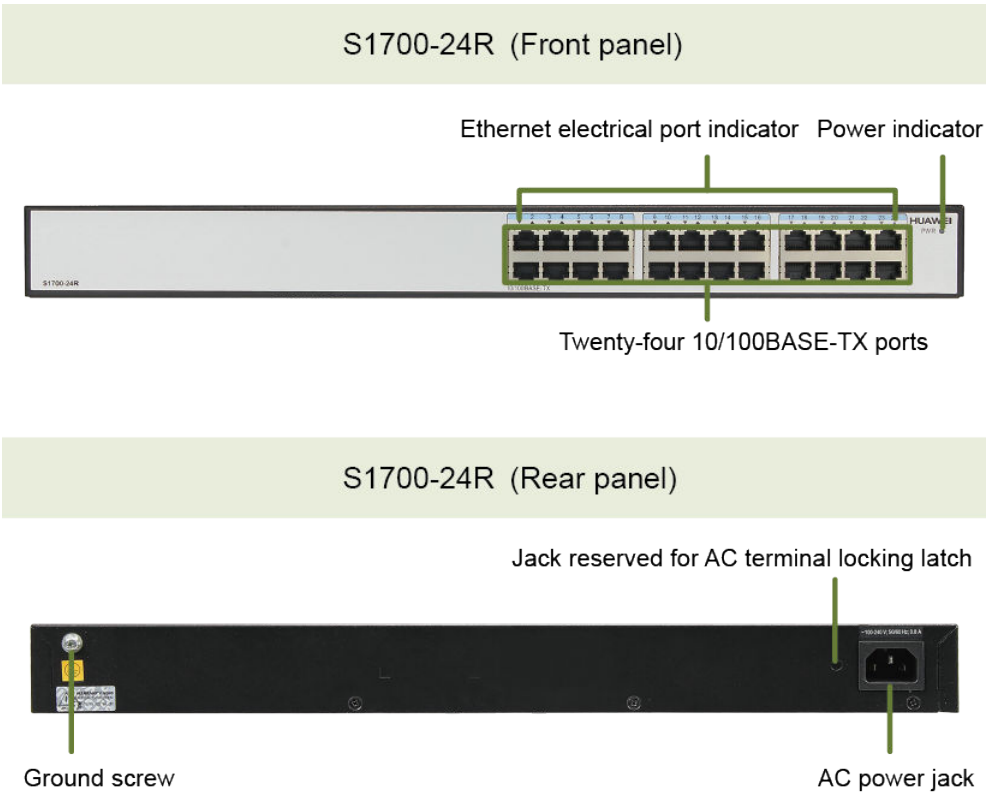
Figure 4-6 Appearance of an S1700-24R



An S1700-24R supports only AC power supply.

NOTE

The switch completes startup one minute after it is powered on.

Indicator

The indicator description for S1700-24R is the same as that for S1700-8-AC. For details, see the indicator description for **4.1 S1700-8-AC**.

4.7 S1724G

Appearance

Figure 4-7 shows appearance of an S1724G.

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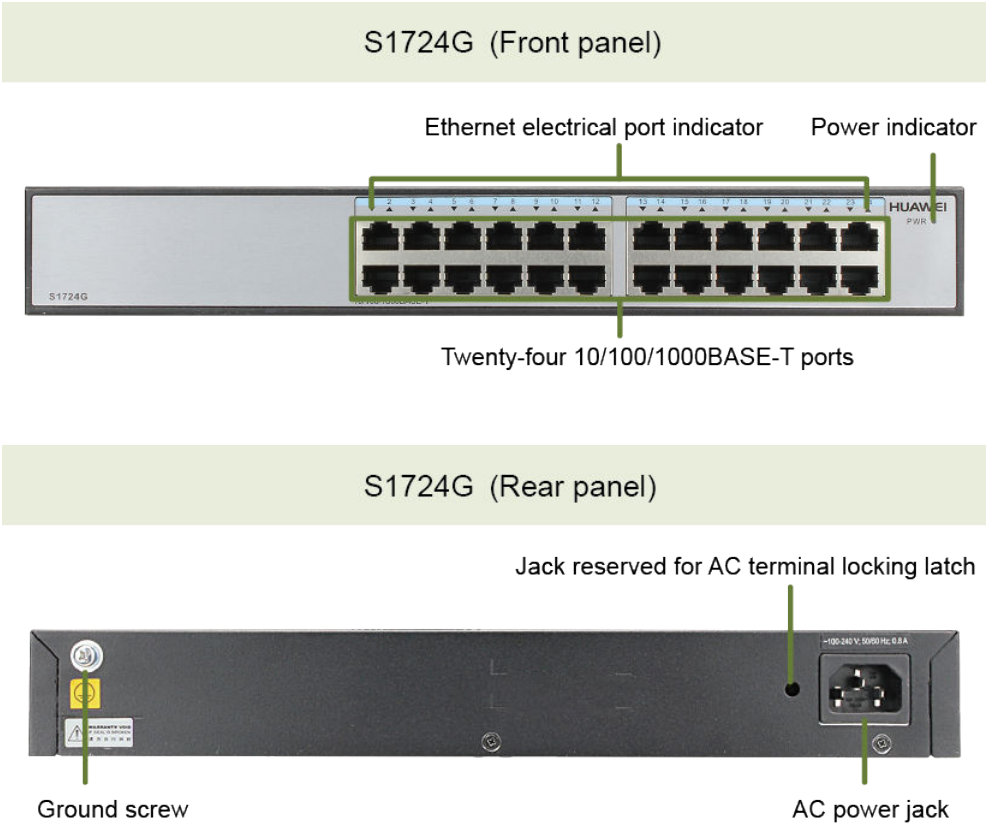
Figure 4-7 Appearance of an S1724G



An S1724G supports only AC power supply.

Indicator

The indicator description for S1724G is the same as that for S1700-8G-AC. For details, see the indicator description for **4.2 S1700-8G-AC**.

4.8 S1700-24GR

Appearance

Figure 4-8 shows appearance of an S1700-24GR.

