



H3C 6W105 SecPath F1000-AI-X0 Firewall Series User Guide

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H3C 6W105 SecPath F1000-AI-X0 Firewall



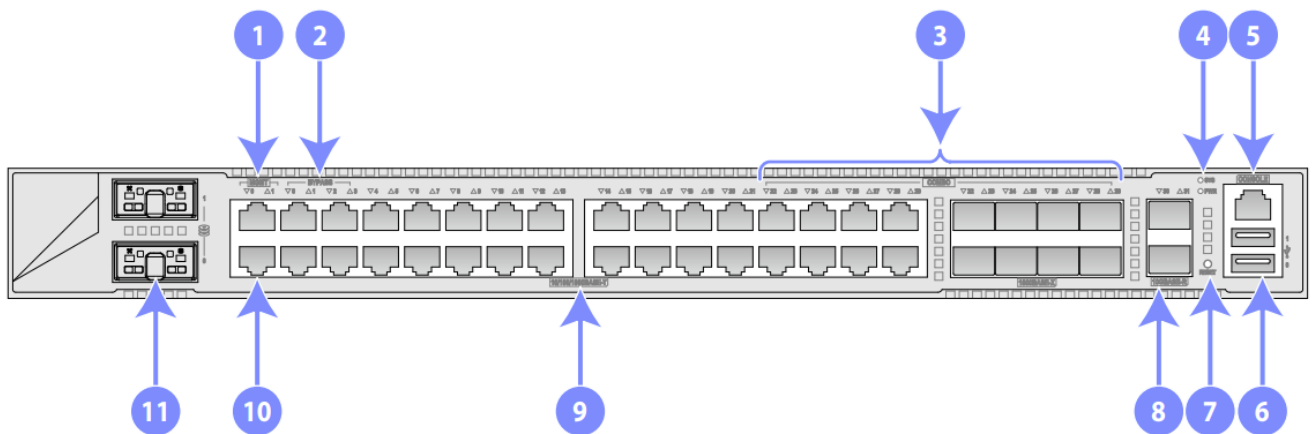
This document is applicable to the F1000-AI-10, F1000-AI-20, F1000-AI-30, F1000-AI-50, F1000-AI-60, F1000-AI-70, F1000-AI-80, and F1000-AI-90 models. The installation procedure is similar for the firewalls. This guide installs an F1000-AI-50.

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Chassis views

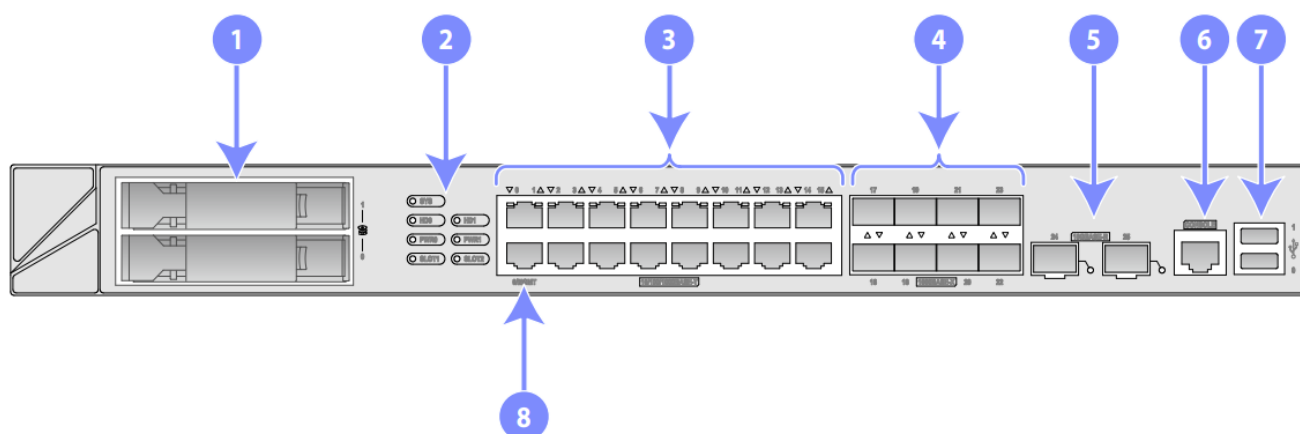
F1000-AI-10 front panel.



