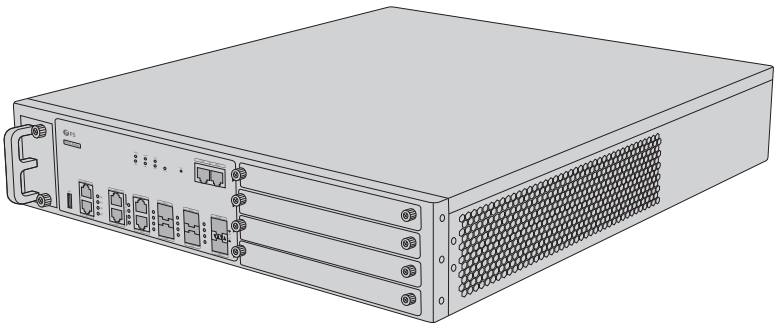


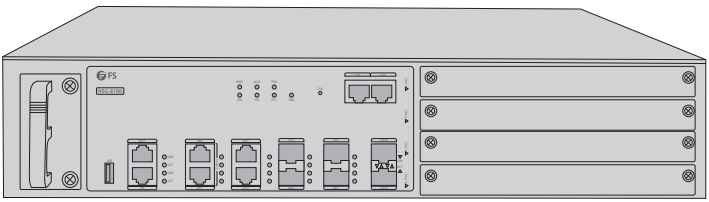
NSG-8100 Firewall

NEXT-GENERATION FIREWALL FOR LARGE-SIZED ENTERPRISES AND DATA CENTERS

Quick Start Guide V1.0

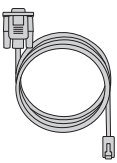
Introduction

Thank you for choosing FS Next-Generation Firewall with IPS, AV, QoS and URL Service Bundle (1 Year). This guide is designed to familiarize you with the layout of the firewall and describes how to deploy the firewall in your network.



NSG-8100

Accessories



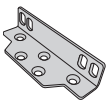
Console Cable x1



Power Cord x2



Cat5e Cable x2



Mounting Bracket x2



M4 Screw x10



Dust Cap x4



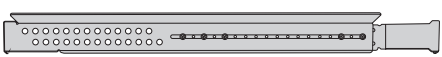
Grounding Cable x1



Rubber Pad x4



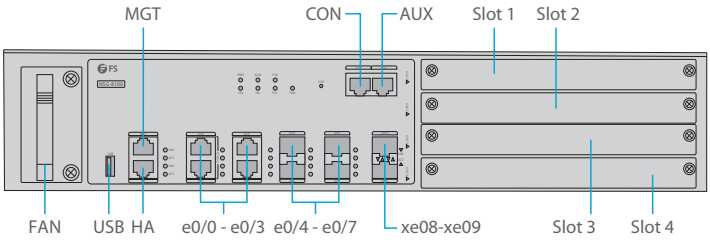
M6 + Nut x12



Fixed Shelf x2

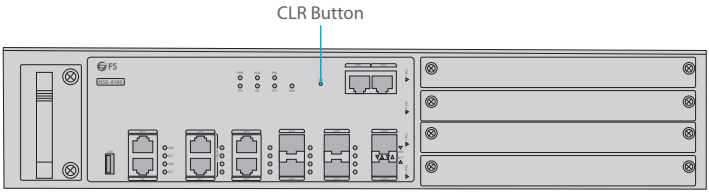
Hardware Overview

Front Panel Ports



Ports	Description
e0/0-e0/3	Gigabit Ethernet ports (e0/2 and e0/3 support the Bypass function)
e0/4-e0/7	SFP ports
xe08-xe09	SFP+ ports
USB	USB 2.0 host interface
AUX	Aux port is used for debugging
MGT	An Out-Of-Band Ethernet management port
HA	A high availability port which is a failover solution to ensure the network reliability
CON	Connect the CON port to the serial port of a PC and run a terminal emulation program on the PC to configure the device
FAN	Fan tray
Slot 1	General expansion slot
Slot 2/3/4	General expansion slot (not for storage expansion module)