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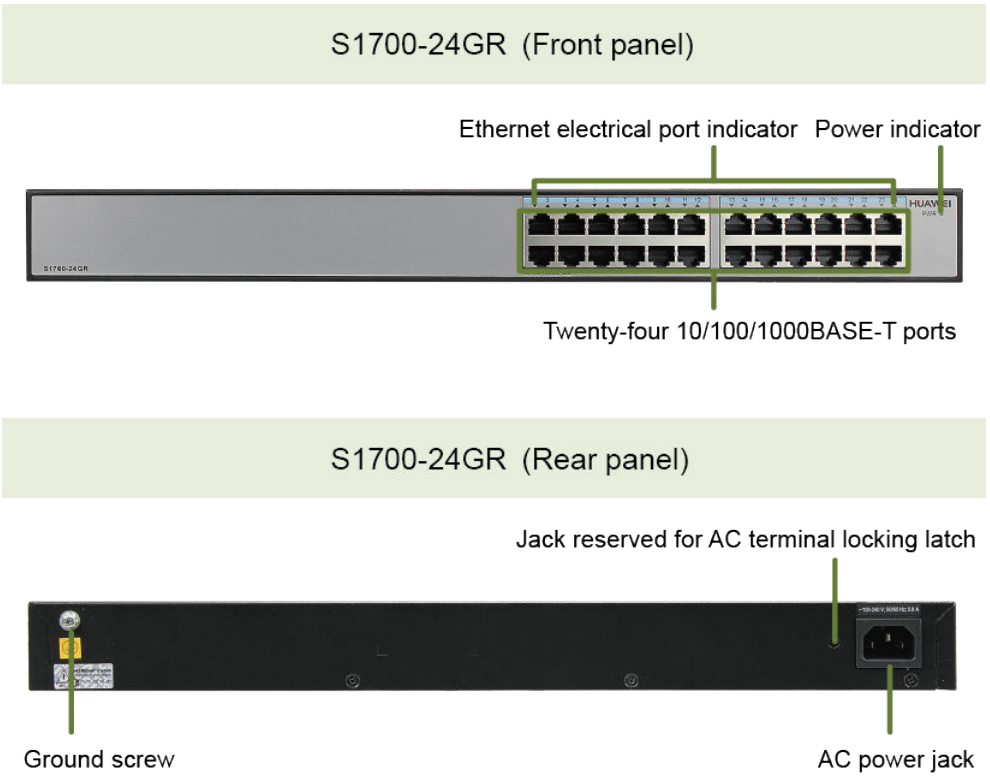
Figure 4-8 Appearance of an S1700-24GR



An S1700-24GR supports only AC power supply.

Indicator

The indicator description for S1700-24GR is the same as that for S1700-8G-AC. For details, see the indicator description for **4.2 S1700-8G-AC**.

4.9 S1700-26R-2T

Appearance

Figure 4-9 shows appearance of an S1700-26R-2T.

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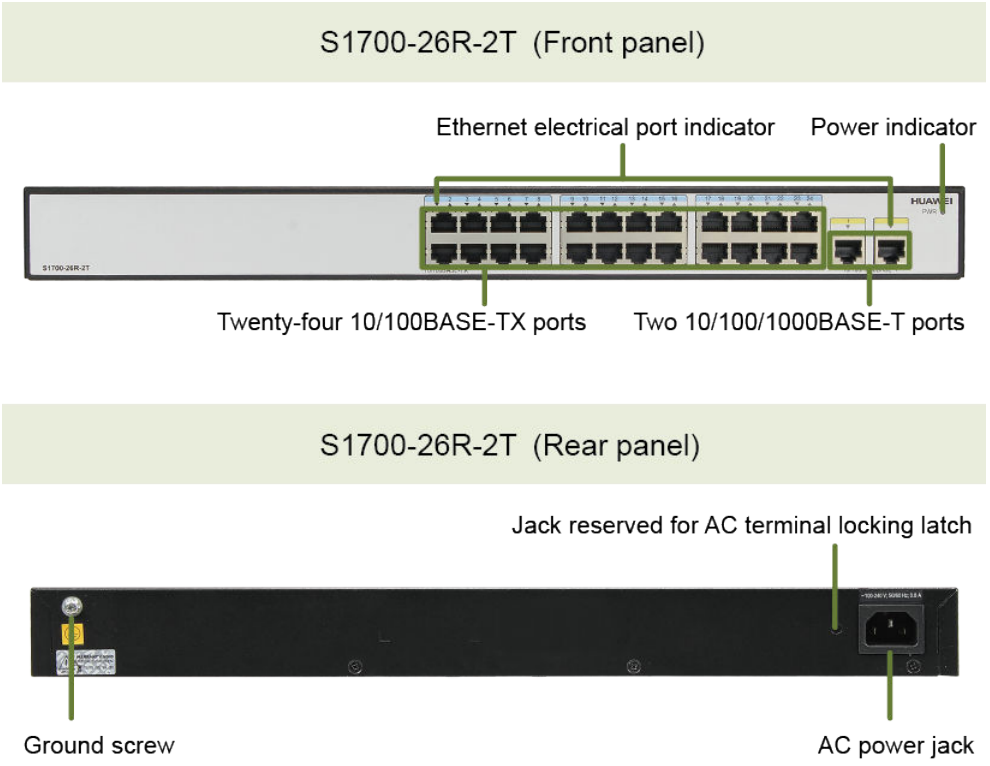
Figure 4-9 Appearance of an S1700-26R-2T



An S1700-26R-2T supports only AC power supply.

Indicator

Table 4-3 Indicators of S1700-26R-2T

Indicator	Status	Description
Power indicator	Steady green	The switch is powered on.
	Off	The switch is powered off.
10/100BASE-TX port indicator	Steady green	The port is connected at the rate of 10/100 Mbit/s.
	Blinking green	The port is transmitting data.
	Off	The port is not connected.
10/100/1000BASE-T port indicator	Steady green	The port is connected at the rate of 1000 Mbit/s.
	Blinking green	The port is connected at the rate of 1000 Mbit/s and transmitting data.