- 1. Management Ethernet port (1/MGMT)
- 2. Bypass ports
- 3. Combo interfaces
- 4. LEDs
- 5. Console port
- 6. USB port
- 7. Reset button

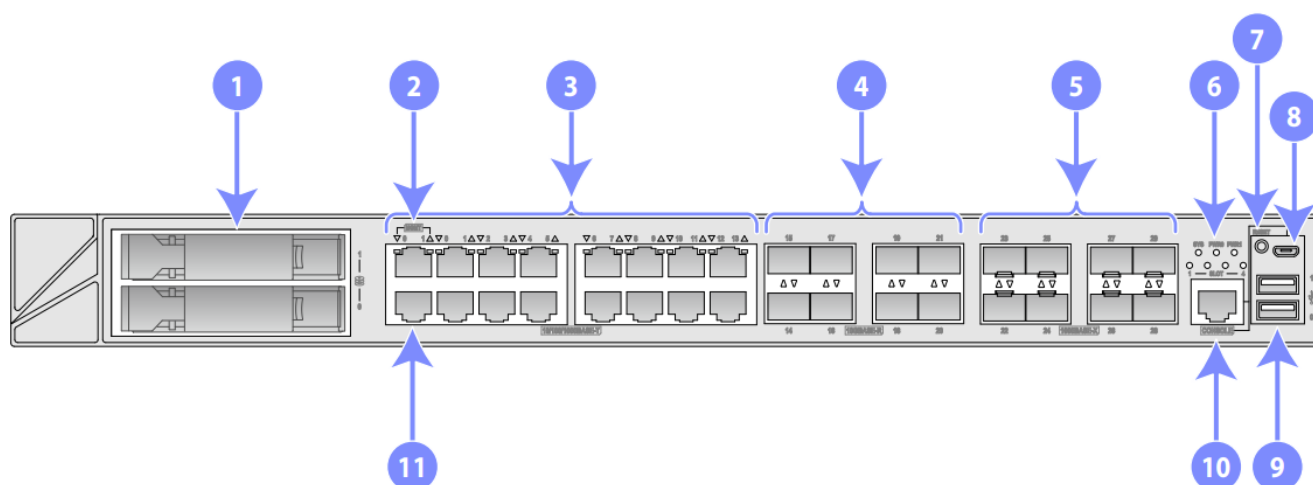
- 8. 10GBASE-R fiber ports
- 9. 10/100/1000BASE-T copper ports
- 10. Management Ethernet port 0/MGMT
- 11. Drive slot

F1000-AI-20/F1000-AI-30/F1000-AI-50 front panel.



- 1. Drive slot
- 2. LEDs
- 3. 10/100/1000BASE-T Copper ports
- 4. 1000BASE-X fiber ports
- 5. 10GBASE-R fiber ports
- 6. Console port
- 7. USB port
- 8. Management Ethernet port(0/MGMT)

The F1000-AI-60, F1000-AI-70, F1000-AI-80, and F1000-AI-90 firewalls have similar front panels. The following shows the F1000-AI-90 front panel. For the differences between the firewalls, see the installation guide.



- 1. Drive slot
- 2. Management Ethernet port(1/MGMT)