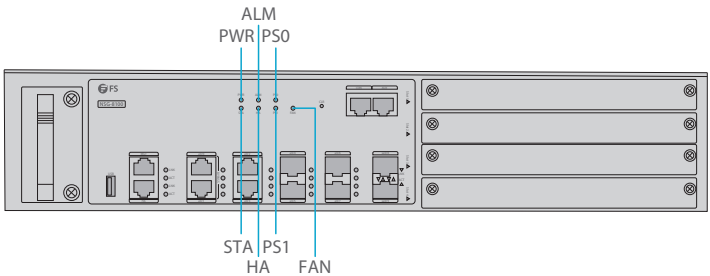
Front Panel Button



Button	Description
CLR Button	This button is used to reset the device back to the factory default settings.
	Restore to Factory Default: When the device is working, press the CLR button in the pinhole and the device will restart. After the device restarted, the CON port outputs the information of CLR button pressed and the STA and ALM LEDs turn to constantly red. After the LEDs turn off, the device will restart again.

NOTE: Use this button with caution. Resetting the device will clear all existing configurations.

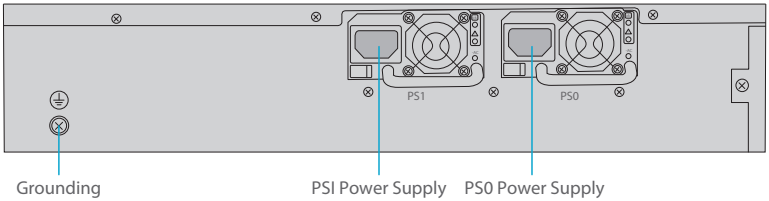
Front Panel LEDs



Button	Status	Description
PWR	Green/Always on	The device power is running normally.
	Orange/Always on	The device power is running abnormally.
	Red/Always on	Power failure so the system is down.
	Off	The device is powered off.

Button	Status	Description
PS0	Green/Always on	Power supply PS0 is running normally.
	Orange/Always on	Power supply PS0 is running normally, but its fan has failed. Change the power supply immediately.
	Off	Power supply PS0 is powered off or has failed.
PS1	Green/Always on	Power supply PS1 is running normally.
	Orange/Always on	Power supply PS1 is running normally, but its fan has failed. Change the power supply immediately.
	Off	Power supply PS1 is powered off or has failed.
STA	Green/Always on	The system is booting.
	Green/Blinking	The system is running normally.
	Red/Always on	The system has failed to boot or has an error.
ALM	Red/Always on	The system is sending alarm(s).
	Green/Blinking	The system is waiting.
	Orange/Blinking	The system is using a trial license.
	Orange/Always on	The trial license has expired and there is no legitimate license installed in the system.
	Off	The system is running normally.
HA	Green/Always on	Not using HA, this device is the master device.
	Green/Blinking	Two device are in an HA cluster. This device is working as the master.
	Orange/Blinking	Two device are in an HA cluster. This device is working as the slave.
	Red/Blinking	HA function has failed.
	Off	High availability is disabled.
e0/0 - e0/9	Green/Always on	The link between this port and its peer device is in normal status.
	Green/Blinking	The port is sending or receiving data.
	Off	There is no connection between this port and its peer device, or the link between this port and its peer device fails.

Back Panel

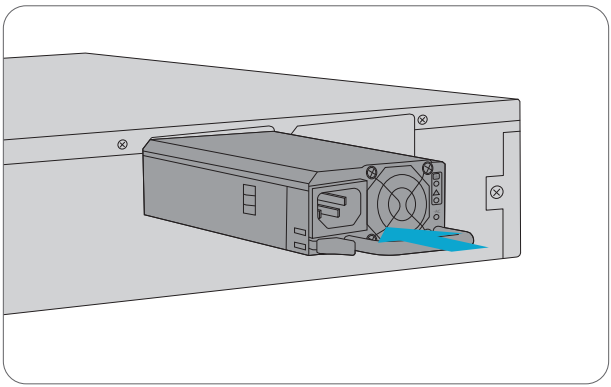


Site Environment

- Do not operate it in an area that exceeds an ambient temperature of 40°C.
- The installation site must be well ventilated. Ensure that there is adequate air flow around the firewall.
- Be sure that the firewall is level and stable to avoid any hazardous conditions.
- Do not install the equipment in a dusty environment.
- The installation site must be free from leaking or dripping water, heavy dew, and humidity.

