Ruijie RG-WALL 1600-Z3200-S

Cloud-Managed Firewall

Hardware Installation and Reference Guide

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Preface

Intended Audience

This document is intended for:

- Network engineers
- Technical support and servicing engineers
- Network administrators

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Conventions

1. Signs

The signs used in this document are described as follows:

Danger

An alert that calls attention to safety instruction that if not understood or followed can result in personal injury.

Warning

An alert that calls attention to important rules and information that if not understood or followed can result in data loss or equipment damage.

Caution

An alert that calls attention to essential information that if not understood or followed can result in function failure or performance degradation.

Note

An alert that contains additional or supplementary information that if not understood or followed will not lead to serious consequences.

Specification

An alert that contains a description of product or version support.

2. Notes

This manual provides installation steps, troubleshooting, technical specifications, and usage guidelines for cables and connectors. It is intended for users who want to understand the above and have extensive experience in network deployment and management, and assume that users are familiar with related terms and concepts.

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1 Overview

1.1 Introduction

The RG-WALL 1600-Z3200-S firewall (Z3200-S firewall or Z3200-S for short) is a next-generation Z series firewall of Ruijie Networks for all industries. It continuously improves the security detection capabilities of firewalls through cloud-network linkage. The Z3200-S firewall offers a quick intelligent deployment solution, simplifying deployment and reducing technical difficulty. In addition, it allows you to easily configure security policies.

1.2 Package Contents

Table 1-1 Package Contents

No.	Item	Quantity
1	Host (nameplate at the bottom)	1
2	Power cord	1
3	Power cord retention clip	1
4	Yellow/Green grounding cable	1
5	Rubber pad	4
6	L-shaped mounting bracket	2
7	M4 x 8 mm cross recessed countersunk head screw	6
8	Console cable	1
9	Ethernet cable	1
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1.3 Product Appearance

1.3.1 Front Panel

Figure 1-1 Front Panel

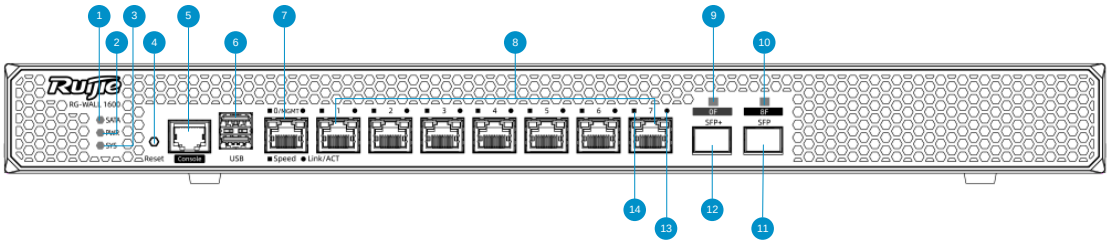


Table 1-2 Components on the Front Panel

No.	Component	Description
1	SATA hard disk LED	● Steady green: A hard disk is connected. ● Blinking green: Data is being read or written.
2	PWSR LED	● Steady green: The power supply is normal. ● Off: The power supply is cut off or fails.
3	SYS LED	● Blinking green: The device is powered on and being initialized. ● Steady green: Initialization is complete. ● Steady red: An alarm is generated.
4	Reset button	● Restarting the device: Press the button for less than 3 seconds. ● Restoring factory settings: Press the button for more than 3 seconds. When you perform either of the preceding operations, device status information is collected. After the device restarts, you can access the web interface of the firewall, choose **System Management** > **One-Click Collection**, and download the information.
5	Console port	It is used to connect to the console for device maintenance and diagnosis. Note: ● If the console port is used, perform the following configuration: set the baud rate to 115200 bps, data bits to 8, and stop bits to 1, and configure no parity check and no data flow control. ● The console port is used only in special scenarios. For details, contact technical support personnel.
6	USB port	Two USB 2.0 ports can be used to connect USB drives.
7	Electrical port 0 (port 0/MGMT)	It is used to access the device management page upon first login.

No.	Component	Description
8	Ethernet ports with 10M/100M/1000M auto-negotiation	Electrical ports 1 to 7. They are used to connect Ethernet cables.
9	10GE SFP+ port LED	● Steady green: The port is connected. ● Blinking green: The port is receiving or sending data. ● Off: The optical port is incorrectly connected.
10	GE SFP port LED	● Steady green: The port is connected. ● Blinking green: The port is receiving or sending data. ● Off: The optical port is incorrectly connected.
11	GE SFP port	Gigabit optical port. For details about optical transceivers that support this port, see Specifications.
12	10GE SFP+ port	10 Gigabit optical port. For details about optical transceivers that support this port, see Specifications.
13	Link/ACT status LEDs (round) of Ethernet ports with 10M/100M/1000M auto-negotiation	● Steady green: The port is connected. ● Blinking green: The port is receiving or sending data. ● Off: The port is incorrectly connected.
14	Speed LEDs (square) of Ethernet ports with 10M/100M/1000M auto-negotiation	● Steady orange: Gbps port speed ● Off: 100/10 Mbps port speed