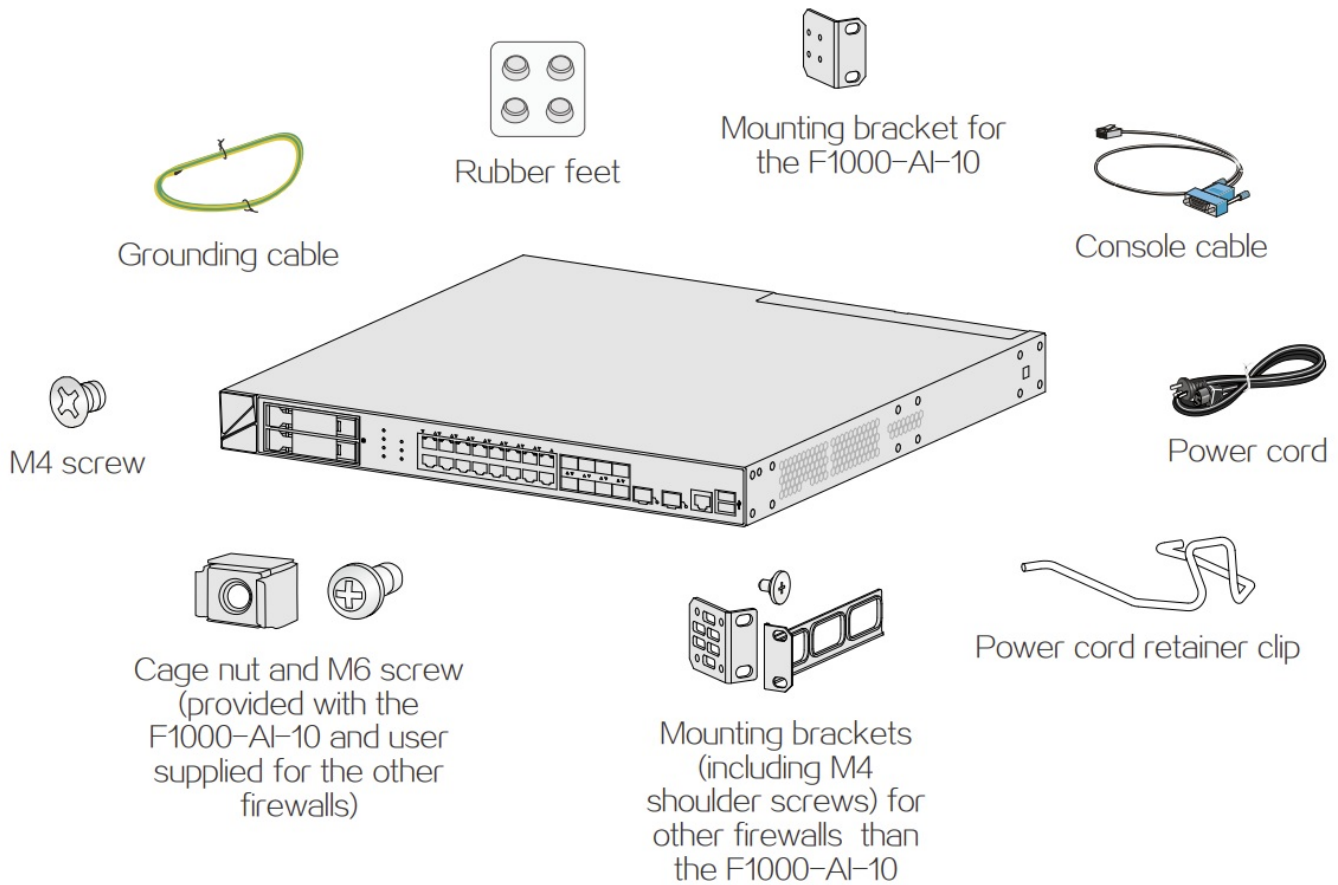
3. 10/100/1000BASE-T Copper ports
4. 10GBASE-R fiber ports
5. 1000BASE-X fiber ports
6. LEDs
7. Reset button
8. Micro USB port
9. USB port
10. Console port
11. Management Ethernet port(0/MGMT)

Tool list

	• No installation tools are provided with the device. Prepare them yourself as required. • Wear an ESD wrist strap before installation, and make sure the wrist strap makes good skin contact and is reliably grounded.
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Flat-head screwdriver	Phillips screwdriver	Needle-nose pliers	Diagonal pliers	ESD wrist strap	Marker