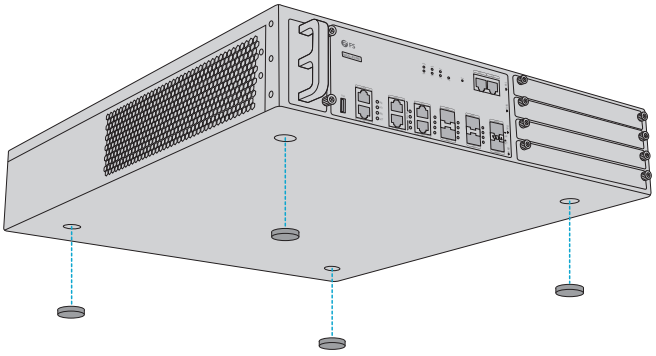
Installing

Power Supply Installation



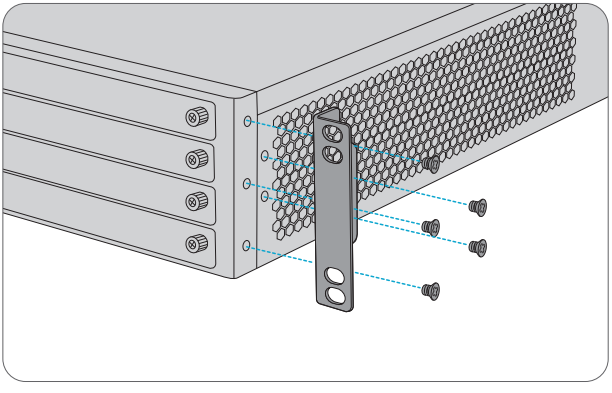
Plug the power supply module into the slot until a click.

Desk Mounting

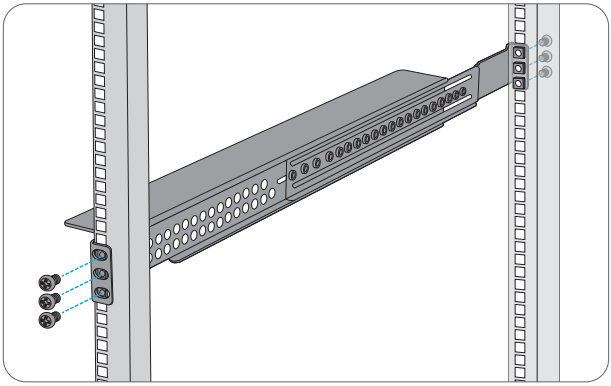


1. Tear off the sticker from the rubber pad.
2. Press the sticky side of the pad to the right-angle die-pressed mark on the bottom panel of the chassis.

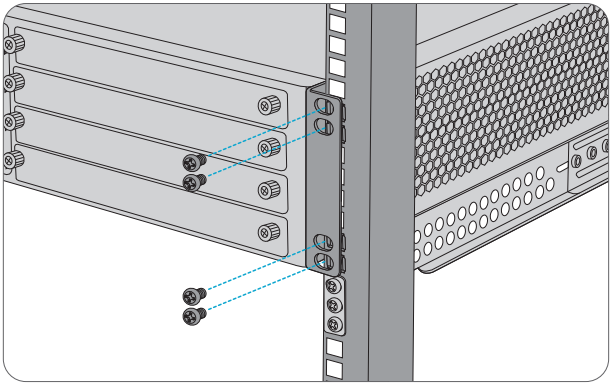
Rack Mounting



1. Secure the mounting brackets to the two sides of the firewall with ten M4 screws.



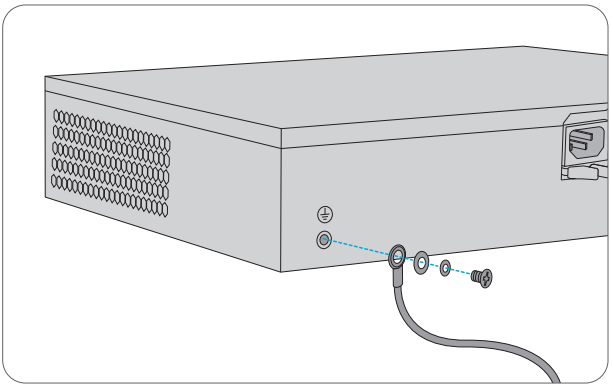
2. Loosen the screws and adjust the shelf to a reasonable position, then tighten the screws.
3. Install the shelf with twelve M6 screws and nuts.