1.3.2 Rear Panel

Figure 1-2 Rear Panel

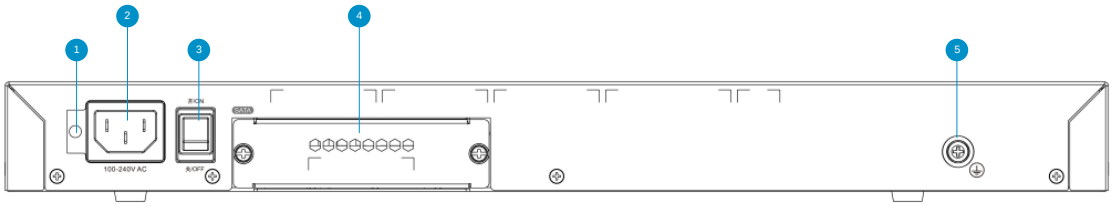


Table 1-3 Components on the Rear Panel

No.	Component	Description
1	Installation position of a power cord retention clip	Used to install a power cord retention clip.

No.	Component	Description
2	Power socket	Used to connect an AC power cord.
3	Power switch	Used to power on or power off the device.
4	Expansion slot for a hard disk	Used to install a hard disk.
5	Grounding terminal	Used to ground the device to ensure electrical safety.

1.4 Specifications

Table 1-4 Specifications

Model	RG-WALL 1600-Z3200-S
Memory	4 GB DDR4 memory
Boot ROM	8 MB
eMMC	8 GB
Hard Disk	No hard disk for factory delivery, expansion module supported: ● Ruijie hard disks ○ RG-NSEC-HDD-1T: 1 TB ● Third-party hard disks ○ Western Digital: WD10SPZX ○ Seagate: ST1000LM048 ○ Transcend: TS1TSSD470P
Hard Disk Slot	1 x 2.5-inch SATA slot
Hard Disk Hot Swapping	Not supported
Fixed Service Port	● 8 x 10/100/1000BASE-T ports (10BASE-T/100BASE-TX/1000BASE-TX): support 10/100/1000 Mbps auto-negotiation and auto MDI/MDIX. Port 0 is the default MGMT port. ● 1 x GE SFP port (1000Base-SX/LX/ZX): supports 1000BASE-SX/LX/ZX mini GBIC and GE-SFP-LX20/LH40-BIDI optical transceivers. ● 1 x 10GE SFP+ port (1000Base-X/10GBase-R): supports XG-SFP-SR-MM850, XG-SFP-LR-SM1310, and XG-SFP-ER-SM1550 optical transceivers, as well as BIDI optical transceivers.
Fixed Management Port	1 x RJ45 MGMT port
	1 x RJ45 console port (RS-232)
USB Port	2 x USB 2.0 ports
Bypass Port	Not supported

Expansion Module	Not supported
Dimensions (W x D x H)	440 mm × 200 mm x 43.6 mm (17.32 in. x 7.87 in. x 1.72 in.; without rubber pads)
Weight	3.1 kg (6.83 lbs.)
Power Supply	1 x fixed power supply
Power Supply Hot Swapping	Not supported
Rated Input Voltage	100 V AC to 240 V AC, 50 Hz to 60 Hz
Rated Input Current	0.65 A
Maximum Power Consumption	25 W
Temperature	Operating temperature: 0°C to 45°C (32°F to 113°F) Storage temperature: –40°C to +45°C (–40°F to +113°F)
Humidity	Operating humidity: 10% RH to 90% RH (non-condensing) Storage humidity: 5% RH to 95% RH (non-condensing)

Warning

- In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.
- During the transfer and use of the product, avoid vibration and shock.
- The original package of the product must be used for transportation.
- The device is not suitable for use in locations where children are likely to be present.

Caution

As USB drive models are diversified, the system may not support specific models. You are advised to use a Kingston USB drive that applies the FAT32 file system.

Warning

This product contains a button battery. If the button battery is swallowed, it may cause severe internal burns and possibly death within 2 hours.

- Keep new and used batteries away from children.
- If the battery compartment is not closed securely, stop using the product and keep it away from children.
- Seek medical help immediately if you believe a battery may have been swallowed or retained in any part of your body.

Warning

The device contains a lithium button battery.

- If the battery is damaged, contact technical support personnel to replace it with the same type of battery and properly dispose of the used battery. Do not replace the battery by yourself. Replacing the battery with an incorrect type may cause explosion or void safety protection.
- If the battery is exposed to extremely high temperatures and/or extremely low air pressure, the battery may explode or leak flammable liquids or gases.
- If the battery is thrown into a fire or oven, or mechanically crushed or cut, it may explode.

1.5 Hard Disk

The Z3200-S firewall can be equipped with the RG-NSEC-HDD-1T module to store logs and report data. Figure 1-3 shows the appearance of the hard disk.