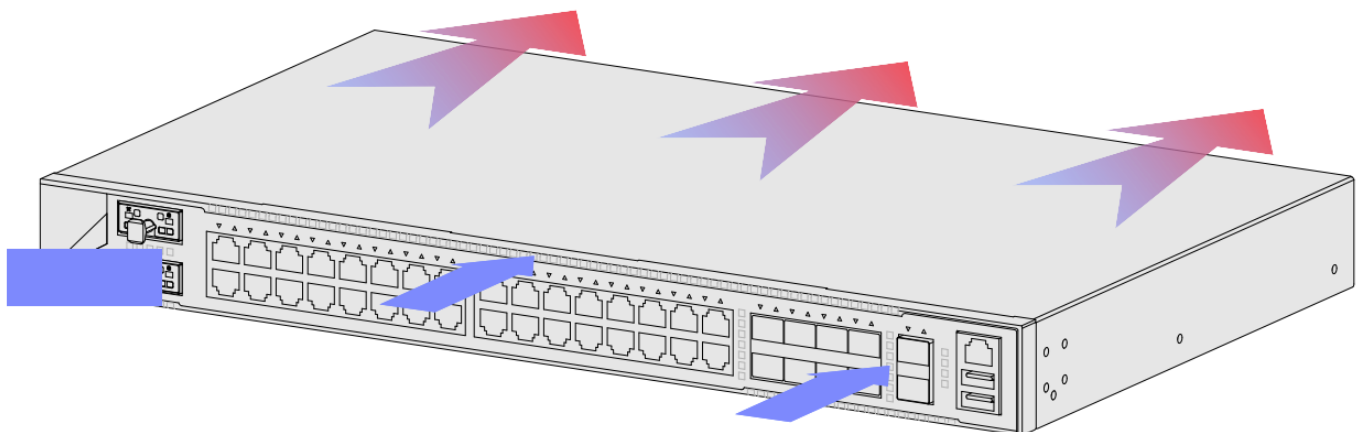
Installation accessories



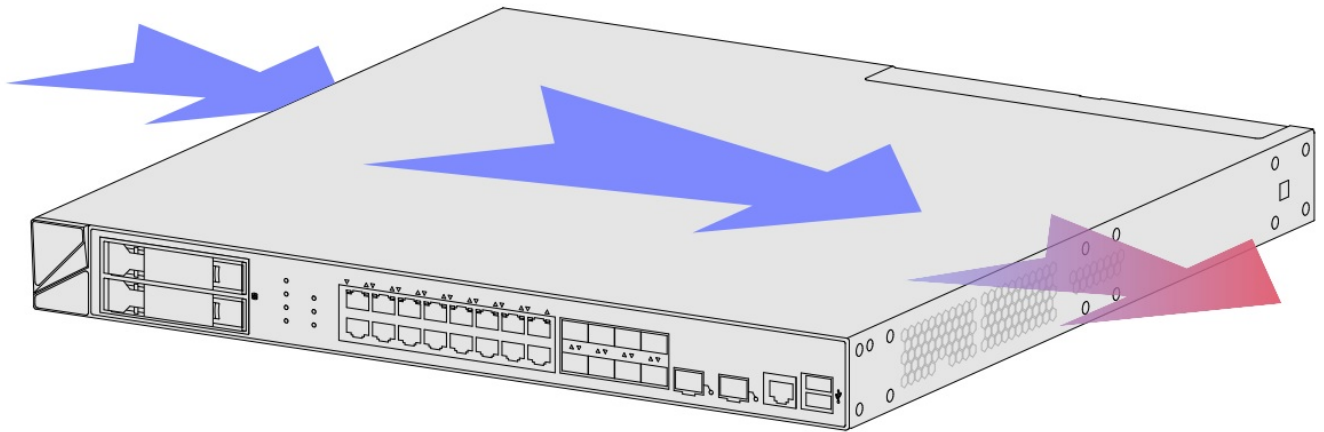
Airflow of the firewall

	• The F1000-AI-10 firewall provides front side-intake and rear side-exhaust airflow for heat dissipation. • The F1000-AI-20, F1000-AI-30, F1000-AI-50, F1000-AI-60, F1000-AI-70, F1000-AI-80, and F1000-AI-90 firewalls provide left side-intake and right side-exhaust airflow for heat dissipation. Make sure the air vents of the device are not blocked and the installation site has a good cooling system.
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Airflow through the F1000-AI-10 firewall chassis



Airflow through the F1000-AI-20/F1000-AI-30/F1000-AI-50/F1000-AI 60/F1000-AI-70/ F1000-AI-80/F1000-AI-90 firewall chassis