4. Put the firewall on the tray and attach it.

NOTE: Do not drag the handle of fan module while installing or removing device.

Grounding the Firewall

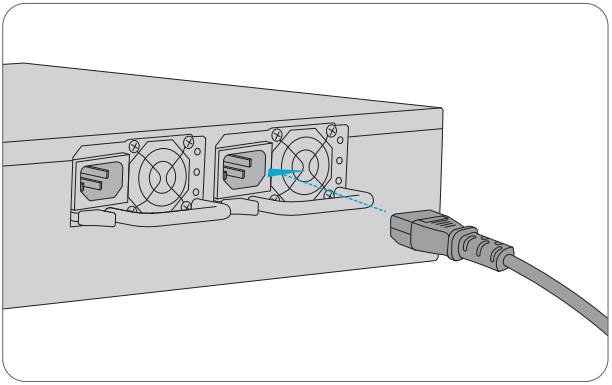


1. Connect one end of the grounding cable to a proper earth ground, such as the rack in which the firewall is mounted.

2. Secure the grounding lug to the grounding point on the firewall back panel with the washers and screws.

NOTE: The correct connection of the ground wire on the chassis is an essential safeguard against lightning shocks and interference. You must properly connect the ground wire when installing and using the firewall.

Connecting the Power

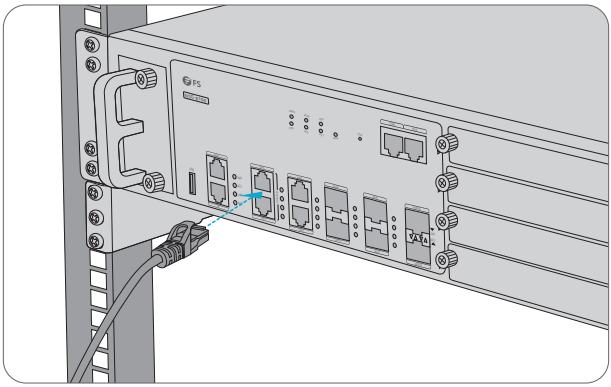


1. Plug the AC power cord into the power port on the back of the firewall.

2. Connect the other end of the power cord to a power outlet.

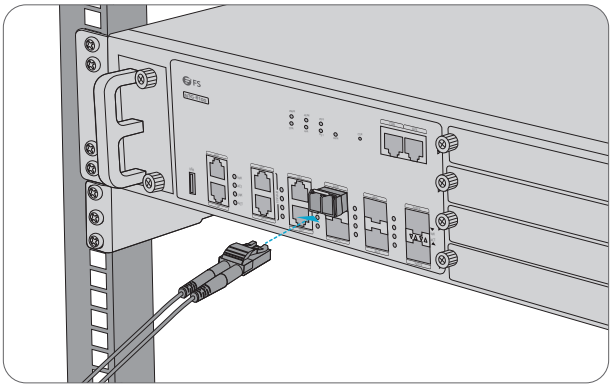
WARNING: Do not install power cables while the power is on.

Connecting the RJ45 Ports



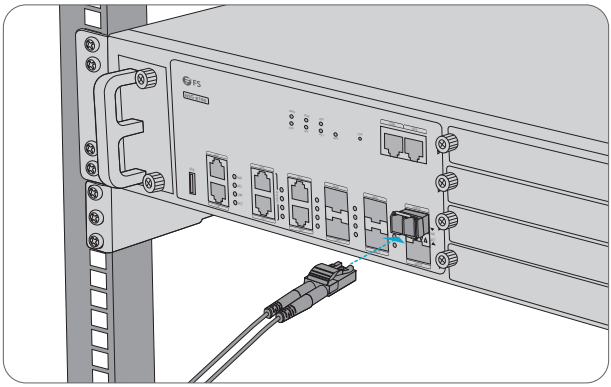
1. Connect an Ethernet cable to the RJ45 port of a computer, switch, router, or other network devices.
2. Connect the other end of the Ethernet cable to the RJ45 port of the firewall.