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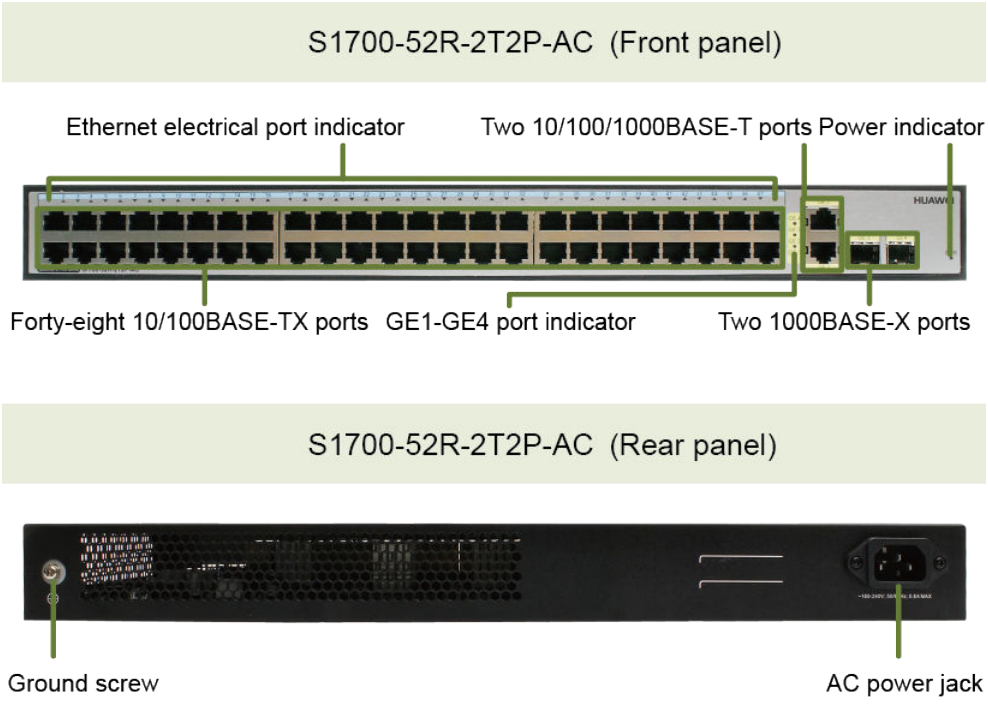
Indicator	Status	Description
	Steady yellow	The port is connected at the rate of 10/100 Mbit/s.
	Blinking yellow	The port is connected at the rate of 10/100 Mbit/s and transmitting data.
	Off	The port is not connected.

4.10 S1700-52R-2T2P-AC

Appearance

Figure 4-10 shows appearance of an S1700-52R-2T2P-AC.

Figure 4-10 Appearance of an S1700-52R-2T2P-AC



An S1700-52R-2T2P-AC supports only AC power supply.

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Indicator

Table 4-4 Indicators of S1700-52R-2T2P-AC

Indicator	Status	Description
Power indicator	Steady green	The switch is powered on.
	Off	The switch is powered off.
Ethernet electrical port indicator	Steady green	The port is connected at the rate of 10/100 Mbit/s.
	Blinking green	The port is transmitting data.
	Off	The port is not connected.
GE1-GE2 electrical port indicator	Steady green	The port is connected at the rate of 1000 Mbit/s.
	Blinking green	The port is connected at the rate of 1000 Mbit/s and transmitting data.
	Steady yellow	The port is connected at the rate of 10/100 Mbit/s.
	Blinking yellow	The port is connected at the rate of 10/100 Mbit/s and transmitting data.
	Off	The port is not connected.
GE3-GE4 optical port indicator	Steady green	The port is connected at the rate of 1000 Mbit/s.
	Blinking green	The port is connected at the rate of 1000 Mbit/s and transmitting data.
	Off	The port is not connected.

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Optical Module

Table 4-5 Table 2-1 Optical modules supported by S1700-52R-2T2P-AC

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-1591 CWDM-SFPGE-1611

4.11 S1700-28GR-4X

Appearance

Figure 4-11 shows the appearance of an S1700-28GR-4X unmanaged switch.

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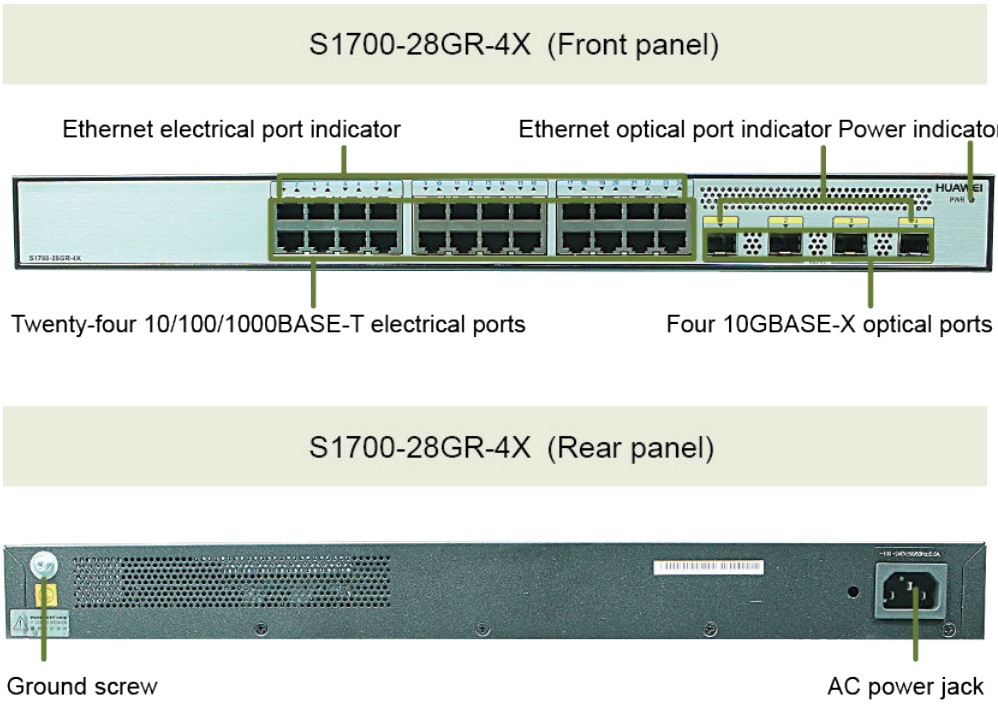
Figure 4-11 Appearance of an S1700-28GR-4X unmanaged switch



An S1700-28GR-4X unmanaged switch supports only AC power input.

Indicator

Table 4-6 Description of indicators on the S1700-28GR-4X

Indicator	Status	Description
Power indicator	Steady green	The switch has been powered on.
	Off	The switch is powered off.
GE electrical port indicator	Steady green	The port has established a 1000M connection.
	Blinking green	The port is transmitting data at 1000 Mbit/s.
	Steady yellow	The port has established a 10/100M connection.
	Blinking yellow	The port is transmitting data at 10/100 Mbit/s.
	Off	The port is not connected.
10GE optical port indicator	Steady green	The port has established a 1000M/10G connection.

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Indicator	Status	Description
	Blinking green	The port is transmitting data.
	Off	The port is not connected.