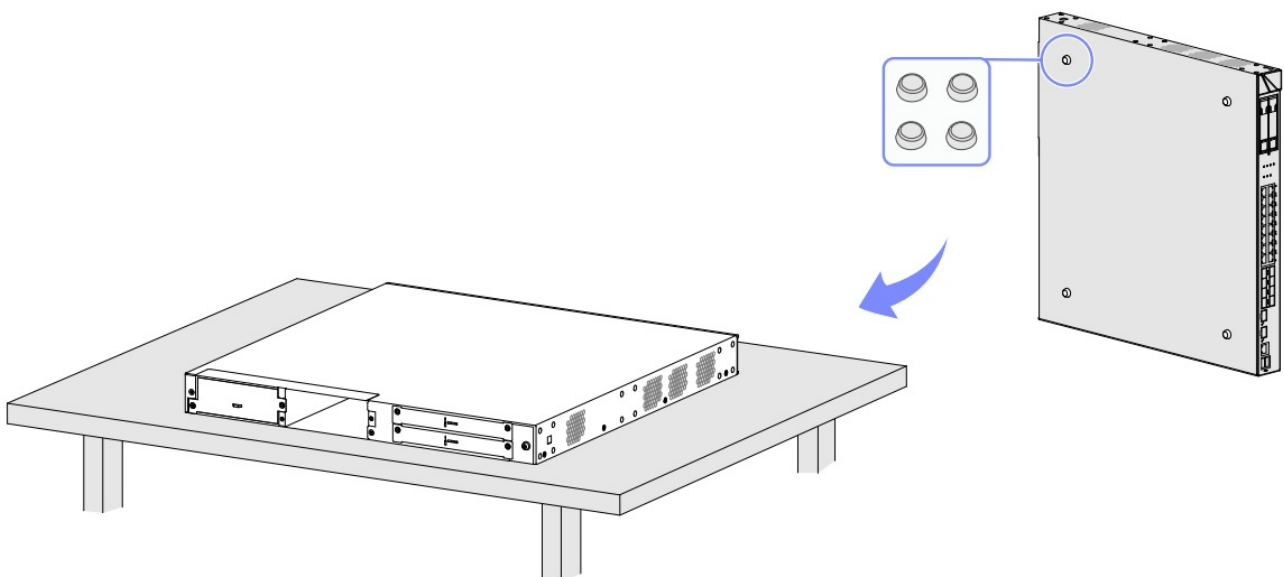


Mounting the device on a workbench



Make sure the workbench is stable and reliably grounded. Do not place heavy objects on the device.

Attach the rubber feet to the four round holes in the chassis bottom. Place the device with upside up on the workbench.



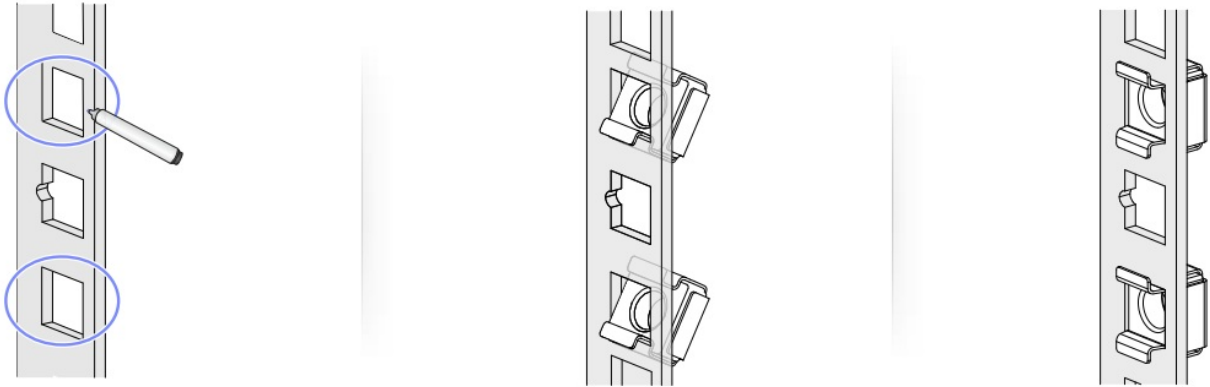
Mounting the device in a rack



- For adequate heat dissipation, ensure a minimum clearance of 80 mm (3.15 in) around the air inlet and outlet vents of the chassis and a distance of 1U (44.45 mm, or 1.75 in) between the chassis and other devices in the rack.
- To avoid bodily injury and device damage, use a minimum of two people to mount the device in a rack.