Connecting the SFP Ports



1. Plug the compatible SFP transceiver into the optical port.
2. Connect a fiber optic cable to the fiber transceivers. Then connect the other end of the cable to another fiber device.

Connecting the SFP+ Ports

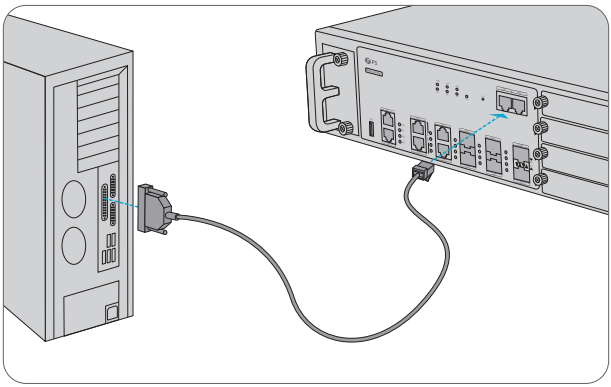


1. Plug the compatible SFP+ transceiver into the optical port.

2. Connect a fiber optic cable to the fiber transceivers. Then connect the other end of the cable to another fiber device.

CAUTION: Laser beams will cause eye damage. Do not look into bores of optical modules or optical fibers without eye protection.

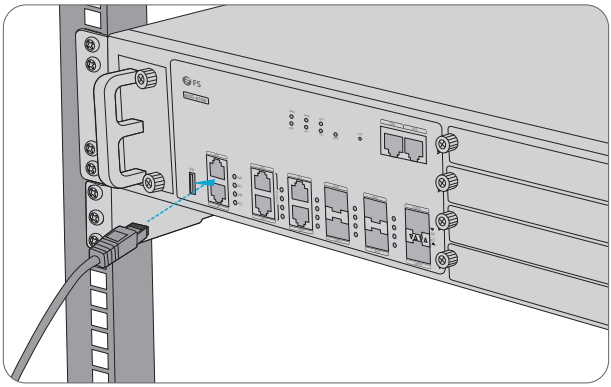
Connecting the Console Port



1. Insert the RJ45 connector of the console cable into the RJ45 console port on the front of the firewall.

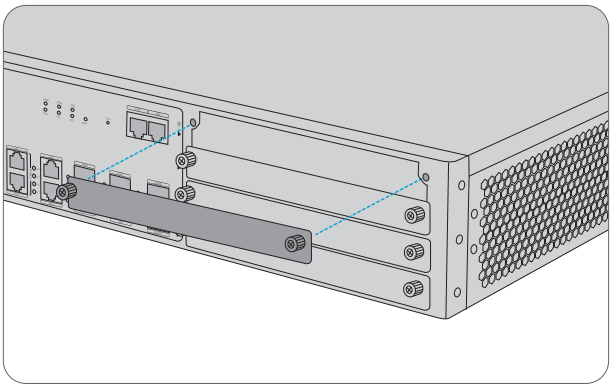
2. Connect the other end of the console cable to RS-232 serial port on the computer.

Connecting the MGT Port

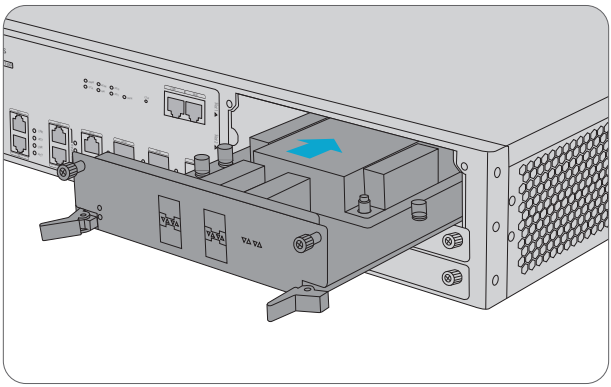


1. Connect one end of a standard RJ45 Ethernet cable to a computer.
2. Connect the other end of the cable to the MGT port on the front of the firewall.