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Optical Module

Table 4-7 Optical modules for the S1700-28GR-4X

Port	Applicable Optical Module
10GBase-X 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-fiber bidirectional) SFP-GE-LX-SM1490-BIDI (single-fiber bidirectional) LE2MGSC40DE0 (single-fiber bidirectional) LE2MGSC40ED0 (single-fiber bidirectional) SFP-GE-ZBXD1 (single-fiber bidirectional) SFP-GE-ZBXU1 (single-fiber bidirectional) SFP-GE-BXU1-SC (single-fiber bidirectional) CWDM-SFPGE-1471 CWDM-SFPGE-1491 CWDM-SFPGE-1511 CWDM-SFPGE-1531 CWDM-SFPGE-1551 CWDM-SFPGE-1571 CWDM-SFPGE-1591 CWDM-SFPGE-1611 DWDM-SFPGE-1560-61 GE copper module (SFP-1000BaseT) SFP-10G-USR OMXD30000 SFP-10G-iLR OSX010000 SFP-10G-BXU1 (single-fiber bidirectional) SFP-10G-BXD1 (single-fiber bidirectional)

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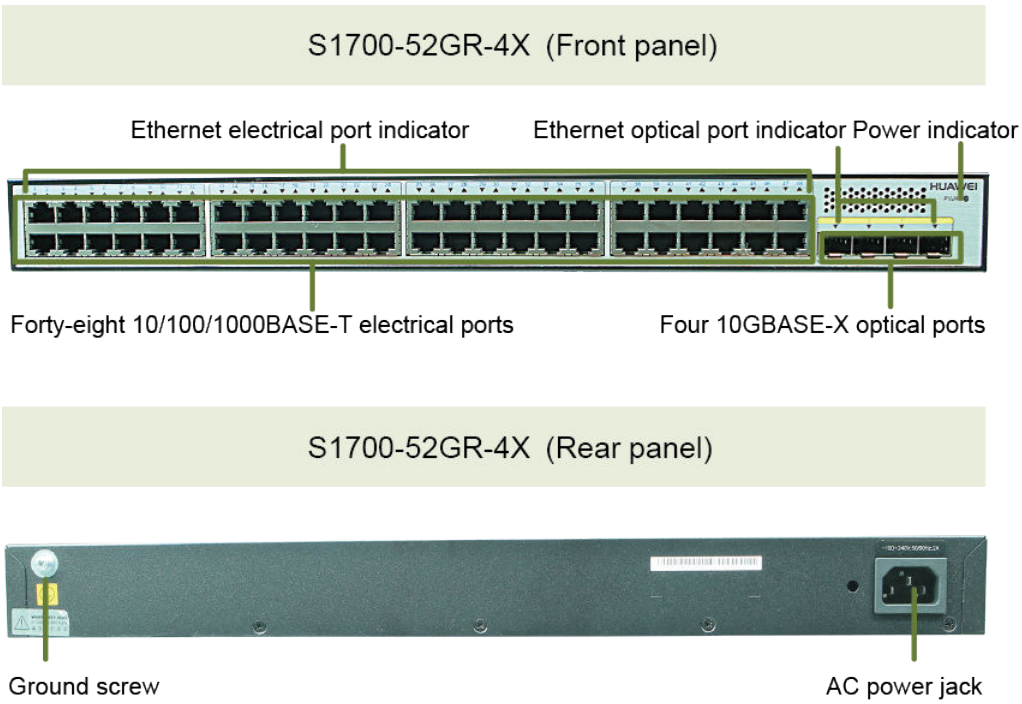
4.12 S1700-52GR-4X

Appearance

Figure 4-12 shows the appearance of an S1700-52GR-4X unmanaged switch.

Figure 4-12 Appearance of an S1700-52GR-4X unmanaged switch



An S1700-52GR-4X unmanaged switch supports only AC power input.

Indicator

Table 4-8 Description of indicators on the S1700-52GR-4X

Indicator	Status	Description
Power indicator	Steady green	The switch has been powered on.
	Off	The switch is powered off.
GE electrical port indicator	Steady green	The port has established a 1000M connection.
	Blinking green	The port is transmitting data at 1000 Mbit/s.

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Indicator	Status	Description
	Steady yellow	The port has established a 10/100M connection.
	Blinking yellow	The port is transmitting data at 10/100 Mbit/s.
	Off	The port is not connected.
10GE optical port indicator	Steady green	The port has established a 1000M/10G connection.
	Blinking green	The port is transmitting data.
	Off	The port is not connected.

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Optical Module

Table 4-9 Optical modules for the S1700-52GR-4X

Port	Applicable Optical Module
10GBase-X 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-fiber bidirectional) SFP-GE-LX-SM1490-BIDI (single-fiber bidirectional) LE2MGSC40DE0 (single-fiber bidirectional) LE2MGSC40ED0 (single-fiber bidirectional) SFP-GE-ZBXD1 (single-fiber bidirectional) SFP-GE-ZBXU1 (single-fiber bidirectional) SFP-GE-BXU1-SC (single-fiber bidirectional) CWDM-SFPGE-1471 CWDM-SFPGE-1491 CWDM-SFPGE-1511 CWDM-SFPGE-1531 CWDM-SFPGE-1551 CWDM-SFPGE-1571 CWDM-SFPGE-1591 CWDM-SFPGE-1611 DWDM-SFPGE-1560-61 GE copper module (SFP-1000BaseT) SFP-10G-USR OMXD30000 SFP-10G-iLR OSX010000 OSX040N01 SFP-10G-ER-1310 SFP-10G-ZR SFP-10G-BXU1 (single-fiber bidirectional) SFP-10G-BXD1 (single-fiber bidirectional)

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Port	Applicable Optical Module
	SFP-10G-ER-SM1330-BIDI (single-fiber bidirectional) SFP-10G-ER-SM1270-BIDI (single-fiber bidirectional) 10GE-CWDM SFP+ SFP-10G-ZDWT

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5 Technical Specifications

About This Chapter

5.1 Physical Specifications

5.2 Interface Specifications

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5.1 Physical Specifications

Table 5-1 Physical Specifications

Item	Description
Dimensions (W x D x H)	● S1700-8-AC: 160.0 mm x 134.0 mm x 30.0 mm ● S1700-8G-AC: 160.0 mm x 134.0 mm x 30.0 mm ● S1700-24-AC: 320.0 mm x 208.0 mm x 43.6 mm ● S1700-16G: 320.0 mm x 208.0 mm x 43.6 mm ● S1700-52R-2T2P-AC: 442.0 mm x 220.0 mm x 43.60 mm ● S1700-24GR: 442.0 mm x 220.0 mm x 43.6 mm ● S1724G: 330.0 mm x 208.0 mm x 43.6 mm ● S1700-16R: 442.0 mm x 220.0 mm x 43.6 mm ● S1700-24R: 442.0 mm x 220.0 mm x 43.6 mm ● S1700-26R-2T: 442.0 mm x 220.0 mm x 43.6 mm ● S1700-28GR-4X: 442.0 mm x 220.0 mm x 43.6 mm ● S1700-52GR-4X: 442.0 mm x 220.0 mm x 43.6 mm
Maximum power (full configuration)	● S1700-8-AC: 4.3 W ● S1700-8G-AC: 4.5 W ● S1700-24-AC: 3.9 W ● S1700-52R-2T2P-AC: 22.6 W ● S1700-24GR: 14.2 W ● S1724G: 14.2 W ● S1700-16R: 7.6 W ● S1700-16G: 12.8 W ● S1700-24R: 10.6 W ● S1700-26R-2T: 8.7 W ● S1700-28GR-4X: 24.8 W ● S1700-52GR-4X: 44.6 W