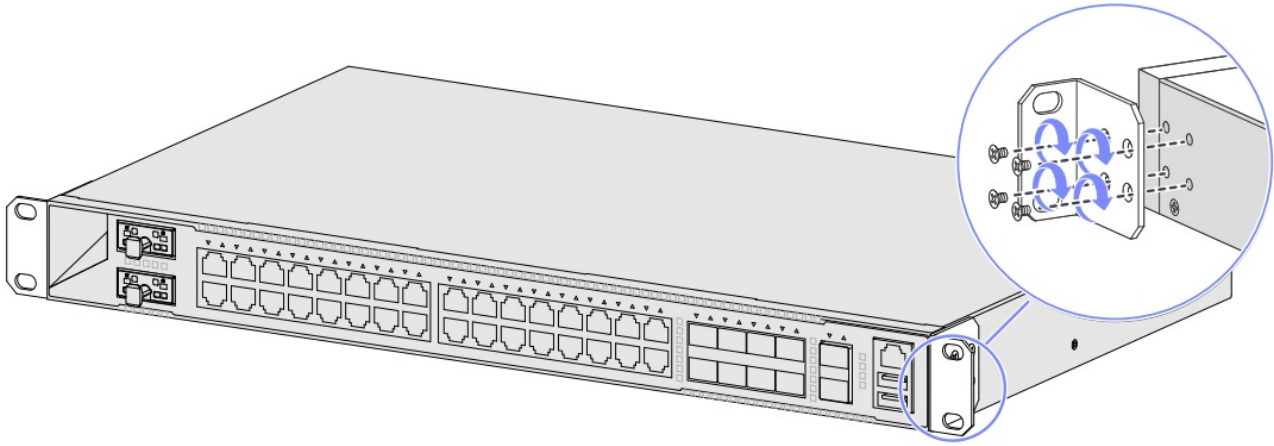
Rack-mounting the F1000-AI-10

1. Install cage nuts

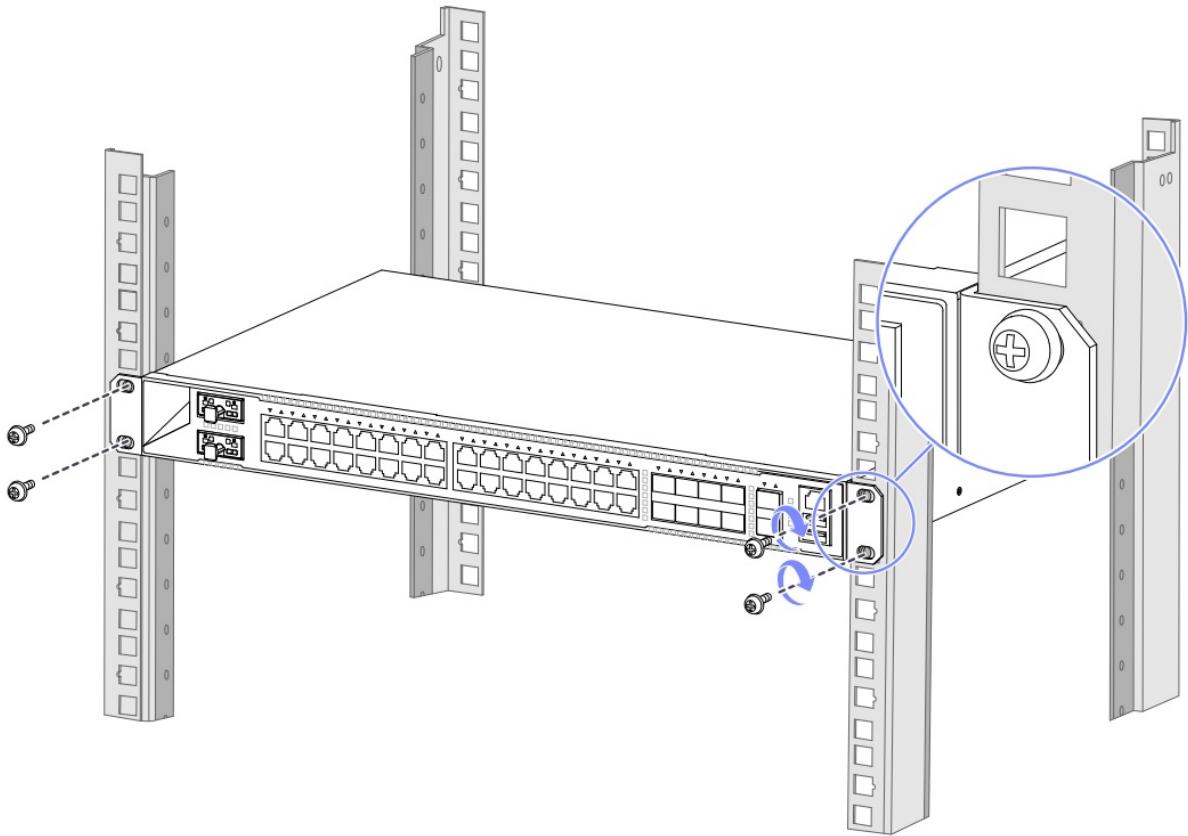


Mark the cage nut installation positions on the rack posts by using a mounting bracket.