Figure 1-3 RG-NSEC-HDD-1T Appearance

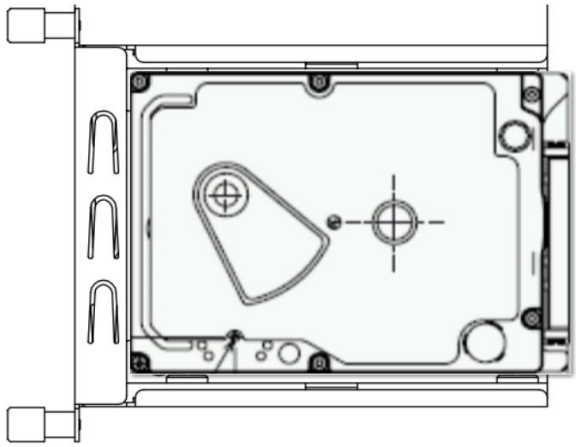


Table 1-5 Hard Disk Specifications

Model	RG-NSEC-HDD-1T
Firewall Model	RG-WALL 1600-Z3200-S
Dimensions (W x D x H)	130 mm x 102 mm x 27 mm (5.12 in. x 4.02 in. x 1.06 in.)
Type	Hard disk drive (HDD)
Capacity	1 TB
Hard Disk Hot Swapping	Not supported

Note

- The hard disk has built-in software that uses third extended filesystem (ext3). It supports plug-and-play.
- The hard disk does not support hot swapping. Before inserting the hard disk, power off the firewall. After inserting the hard disk, restart the firewall.

Caution

- During the transfer and use of the hard disk, avoid vibration and shock.
- The original package of the hard disk must be used for transportation.
- At an altitude above 3000 m, the hard disk may not function properly.
- When operating the hard disk, do not drop it, press the surface, or cover the air vent.

2 Preparing for Installation

2.1 Safety Precautions

Note

- To avoid personal injury and device damage, carefully read the safety precautions before installation.
- The following safety precautions may not cover all possible dangers.

2.1.1 General Safety

- Install the device in a standard 19-inch cabinet.
- Do not place the device in a wet position, and keep the device away from liquid. Keep the chassis clean and dust-free.
- Install the device in a position far away from heat sources.
- Ensure that the cabinet and power distribution system are properly grounded.
- Do not place the device in walking areas.
- During installation and maintenance, do not wear loose clothes, ornaments, or any other things that may be hooked by the chassis.
- Keep tools and components away from walking areas.

2.1.2 Transfer Safety

- Do not frequently move devices.
- Cut off all power supplies and unplug all power cords before moving or transferring the device.
- The device should be moved by at least two persons. Keep balance and prevent personal injuries when moving the device.

2.1.3 Electrical Safety

Warning

- Any non-standard and inaccurate operation can cause an accident such as fire or electric shock, thus causing severe damages to human bodies and the device.
- Direct or indirect touch on high-voltage and mains supply through a wet object can bring a fatal danger.

- Observe local regulations and specifications when performing electrical operations. The operators must be qualified.
- Carefully check any potential danger in the work area, such as ungrounded power supply, unreliable power grounding, and wet floor.
- Before installing the device, find out the location of the emergency power switch in the room. First cut off the power supply in the case of an accident.
- Make a careful check before you cut off the power supply.

- You are advised to use an uninterrupted power supply (UPS) to avoid interference caused by power failures.

2.1.4 ESD Safety

- Properly ground the device and floor.
- Keep the indoor installation environment clean and dust-free.
- Maintain appropriate humidity conditions.
- Before installing various pluggable modules, wear an ESD wrist strap and make sure that it is well grounded.
- Do not directly touch the components and PCB of a board with your hands.
- Use an ESD bag to store a board, or place the board upwards on an ESD workbench.
- Avoid touching the circuit board with items such as clothing. The ESD wrist strap can only prevent damage to the circuit board caused by static electricity on the body. Static electricity on clothing cannot be prevented.

2.1.5 Laser Safety

Among the modules supported by the device, many optical modules are Class I laser products.



Precautions:

- When an optical transceiver is working, ensure that its port is connected to an optical fiber or covered by a dust cap to keep out dust and prevent it from burning your eyes
- Do not stare at any fiber port.

Warning

Do not approach or look into any optical port under any circumstances. This may cause permanent damage to your eyes.

2.2 Installation Environment Requirements

Install the RG-WALL 1600 series firewall indoors to ensure its normal operation and prolonged service life.

The installation site must meet the following requirements:

2.2.1 Ventilation Requirements

Reserve sufficient space in front of the air vents to ensure normal heat dissipation. After cables are connected, bundle the cables or place them in the cable management bracket to avoid blocking air inlets.

2.2.2 Space Requirements

To have sufficient room for chassis handling and module swapping, you are advised to maintain an indoor pathway of at least 0.8 m (31.50 in.) wide.

Do not install the device against the wall. Instead, maintain a minimum space of 0.4 m (15.75 in.) wide around the device for proper ventilation.

2.2.3 Temperature and Humidity Requirements

To ensure the normal operation and prolonged service life of the device, maintain an appropriate temperature and humidity in the equipment room.

If the device works in an environment with too high or too low temperature and humidity for a long period, it may be damaged.

- If the relative humidity is too high, insulating materials may have poor insulation or even leak electricity.
- If the relative humidity is too low, insulating gaskets may shrink, which makes fastening screws loose.
- In a dry environment, internal circuits are prone to static electricity.
- A high temperature can accelerate the aging process of insulating materials, greatly reducing the reliability of the device and severely affecting its service life.