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Item		Description
Weight (without optical modules)		● S1700-8-AC: 0.30 kg ● S1700-8G-AC: 0.33 kg ● S1700-24-AC: 1.63 kg ● S1700-52R-2T2P-AC: 2.54 kg ● S1700-24GR: 2.50 kg ● S1724G: 1.71 kg ● S1700-16R: 3.05 kg ● S1700-16G: 1.59 kg ● S1700-24R: 3.16 kg ● S1700-26R-2T: 3.16 kg ● S1700-28GR-4X: 3.78 kg ● S1700-52GR-4X: 4.22 kg
AC input voltage	Rated voltage	100V AC to 240V AC 50/60 Hz
	Maximum voltage range	90V AC to 264V AC 47 Hz to 63 Hz
Temperature	Operating temperature	● S1700-8-AC/S1700-52R-2T2P-AC: 0°C to 45°C ● S1700-8G-AC/S1700-24-AC/S1700-24GR/S1724G/S1700-16G/S1700-16R/S1700-24R/S1700-26R-2T/S1700-28GR-4X/S1700-52GR-4X: 0°C to 45°C (When the altitude is between 1800 m and 5000 m, the highest temperature decreases by 1°C every time the altitude increases 220 m.) **NOTE** When the S1700-8G-AC is used in Japan, its operating temperature range is 0°C to 40°C. The operating temperature of the S1700-28GR-4X is 0°C to 40°C when it uses 10GE optical modules with 10 km transmission distances.
	Storage temperature	-40°C to 70°C
Relative humidity		● S1700-8-AC/S1700-52R-2T2P-AC: 10%RH–90%RH ● S1700-8G-AC/S1700-24-AC/S1700-24GR/S1724G/S1700-16G/S1700-16R/S1700-24R/S1700-26R-2T/S1700-28GR-4X/S1700-52GR-4X: 5%RH–95%RH

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Item	Description
Altitude	● S1700-8-AC/S1700-52R-2T2P-AC: 0 m to 3500 m ● S1700-8G-AC/S1700-24-AC/S1700-16R/S1700-16G/S1700-24R/S1700-26R-2T/S1700-24GR/S1724G/S1700-28GR-4X/S1700-52GR-4X: 0 m to 5000 m

5.2 Interface Specifications

Table 5-2 Interface Specifications

Product Model	Downlink Port	Uplink Port
S1700-8-AC	Eight 10/100BASE-TX ports	Downlink ports can be used as uplink ports.
S1700-24-AC	Twenty-four 10/100BASE-TX ports	Downlink ports can be used as uplink ports.
S1700-16R	Sixteen 10/100BASE-TX ports	Downlink ports can be used as uplink ports.
S1700-24R	Twenty-four 10/100BASE-TX ports	Downlink ports can be used as uplink ports.
S1700-26R-2T	Twenty-four 10/100BASE-TX ports	Two 10/100/1000BASE-T ports
S1700-52R-2T2P-AC	Forty-eight 10/100BASE-TX ports	● Two 10/100/1000BASE-T ports ● Two 1000BASE-X ports
S1700-8G-AC	Eight 10/100/1000BASE-T ports	Downlink ports can be used as uplink ports.
S1700-16G	Sixteen 10/100/1000BASE-T ports	Downlink ports can be used as uplink ports.
S1700-24GR	Twenty-four 10/100/1000BASE-T ports	Downlink ports can be used as uplink ports.
S1724G	Twenty-four 10/100/1000BASE-T ports	Downlink ports can be used as uplink ports.
S1700-28GR-4X	Twenty-four 10/100/1000BASE-T ports	Four 10GBASE-X ports
S1700-52GR-4X	Forty-eight 10/100/1000BASE-T ports	Four 10GBASE-X ports

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6 Optical Module

About This Chapter

6.1 GE eSFP Optical Modules
6.2 GE-CWDM eSFP Optical Modules
6.3 GE-DWDM eSFP Optical Modules
6.4 GE SFP Copper Modules
6.5 10GE SFP+ Optical Modules
6.6 10GE-CWDM SFP+ Optical Modules
6.7 10GE-DWDM SFP+ Optical Modules

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6.1 GE eSFP Optical Modules

6.1.1 eSFP-GE-SX-MM850

Table 6-1 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	GE
Center wavelength (nm)	850
Standard compliance	1000base-SX
Connector type	LC
Applicable cable and maximum transmission distance	● Multimode fiber (with modal bandwidth of 160 MHz*km and diameter of 62.5 μm): 0.22 km ● Multimode fiber (OM1): 0.275 km ● Multimode fiber (with modal bandwidth of 400 MHz*km and diameter of 50 μm): 0.5 km ● Multimode fiber (OM2): 0.55 km ● Multimode fiber (OM3): 1 km
Transmit power (dBm)	-9.5 to -2.5
Maximum receiver sensitivity (dBm)	-17.0
Overload power (dBm)	0
Extinction ratio (dB)	9
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02315204

6.1.2 SFP-GE-LX-SM1310

Table 6-2 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	1 Gbit/s

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Item	Description
Center wavelength (nm)	1310
Standard compliance	1000base-LX10/LH
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 10 km
Transmit power (dBm)	-9.0 to -3.0
Maximum receiver sensitivity (dBm)	-20.0
Overload power (dBm)	-3.0
Extinction ratio (dB)	9
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02315200

6.1.3 S-SFP-GE-LH40-SM1310

Table 6-3 Technical specifications

Item	Description
Transceiver type	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	1310
Standard compliance	1000base-EX
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 40 km
Transmit power (dBm)	-5.0 to 0
Maximum receiver sensitivity (dBm)	-23
Overload power (dBm)	-3.0
Extinction ratio (dB)	9
Operating temperature	0°C to 70°C (32°F to 158°F)