2. Install the mounting brackets

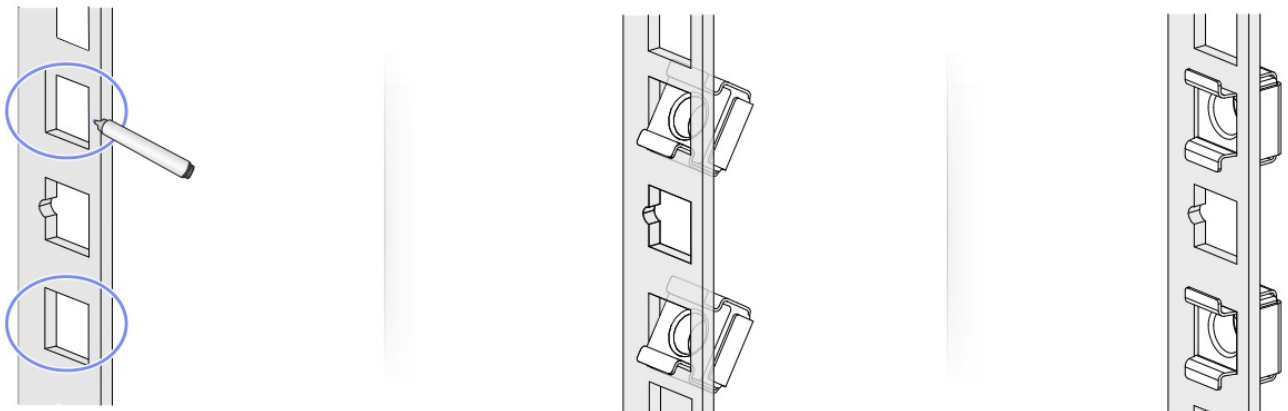


3. Install the device in the rack



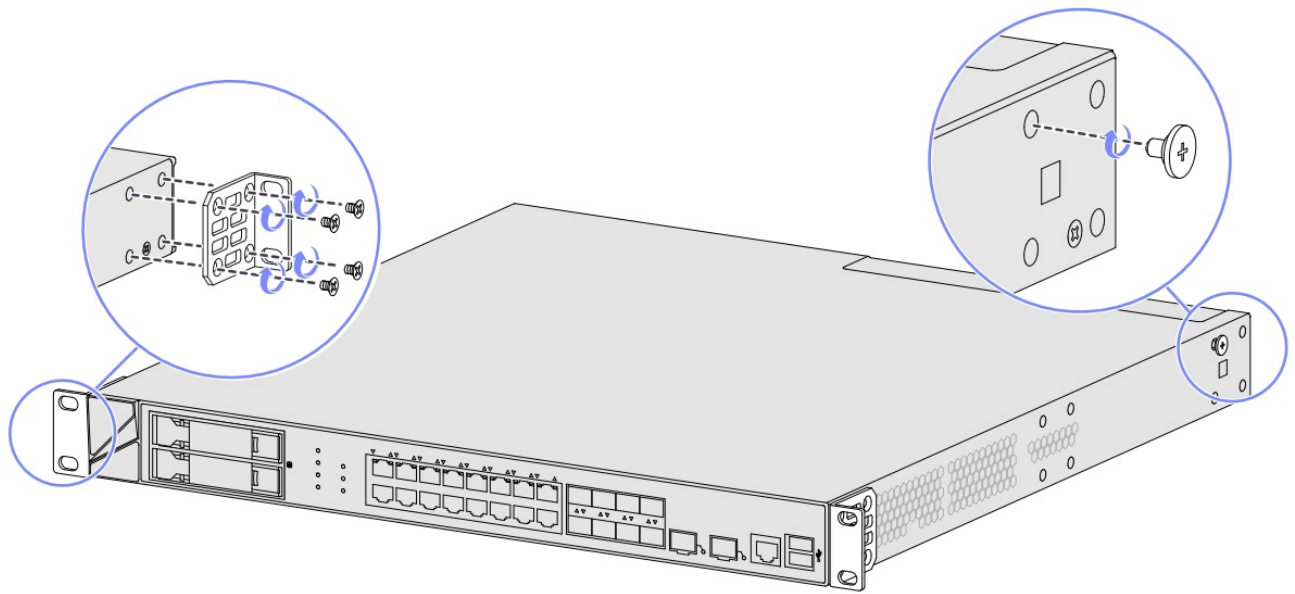
Rack-mounting the F1000-AI-20/F1000-AI-30/F1000-AI-50/F1000-AI 60/F1000-AI-70/ F1000-AI-80/F1000-AI-90 firewall