Table 2-1 Temperature and Humidity Requirements

Item	Requirements
Temperature	Long-term operating temperature: 15°C to 30°C (59°F to 86°F) Short-term operating temperature: 0°C to 45°C (32°F to 113°F)
Humidity	Long-term operating humidity: 40% to 65% RH (non-condensing) Short-term operating humidity: 10% to 90% RH (non-condensing)

Note

- The operating temperature and humidity of the device are measured at the point that is 1.5 m (59.06 in.) above the floor and 0.4 m (15.75 in.) before the device when there is no protective plate in front or on the rear of the device.
- Short-term operating: The continuous operating period is no more than 48 hours or the total operating period per year is no more than 15 days.

2.2.4 Cleanliness Requirements

Dust poses a major threat to device operating. In an indoor environment, dust may fall on the device and be attached on the surface due to static electricity, causing poor contact of metallic joints. Such electrostatic adhesion may occur more easily when the relative humidity is low, not only affecting the service life of the device, but also causing communication faults. The following table describes the requirements on the dust content and granularity in the equipment room.

Table 2-2 Requirements on Dust

Dust	Content (Particles/m^3)
Dust particles (diameter ≥ 0.5 μm)	≤ 1.4×10^7
Dust particles (diameter ≥ 1 μm)	≤ 7×10^5

Dust	Content (Particles/m^3)
Dust particles (diameter ≥ 3 μm)	≤ 2.4×10^5
Dust particles (diameter ≥ 5 μm)	≤ 1.3×10^5

Apart from dust, the salt, acid, and sulfide in the air in the equipment room must meet strict requirements. These harmful substances will accelerate metal corrosion and component aging. Therefore, the equipment room should be properly protected against the intrusion of harmful gases, such as sulfur dioxide, hydrogen sulfide, nitrogen dioxide, and chlorine gas. The following table lists limit values for harmful gases.

Table 2-3 Requirements on Gases

Gas	Average (mg/m^3)	Maximum (mg/m^3)
Sulfur dioxide (SO_2)	0.2	1.5
Hydrogen sulfide (H_2S)	0.006	0.03
Nitrogen dioxide (NO_2)	0.04	0.15
Ammonia gas (NH_3)	0.05	0.15
Chlorine gas (Cl_2)	0.01	0.3

Note

Average refers to the average value of harmful gases measured in one week. **Maximum** refers to the upper limit of harmful gases measured in one week for up to 30 minutes every day.

2.2.5 Grounding Requirements

A proper grounding system is the basis for stable and reliable running and is indispensable for protection against lightning and interference. Carefully check the grounding conditions at the installation site according to the grounding specifications, and complete grounding properly based on the actual situation.

- **Safe Grounding**

Ensure that the cabinet and power distribution device are securely grounded when the device uses an AC power supply. Otherwise, electric shock may occur when the insulation resistance between the power supply inside the device and the chassis becomes small.

Caution

The building should provide protective grounding to ensure that the device can be properly grounded.

- **Lightning Grounding**

The lightning protection system of facilities is standalone, and is composed of a lightning rod, a down conductor, and a connector connected to the grounding system. The grounding system is typically used as the reference point for power supply and for safe grounding of the cabinet. Lightning grounding is required only by facilities and is not required by the device.

- **EMC Grounding**

Grounding for electromagnetic compatibility (EMC) includes shielded grounding, filter grounding, noise and interference suppression, and level reference.

The grounding resistance should be smaller than 1 ohm. The grounding terminal on the cabinet should be properly grounded before device running.

2.2.6 Anti-interference Requirements

- Take interference prevention measures for the power supply system.
- Keep the firewall away from the lightning protection and grounding system of power devices.
- Keep the firewall away from high-frequency current devices such as a high-power radio transmitting station and radar launcher.
- Take electromagnetic shielding measures when necessary.

2.2.7 Lightning Protection Requirements

- The device provides lightning protection. However, as an electrical device, it may still be damaged by strong lightning strikes. Take the following lightning protection measure: Ensure that the grounding cable of the cabinet is in good contact with the ground.
- Ensure that the neutral point of the AC power socket is in good contact with the ground.
- You are advised to install a power lightning arrester in front of the power input end to enhance lightning protection for the power supply.

2.2.8 Installation Site Requirements

Regardless of whether the device is installed in a cabinet or on a workbench, observe the following conditions:

- Maintain a proper clearance around the air intakes and outlets for heat dissipation.
- The device is equipped with fans to draw in cold air and dissipate heat through the side of the chassis. Maintain a minimum clearance of 15 cm (5.91 in.) around the ventilation openings for heat dissipation. You are advised to install the device in a standard 19-inch cabinet. Or, place the device on a clean workbench. In hot areas, air-conditioning is recommended.
- The installation site has good cooling and ventilation.
- The installation site is sturdy enough to support the weight of the device and its accessories.
- The installation site is properly grounded.

2.3 Tools

Table 2-4 Tools

Common Tools	Phillips screwdrivers, fastening bolts, and cable ties
Special Tools	ESD gloves, wire stripper, crimping plier, and crystal connector crimping plier
Relevant Devices	PC, display, and keyboard

Note

The RG-WALL 1600 series firewall is delivered without a tool kit. You need to prepare a tool kit.