Installing an Expansion Module



1. Use a screwdriver to remove the blank panel from the expansion slot you want to insert.

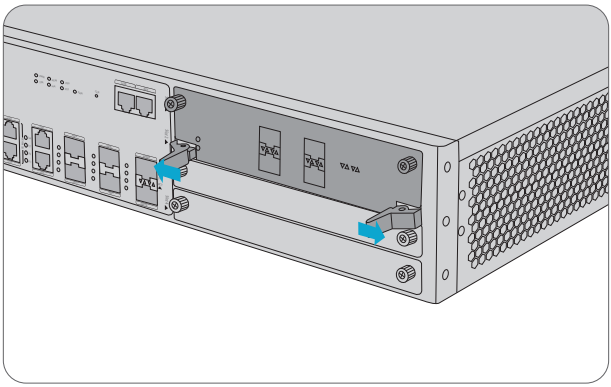


2. Slide the expansion module into the slot until you feel resistant.

3. Tighten the screws on the expansion module.

NOTE: Make sure that the device has been powered off and you should wear the ESD strap properly.

Removing an Expansion Module



1. Loosen the screws on the expansion module.

2. To ½U expansion module, Pull the expansion module straight out of the chassis by holding the screws.

3. To 1U expansion module, push the handle on module to both sides first, then pull the expansion module straight out of the chassis by holding the handle.

Configuring the Firewall

Configuring the Firewall Using the Web-based Interface

1. Set up the IP address of the management PC on the same subnet as 192.168.1.1/24. Connect the management PC to the e0/0 port through an Ethernet cable.
2. Launch a Web browser of the management PC, enter the URL http://192.168.1.1 in the address bar, and then press Enter.
3. Enter the default administrator name and password "admin" in both the Login and Password text boxes.
4. Click the Login button to enter WebUI main page. Then you can set other configurations to the device.

Configuring the Firewall Using the Console Port

Step 1: Connect a computer to the firewall's console port using the supplied console cable.

Step 2: Start the terminal simulation software such as HyperTerminal on the computer.

Step 3: Configure the terminal simulation with the following parameters:

- 9600 bits per second
- 8 data bits
- no parity
- 1 stop bit
- no flow control

Step 4: Enter the default administrator name and password "admin" at the "login" and "password" prompts, press "Enter".

Step 5: Enter commands to configure or view running status. Enter a question mark "?" to get help on commands whenever you want.



CAUTION: Make sure that any configuration changes made are saved before exiting.

Troubleshooting

Troubleshooting Power System

Check the PWR LED on the front panel of the device. If the power supply is functioning normally, the PWR LED lights steadily in green color. If the LED is off, perform the following steps:

1. Make sure the power supply cable is connected correctly.

2. Ensure that the voltage of the power source conforms to the required voltage.

For the PWR LED information, see LED Indicators.

Troubleshooting the Configuration System

The Console configuration terminal shows system booting message when the device is powered on. If the configuration system has failed, it displays error information or nothing at all.

If the configuration terminal shows no information, perform the following steps:

1. Make sure the power supply is correctly connected and powered on.
2. Verify the Console cable is connected properly.
3. Ensure the terminal configuration settings are correct.

If above steps reveal no error, the Console cable may be broken.

Online Resources

- Download **https://www.fs.com/download.html**
- Help Center **https://www.fs.com/service/help_center.html**
- Contact Us **https://www.fs.com/contact_us.html**

Product Warranty

FS ensures our customers that any damage or faulty items due to our workmanship, we will offer replacement service within 90 Days from the day you receive your goods. This excludes any custom made items or tailored solutions.

Warranty: FS Next-Generation Firewalls enjoy 1, 2 or 3 years limited warranty based on your service item against defect in materials or workmanship. For more details about warranty, please check at https://www.fs.com/policies/warranty.html

Return: If you want to return item(s), information on how to return can be found at https://www.fs.com/policies/day_return_policy.html

Q.C. PASSED

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