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Item	Description
Part number	02317346

6.1.4 S-SFP-GE-LH40-SM1550

Table 6-4 Technical specifications

Item	Description
Transceiver type	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	1550
Standard compliance	NA
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 40 km
Transmit power (dBm)	-5.0 to 0
Maximum receiver sensitivity (dBm)	-22
Overload power (dBm)	-3.0
Extinction ratio (dB)	8.5
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02317347

6.1.5 S-SFP-GE-LH80-SM1550

Table 6-5 Technical specifications

Item	Description
Transceiver type	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	1550
Standard compliance	1000base-ZX

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Item	Description
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 80 km
Transmit power (dBm)	-2.0 to 5.0
Maximum receiver sensitivity (dBm)	-23
Overload power (dBm)	-3.0
Extinction ratio (dB)	9
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02317348

6.1.6 eSFP-GE-ZX100-SM1550

Table 6-6 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	1550
Standard compliance	1000base-ZX
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 100 km
Transmit power (dBm)	0-5
Maximum receiver sensitivity (dBm)	-30.0
Overload power (dBm)	-9.0
Extinction ratio (dB)	9.5
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02315206

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6.1.7 SFP-GE-LX-SM1310-BIDI (Single-Fiber-Bidirectional Module)

Table 6-7 Technical specifications

Item	Description
Transceiver type	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	Rx: 1490/Tx: 1310
Standard compliance	1000base-BX10
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 10 km
Transmit power (dBm)	-9.0 to -3.0
Maximum receiver sensitivity (dBm)	-19.5
Overload power (dBm)	-3.0
Extinction ratio (dB)	6
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02315285

NOTE

Single-fiber bidirectional (BIDI) optical modules must be used in pairs. For example, SFP-GE-LX-SM1310-BIDI must be used with SFP-GE-LX-SM1490-BIDI.

6.1.8 SFP-GE-LX-SM1490-BIDI (Single-Fiber-Bidirectional Module)

Table 6-8 Technical specifications

Item	Description
Transceiver type	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	Rx: 1310/Tx: 1490
Standard compliance	1000base-BX10

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Item	Description
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 10 km
Transmit power (dBm)	-9.0 to -3.0
Maximum receiver sensitivity (dBm)	-19.5
Overload power (dBm)	-3.0
Extinction ratio (dB)	6
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02315286

NOTE

Single-fiber bidirectional (BIDI) optical modules must be used in pairs. For example, SFP-GE-LX-SM1490-BIDI must be used with SFP-GE-LX-SM1310-BIDI.

6.1.9 LE2MGSC40DE0 (Single-Fiber-Bidirectional Module)

Table 6-9 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	Rx: 1490/Tx: 1310
Standard compliance	1000base-BX
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 40 km
Transmit power (dBm)	-2.0 to +3.0
Maximum receiver sensitivity (dBm)	-23
Overload power (dBm)	-3.0
Extinction ratio (dB)	9
Operating temperature	0°C to 70°C (32°F to 158°F)

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Item	Description
Part number	02310KVV

NOTE

Single-fiber bidirectional (BIDI) optical modules must be used in pairs. For example, LE2MGSC40DE0 must be used with LE2MGSC40ED0.

6.1.10 LE2MGSC40ED0 (Single-Fiber-Bidirectional Module)

Table 6-10 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	Rx: 1310/Tx: 1490
Standard compliance	1000base-BX
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 40 km
Transmit power (dBm)	-2.0 to +3.0
Maximum receiver sensitivity (dBm)	-23
Overload power (dBm)	-3.0
Extinction ratio (dB)	9
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310KVU

NOTE

Single-fiber bidirectional (BIDI) optical modules must be used in pairs. For example, LE2MGSC40ED0 must be used with LE2MGSC40DE0.

6.1.11 SFP-GE-ZBXD1 (Single-Fiber-Bidirectional Module)

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Table 6-11 Technical specifications

Item	Description
Transceiver type	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	Rx: 1490/Tx: 1570
Standard compliance	1000base-BX
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 80 km
Transmit power (dBm)	-2.0 to +4.0
Maximum receiver sensitivity (dBm)	-26
Overload power (dBm)	-3.0
Extinction ratio (dB)	9
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02311DDB

NOTE

This module can only be used on a switch running V200R008C00 or a later version. A switch running an earlier version may fail to obtain information about this module.

Single-fiber bidirectional (BIDI) optical modules must be used in pairs. For example, SFP-GE-ZBXD1 must be used with SFP-GE-ZBXU1.

6.1.12 SFP-GE-ZBXU1 (Single-Fiber-Bidirectional Module)

Table 6-12 Technical specifications

Item	Description
Transceiver type	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	Rx: 1570/Tx: 1490
Standard compliance	1000base-BX
Connector type	LC

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Item	Description
Applicable cable and maximum transmission distance	Single-mode fiber: 80 km
Transmit power (dBm)	-2.0 to +4.0
Maximum receiver sensitivity (dBm)	-26
Overload power (dBm)	-3.0
Extinction ratio (dB)	9
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02311DDC

NOTE

This module can only be used on a switch running V200R008C00 or a later version. A switch running an earlier version may fail to obtain information about this module.

Single-fiber bidirectional (BIDI) optical modules must be used in pairs. For example, SFP-GE-ZBXU1 must be used with SFP-GE-ZBXD1.

6.1.13 SFP-GE-BXU1-SC (Single-Fiber-Bidirectional Module)

Table 6-13 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	GE
Center wavelength (nm)	Rx: 1310/Tx: 1490
Standard compliance	1000base-BX
Connector type	SC
Applicable cable and maximum transmission distance	Single-mode fiber: 10 km
Transmit power (dBm)	-9.0 to -3.0
Maximum receiver sensitivity (dBm)	-19.5
Overload power (dBm)	-3.0
Extinction ratio (dB)	9

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Item	Description
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310TQH

6.2 GE-CWDM eSFP Optical Modules

6.2.1 CWDM-SFPGE-1471

Table 6-14 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	1471
Standard compliance	GE-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 80 km
Transmit power (dBm)	0-5.0
Maximum receiver sensitivity (dBm)	-28.0
Overload power (dBm)	-9.0
Extinction ratio (dB)	8.5
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310LPN

6.2.2 CWDM-SFPGE-1491

Table 6-15 Technical specifications

Item	Description
Transceiver form factor	eSFP

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Item	Description
Transmission speed	1 Gbit/s
Center wavelength (nm)	1491
Standard compliance	GE-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 80 km
Transmit power (dBm)	0-5.0
Maximum receiver sensitivity (dBm)	-28.0
Overload power (dBm)	-9.0
Extinction ratio (dB)	8.5
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310LPK