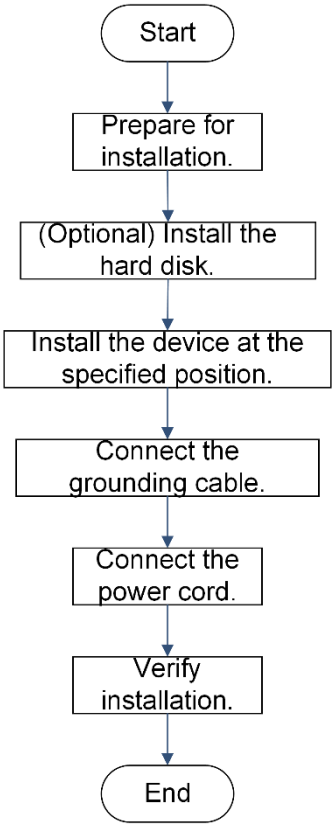
2.4 Unpacking the Device

Before installing the Z3200-S firewall, open the accessories box delivered with the product and check whether the accessories are complete. The accessories of the product depend on the product model. For details, see the package contents.

3 Installing the Device

3.1 Installation Procedure

Install the device according to the following procedure to prevent damage.



3.2 Preparing for Installation

Prepare for installation according to 2 Preparing for Installation and check whether the following conditions are met:

- The installation site provides sufficient space for heat dissipation.
- The installation site meets the temperature and humidity requirements of the device.
- The power supply is available at the installation site and its current meets the requirement.
- Ethernet cables have been deployed at the installation site.
- The selected power supply meets the requirement on the system power.
- The emergency power switch in the room is located so that the power supply can be cut off in the case of an accident.

3.3 (Optional) Installing the Hard Disk

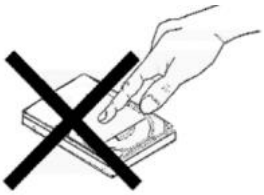
Application Scenario

The RG-NSEC-HDD-1T hard disk can be configured for the device to store logs and report data.

Precautions

Pay attention to the following:

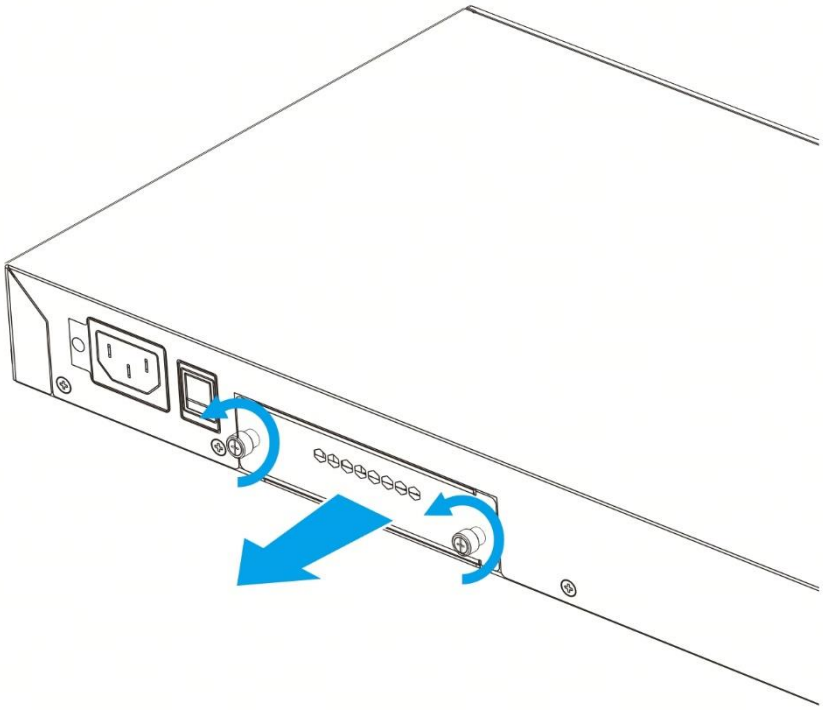
- Install the hard disk when the device is powered off. Otherwise, the hard disk will be damaged.
- Do not cover the hole on top of the hard disk.
- Do not press down on the hard disk.
- Do not drop, shake, or vibrate the hard disk. When handling the hard disk, hold it by its sides.
- Do not touch PCB components with hands or tools.






Procedure

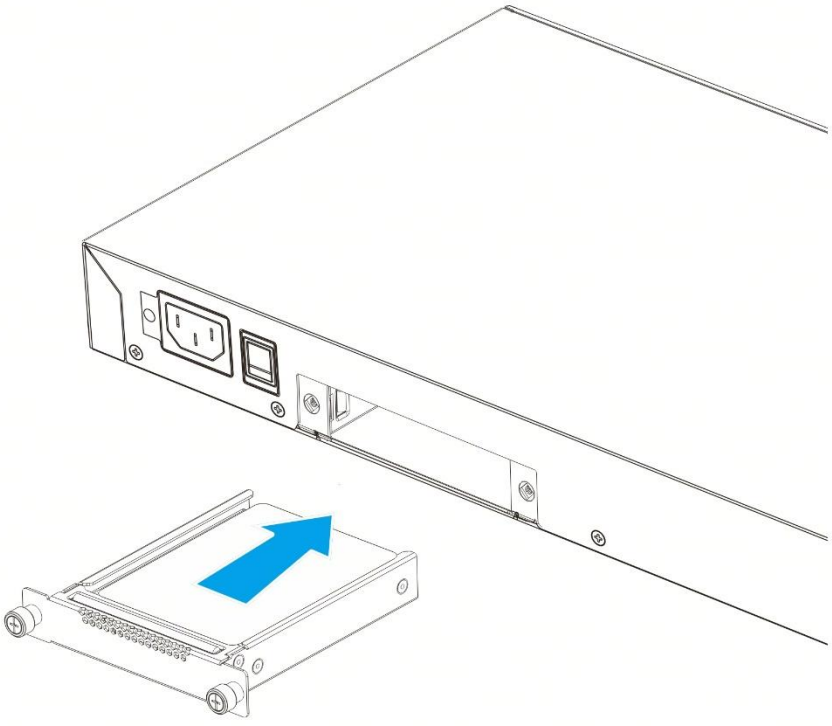
(1) Loosen the two fixing screws of the hard disk on the rear of the device when the device is powered off.



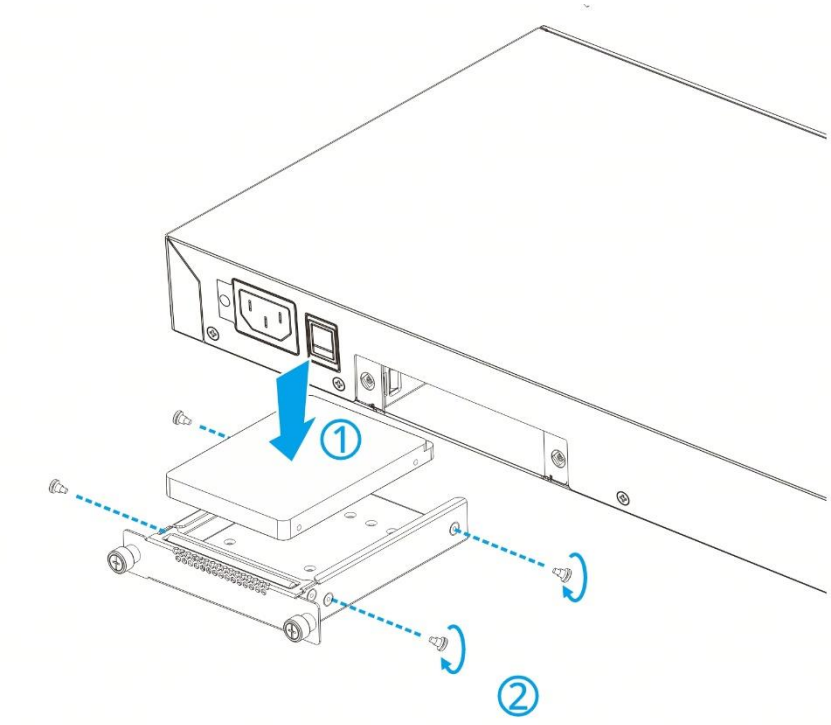
(2) Remove the hard disk panel.

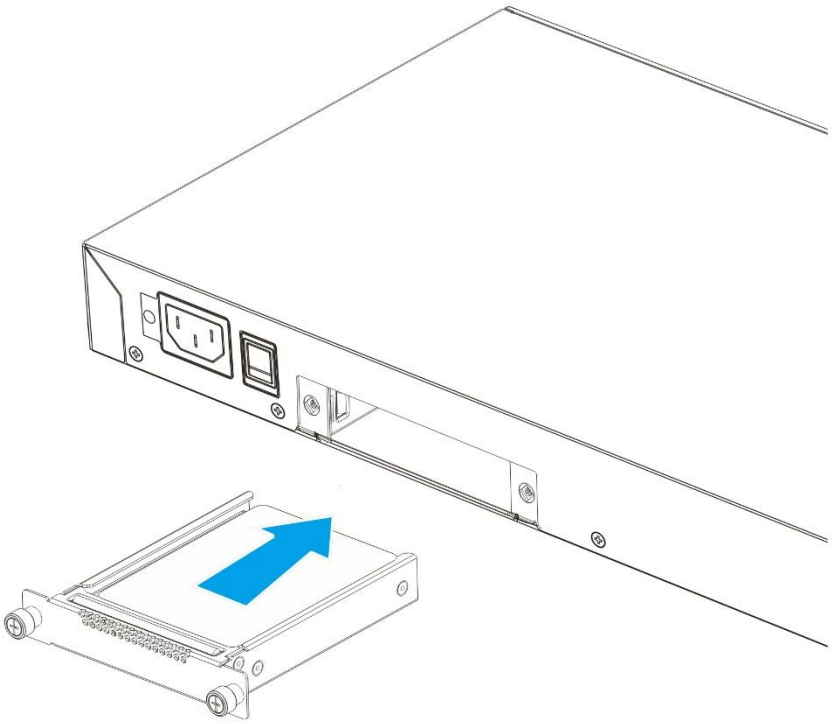
(3) Slowly push the hard disk horizontally into the slot until it is fully seated.

- Install a Ruijie hard disk.