6.2.3 CWDM-SFPGE-1511

Table 6-16 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	1511
Standard compliance	GE-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 80 km
Transmit power (dBm)	0-5.0
Maximum receiver sensitivity (dBm)	-28.0
Overload power (dBm)	-9.0
Extinction ratio (dB)	8.5

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Item	Description
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310LPH

6.2.4 CWDM-SFPGE-1531

Table 6-17 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	1531
Standard compliance	GE-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 80 km
Transmit power (dBm)	0-5.0
Maximum receiver sensitivity (dBm)	-28.0
Overload power (dBm)	-9.0
Extinction ratio (dB)	8.5
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310LPL

6.2.5 CWDM-SFPGE-1551

Table 6-18 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	1551

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Item	Description
Standard compliance	GE-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 80 km
Transmit power (dBm)	0-5.0
Maximum receiver sensitivity (dBm)	-28.0
Overload power (dBm)	-9.0
Extinction ratio (dB)	8.5
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310LPG

6.2.6 CWDM-SFPGE-1571

Table 6-19 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	1571
Standard compliance	GE-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 80 km
Transmit power (dBm)	0-5.0
Maximum receiver sensitivity (dBm)	-28.0
Overload power (dBm)	-9.0
Extinction ratio (dB)	8.5
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310LNS

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6.2.7 CWDM-SFPGE-1591

Table 6-20 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	1591
Standard compliance	GE-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 80 km
Transmit power (dBm)	0-5.0
Maximum receiver sensitivity (dBm)	-28.0
Overload power (dBm)	-9.0
Extinction ratio (dB)	8.5
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310LNT

6.2.8 CWDM-SFPGE-1611

Table 6-21 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	1 Gbit/s
Center wavelength (nm)	1611
Standard compliance	GE-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 80 km
Transmit power (dBm)	0-5.0

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Item	Description
Maximum receiver sensitivity (dBm)	-28.0
Overload power (dBm)	-9.0
Extinction ratio (dB)	8.5
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310LPJ

6.3 GE-DWDM eSFP Optical Modules

6.3.1 DWDM-SFPGE-1560-61

Table 6-22 Technical specifications

Item	Description
Transceiver form factor	eSFP
Transmission speed	Gbit/s
Center wavelength (nm)	1560.61
Standard compliance	GE-DWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 120 km
Transmit power (dBm)	0-4.0
Maximum receiver sensitivity (dBm)	-28.0
Overload power (dBm)	-8.0
Extinction ratio (dB)	8.2
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310LLE

6.4 GE SFP Copper Modules

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6.4.1 SFP-1000BaseT

Table 6-23 Technical specifications

Item	Description
Transceiver form factor	SFP
Transmission speed	The transmission speed varies depending on the port where the copper transceiver module is used.
Standard compliance	1000Base-T
Connector type	RJ45
Surge protection	Common mode: ±1 kV
Applicable cable and maximum transmission distance	Ethernet cable: 0.1 km
Part number	02314171

6.5 10GE SFP+ Optical Modules

6.5.1 SFP-10G-USR

Table 6-24 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	850
Standard compliance	10Gbase-USR
Connector type	LC
Applicable cable and maximum transmission distance	Multimode fiber (OM3): 0.1 km
Transmit power (dBm)	-7.3 to -1.0
Maximum receiver sensitivity (dBm)	-10.7
Overload power (dBm)	0.5

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Item	Description
Extinction ratio (dB)	3.0
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310MNW

6.5.2 OMXD30000

Table 6-25 Technical Specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	850
Standard compliance	10Gbase-SR
Connector type	LC
Applicable cable and maximum transmission distance	● Multimode fiber (with modal bandwidth of 160 MHz*km and diameter of 62.5 μm): 0.026 km ● Multimode fiber (OM1): 0.033 km ● Multimode fiber (with modal bandwidth of 400 MHz*km and diameter of 50 μm): 0.066 km ● Multimode fiber (OM2): 0.082 km ● Multimode fiber (OM3): 0.3 km ● Multimode fiber (OM4): 0.4 km
Transmit power (dBm)	-7.3 to -1.0
Maximum receiver sensitivity (dBm)	-11.1
Overload power (dBm)	-1.0
Extinction ratio (dB)	3.0
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02318169

6.5.3 SFP-10G-iLR

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Table 6-26 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	1310
Standard compliance	10Gbase-iLR
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 1.4 km
Transmit power (dBm)	-8.2 to +0.5
Maximum receiver sensitivity (dBm)	-14.4
Overload power (dBm)	0.5
Extinction ratio (dB)	3.5
Operating temperature	-40°C to +85°C (-40°F to +185°F)
Part number	02311BJJ

NOTE

This module can only be used on a switch running V200R008C00 or a later version. A switch running an earlier version may fail to obtain information about this module.

6.5.4 OSX010000

Table 6-27 Technical Specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	1310
Standard compliance	10Gbase-LR
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 10 km
Transmit power (dBm)	-8.2 to +0.5

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Item	Description
Maximum receiver sensitivity (dBm)	-12.6
Overload power (dBm)	0.5
Extinction ratio (dB)	3.5
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02318170

6.5.5 OSX040N01

Table 6-28 Technical Specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	1550
Standard compliance	10Gbase-ER
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 40 km
Transmit power (dBm)	-4.7 to 4.0
Maximum receiver sensitivity (dBm)	-14.1
Overload power (dBm)	-1.0
Extinction ratio (dB)	3.0
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310CNF

6.5.6 SFP-10G-ER-1310

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Table 6-29 Technical Specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	1310
Standard compliance	10Gbase-ER
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 40 km
Transmit power (dBm)	-2.0 to 4.0
Maximum receiver sensitivity (dBm)	-20
Overload power (dBm)	-7.0
Extinction ratio (dB)	3.5
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02311RLX

NOTE

When connected to a 10Gbase-ER standard optical module (1550 nm, 10 Gbit/s, 40 km), an SFP-10G-ER-1310 optical module supports only 20 km of maximum transmission distance.

This module can only be used on a switch running V200R010C00 or a later version.