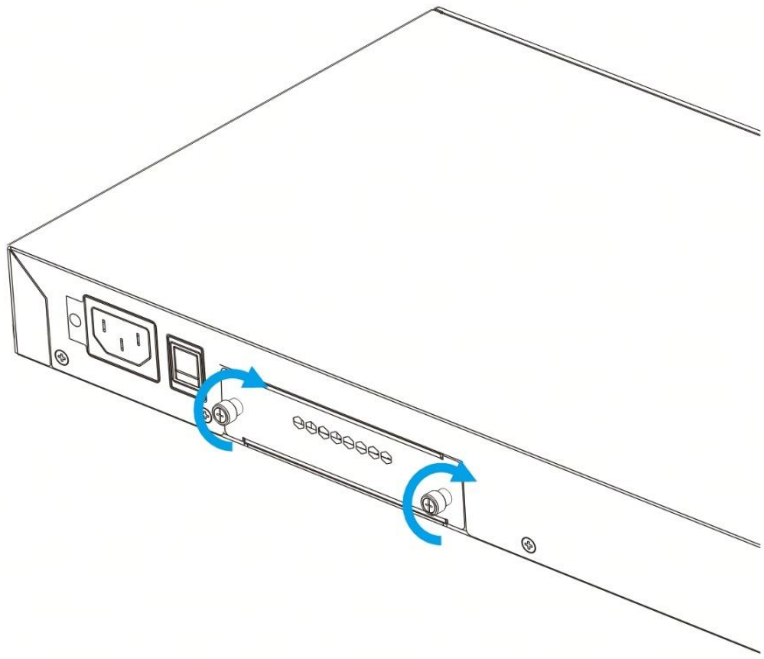


- Install a third-party hard disk.





(4) Fasten the fixing screws.



3.4 Installing the Device at the Specific Position

The Z3200-S firewall can be installed in a standard cabinet. If no cabinet is available, the device can be installed on a workbench.

3.4.1 Installing in a Cabinet

Application Scenario

When a standard cabinet is configured, the fixed accessories delivered with the device can be used.

The Z3200-S firewall is designed based on a standard cabinet. You can use the fixed accessories as required.

Prerequisites

Before installation, check the following items:

- The cabinet has been properly secured.
- The device installation position in the cabinet has been planned.

Procedure

(1) Install the mounting brackets on both sides of the device according to the Mounting Bracket Installation Guide in the package contents.

(2) Install the cage nuts on both sides of the device.

(3) Lift the device by both sides and push it horizontally into the cabinet.

(1) Secure the left and right mounting brackets of the device to the front of the cabinet to fix the device in the cabinet.

Follow-up Procedure

After installation, check the following items:

- The device is securely installed in the cabinet.

- About 1 U space is reserved above and below the device to facilitate heat dissipation.
- No objects around the device hinder heat dissipation.

3.4.2 Installing on a Workbench

Application Scenario

In many cases, a standard cabinet is unavailable. In such cases, you can simply place the device on a clean workbench.

Prerequisites

Before installation, check the following items:

- The workbench has been properly grounded.
- The workbench is clean, sturdy, and stable.

Procedure

(1) Paste the four rubber pads delivered with the device on the holes at the four corners of the bottom of the device.

(1) Place the device on the workbench.

Follow-up Procedure

After installation, check the following items:

- The device is securely placed on the workbench.
- A 10 cm space has been reserved around the device for heat dissipation, and no objects that hinder heat dissipation exist.
- No heavy objects are placed on top of the device.

3.5 Connecting the Grounding Cable

Application Scenario

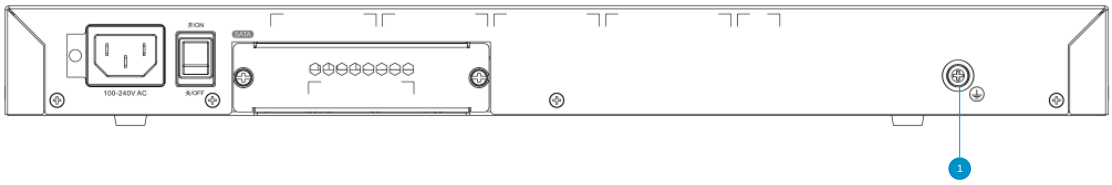
You must correctly connect the grounding cable to ensure lightning protection and anti-interference of the firewall.

Procedure

(1) Remove the screw from the grounding terminal of the device.

Icon 1 in Figure 3-1 shows the grounding terminal of the firewall.

Figure 3-1 Grounding Terminal of the Z3200-S Firewall



(2) Align the M4 end of the grounding cable with the screw hole of the grounding terminal, and fasten the screw.

(3) Connect the M6 end of the grounding cable to the grounding terminal of the cabinet or workbench.

Follow-up Procedure

After connecting the grounding cable, check the following items:

- The grounding cable is securely connected to the grounding terminal.
- Use the ohm mode of a multimeter to measure the resistance between the grounding terminal and the grounding point. The grounding resistance is less than 1 ohm.

3.6 Connecting the Power Cord

Application Scenario

A power cord is used to connect a power module and an external power supply. If dual power supplies are configured, the power cords need to be connected for both power modules.