6.5.7 SFP-10G-ZR

Table 6-30 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	1550
Standard compliance	10Gbase-ZR
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 80 km

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Item	Description
Transmit power (dBm)	0-4.0
Maximum receiver sensitivity (dBm)	-24.0
Overload power (dBm)	-7.0
Extinction ratio (dB)	9
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310SNN

6.5.8 SFP-10G-BXU1 (Single-Fiber-Bidirectional Module)

Table 6-31 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	Rx: 1330/Tx: 1270
Standard compliance	10Gbase-BX
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 10 km
Transmit power (dBm)	-8.2 to +0.5
Maximum receiver sensitivity (dBm)	-14.4
Overload power (dBm)	0.5
Extinction ratio (dB)	3.5
Operating temperature	-40°C to +85°C (-40°F to +185°F)
Part number	02310QBJ

NOTE

Single-fiber bidirectional (BIDI) optical modules must be used in pairs. For example, SFP-10G-BXU1 must be used with SFP-10G-BXD1.

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6.5.9 SFP-10G-BXD1 (Single-Fiber-Bidirectional Module)

Table 6-32 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10GE
Center wavelength (nm)	Rx: 1270/Tx: 1330
Standard compliance	10Gbase-BX
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 10 km
Transmit power (dBm)	-8.2 to +0.5
Maximum receiver sensitivity (dBm)	-14.4
Overload power (dBm)	0.5
Extinction ratio (dB)	3.5
Operating temperature	-40°C to +85°C (-40°F to +185°F)
Part number	02310QDT

NOTE

Single-fiber bidirectional (BIDI) optical modules must be used in pairs. For example, SFP-10G-BXD1 must be used with SFP-10G-BXU1.

6.5.10 SFP-10G-ER-SM1330-BIDI (Single-Fiber-Bidirectional Module)

Table 6-33 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	Rx: 1270/Tx: 1330
Standard compliance	10Gbase-BX
Connector type	LC

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Item	Description
Applicable cable and maximum transmission distance	Single-mode fiber: 40 km
Transmit power (dBm)	0-5
Maximum receiver sensitivity (dBm)	-18
Overload power (dBm)	-9
Extinction ratio (dB)	3.5
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02311BJB

NOTE

This module can only be used on a switch running V200R009C00 or a later version. A switch running an earlier version may fail to obtain information about this module.

Single-fiber bidirectional (BIDI) optical modules must be used in pairs. For example, SFP-10G-ER-SM1330-BIDI must be used with SFP-10G-ER-SM1270-BIDI.

6.5.11 SFP-10G-ER-SM1270-BIDI (Single-Fiber-Bidirectional Module)

Table 6-34 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	Rx: 1330/Tx: 1270
Standard compliance	10Gbase-BX
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 40 km
Transmit power (dBm)	0-5
Maximum receiver sensitivity (dBm)	-18
Overload power (dBm)	-9
Extinction ratio (dB)	3.5

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Item	Description
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02311BJC

NOTE

This module can only be used on a switch running V200R009C00 or a later version. A switch running an earlier version may fail to obtain information about this module.

Single-fiber bidirectional (BIDI) optical modules must be used in pairs. For example, SFP-10G-ER-SM1270-BIDI must be used with SFP-10G-ER-SM1330-BIDI.

6.6 10GE-CWDM SFP+ Optical Modules

6.6.1 SFP-10G-ZCW1471

Table 6-35 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	1471
Standard compliance	10G-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 70 km
Transmit power (dBm)	0-4.0
Maximum receiver sensitivity (dBm)	-23.0
Overload power (dBm)	-7.0
Extinction ratio (dB)	8.2
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310SSG

6.6.2 SFP-10G-ZCW1491

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Table 6-36 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	1491
Standard compliance	10G-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 70 km
Transmit power (dBm)	0-4.0
Maximum receiver sensitivity (dBm)	-23.0
Overload power (dBm)	-7.0
Extinction ratio (dB)	8.2
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310SSF

6.6.3 SFP-10G-ZCW1511

Table 6-37 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	1511
Standard compliance	10G-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 70 km
Transmit power (dBm)	0-4.0
Maximum receiver sensitivity (dBm)	-23.0

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Item	Description
Overload power (dBm)	-7.0
Extinction ratio (dB)	8.2
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310SSE

6.6.4 SFP-10G-ZCW1531

Table 6-38 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	1531
Standard compliance	CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 70 km
Transmit power (dBm)	0-4.0
Maximum receiver sensitivity (dBm)	-23.0
Overload power (dBm)	-7.0
Extinction ratio (dB)	8.2
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310SSD

6.6.5 SFP-10G-ZCW1551

Table 6-39 Technical specifications

Item	Description
Transceiver form factor	SFP+

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Item	Description
Transmission speed	10 Gbit/s
Center wavelength (nm)	1551
Standard compliance	10G-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 70 km
Transmit power (dBm)	0-4.0
Maximum receiver sensitivity (dBm)	-23.0
Overload power (dBm)	-7.0
Extinction ratio (dB)	8.2
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310SSC

6.6.6 SFP-10G-ZCW1571

Table 6-40 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	1571
Standard compliance	10G-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 70 km
Transmit power (dBm)	0-4.0
Maximum receiver sensitivity (dBm)	-23.0
Overload power (dBm)	-7.0
Extinction ratio (dB)	8.2

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Item	Description
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310SSB

6.6.7 SFP-10G-ZCW1591

Table 6-41 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	1591
Standard compliance	10G-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 70 km
Transmit power (dBm)	0-4.0
Maximum receiver sensitivity (dBm)	-23.0
Overload power (dBm)	-7.0
Extinction ratio (dB)	8.2
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310SSA

6.6.8 SFP-10G-ZCW1611

Table 6-42 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	1611

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Item	Description
Standard compliance	10G-CWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 70 km
Transmit power (dBm)	0-4.0
Maximum receiver sensitivity (dBm)	-23.0
Overload power (dBm)	-7.0
Extinction ratio (dB)	8.2
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310SRY

6.7 10GE-DWDM SFP+ Optical Modules

6.7.1 SFP-10G-ZDWT

Table 6-43 Technical specifications

Item	Description
Transceiver form factor	SFP+
Transmission speed	10 Gbit/s
Center wavelength (nm)	1529.16 to 1560.61
Standard compliance	10G-DWDM
Connector type	LC
Applicable cable and maximum transmission distance	Single-mode fiber: 80 km
Transmit power (dBm)	-1 to +3
Maximum receiver sensitivity (dBm)	-24
Overload power (dBm)	-1
Extinction ratio (dB)	8.2

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Item	Description
Operating temperature	0°C to 70°C (32°F to 158°F)
Part number	02310YUT

NOTE

This module can only be used on a switch running V200R009C00 or a later version. A switch running an earlier version may fail to obtain information about this module.

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