Prerequisites

- The power supply meets power requirements of the Z3200-S firewall.

  AC power supported by the RG-WALL 1600 series firewall: 100–240 V AC/50–60 Hz.

  The power cord of the firewall has three cores. It is recommended that a single-phase three-core power socket with a neutral point connector or a multi-function microcomputer power socket be used. The neutral point of the power supply has been securely grounded in the building. Typically, the neutral point of the power supply system of a building has been buried during construction and cabling. Ensure that the power supply of the building has been properly grounded. The grounding resistance is less than 1 ohm.
- The device has been properly grounded.
- The power switch is off.

Procedure

Warning

Use the delivered power cords. Otherwise, security accidents may occur.

- Plug one end of a power cord into the power socket on the rear panel of the firewall chassis.
- Verify that the power cord retention clip is properly installed and secure the power cord with the clip.
- Connect the other end of the power cable to the AC power socket.

3.7 Verifying Installation

After installing the device, check the following items before powering on the device:

- If the device is installed in a cabinet, check whether the mounting angle irons of the cabinet and device are secure. If the device is installed on a workbench, check whether there is sufficient space for heat dissipation and whether the workbench is secure.
- Check whether the connected power supply meets the power requirements of the device.
- Check whether the cabinet is properly grounded.
- Check whether the device is correctly connected to other devices such as configuration terminals.
- Check whether the power cord is long enough to avoid cord tension and reduced service life.

4 Commissioning

4.1 Setting Up the Configuration Environment

Prerequisites

The Z3200-S firewall provides the default configuration, as described in Table 4-1.

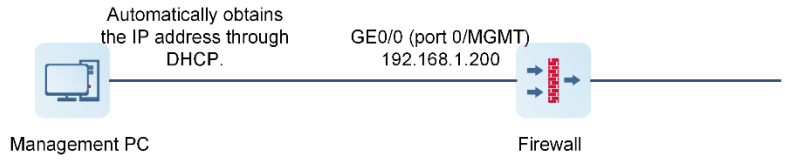
Table 4-1 Factory Settings of the Device

DHCP	By default, the DHCP service is enabled.
Login Address	Default address: **https://192.168.1.200**
Account and Password	Default account: **admin** Default password: **firewall**
Management Port	Port 0/MGMT

Procedure

Use an Ethernet cable to connect port 0/MGMT on the firewall to the management PC.

Figure 4-1 Connecting the Ethernet Cable



By default, the DHCP server function is enabled on port 0/MGMT. In this case, the local NIC of the management PC can automatically obtain an IP address from the firewall to communicate with the firewall. Therefore, you do not need to manually configure the IP address.

4.2 Powering on and Starting the Device

4.2.1 Checklist Before Power-On

- The device is properly grounded. (The three-core power supply and grounding connector are properly grounded.)
- The power cord is properly connected.
- The power voltage meets the device requirement.
- The Ethernet cable is properly connected.

4.2.2 Powering on and Starting the Device

(1) Turn on the switch of the external power supply.

(2) Turn on the power switch of the firewall.

4.2.3 Checklist After Power-On

Check the status of the PWR LED on the device.

Table 4-2 PWR LED Status

Status	Description
Steady green	The power supply is working normally.
Off	The power supply fails or is not turned on.

4.3 Configuring the Product

Open a browser on the management PC, enter **https://192.168.1.200** in the search box, and press **Enter**. Then, log in to the web interface of the firewall to configure services.

Caution

By default, the prefix **https** must be used. If **http://192.168.1.200** is used, you may fail to log in.

For details about device configuration, see *User Manual* of the required version.

5 FAQs

5.1 AC Power Module Does Not Work

5.1.1 Symptom

All LEDs on the front panel are off, and the fan does not rotate.

5.1.2 Solution

(1) Remove the power cord from the power socket.

(2) Check whether cables in the cabinet or on the workbench are correctly connected, and whether the power cord is securely connected to the power socket.

(3) Check whether the power cord is securely connected to the power supply module.

5.2 Serial Console Has No Output

5.2.1 Symptom

After the system is started, the serial console does not display any information.

5.2.2 Solution

(1) Check whether the serial cable is properly connected, and whether the connected serial port is consistent with that configured on HyperTerminal.

(2) Check whether the baud rate configured for the serial port on HyperTerminal is correct.

(3) If there is still no output on the serial port, contact Ruijie technical support.

5.3 Optical Port Fails

5.3.1 Symptom

After an optical transceiver is inserted into an optical port and the optical cable is properly connected, the LED of the optical port is still off.

5.3.2 Solution

Perform the following steps:

(1) Check whether the receive end and transmit end of the cable connection are reverse. In normal cases, the transmit end on a local optical port must be connected to the receive end on the peer port. You can change the connection sequence of the two cables on the optical transceivers.

(2) Check whether the wavelengths of the optical transceivers on both ends are the same. For example, an optical transceiver with a wavelength of 1310 nm cannot be connected to an optical transceiver of 1550 nm.

(3) Check whether the distance between the two ends exceeds the maximum length marked on the optical transceivers.

(4) Check whether the cable type meets the requirement.

(5) Optical ports of some devices can work at different rates. In this case, you need to check whether the rates of the two ends are the same.