1. Install cage nuts



Mark the cage nut installation positions on the rack posts by using a mounting bracket.

2. Install the mounting brackets and shoulder screws

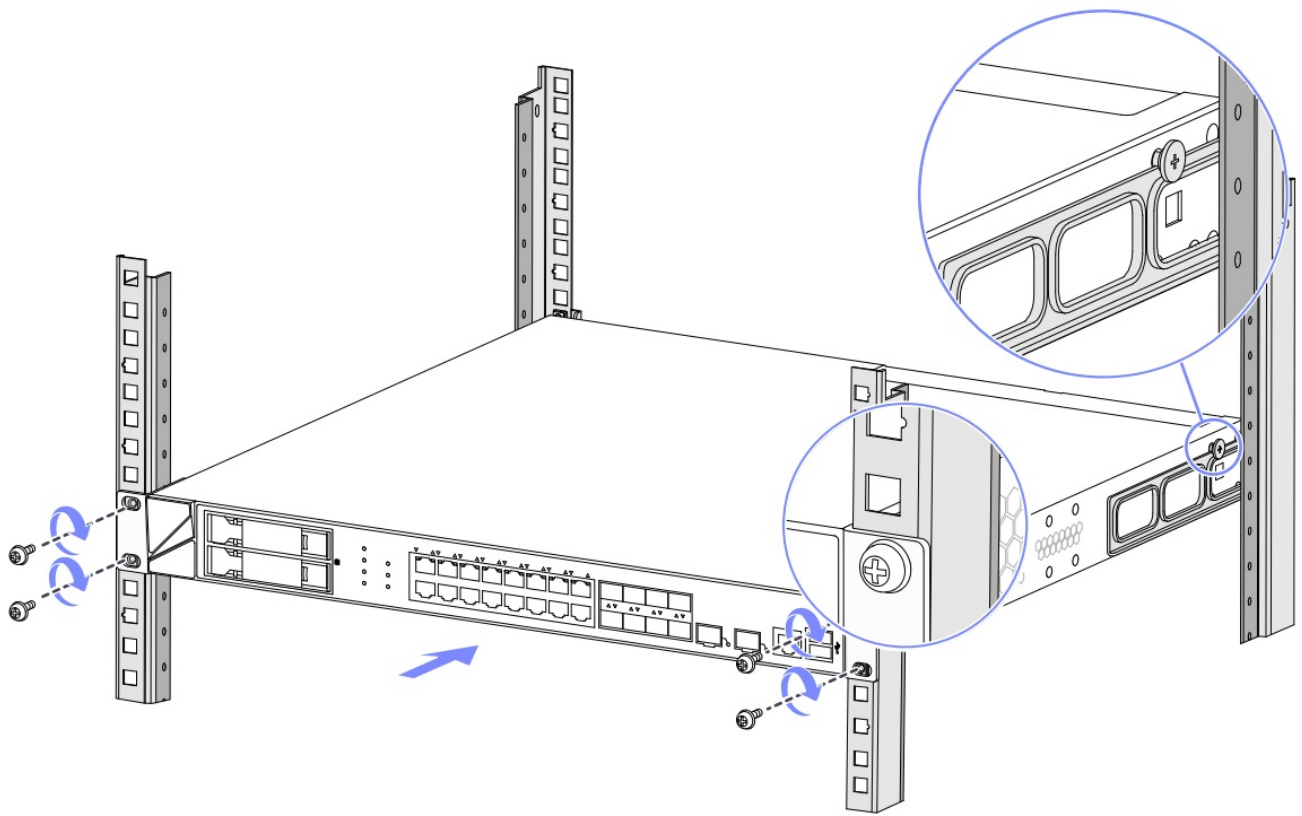


3. Install the device in the rack

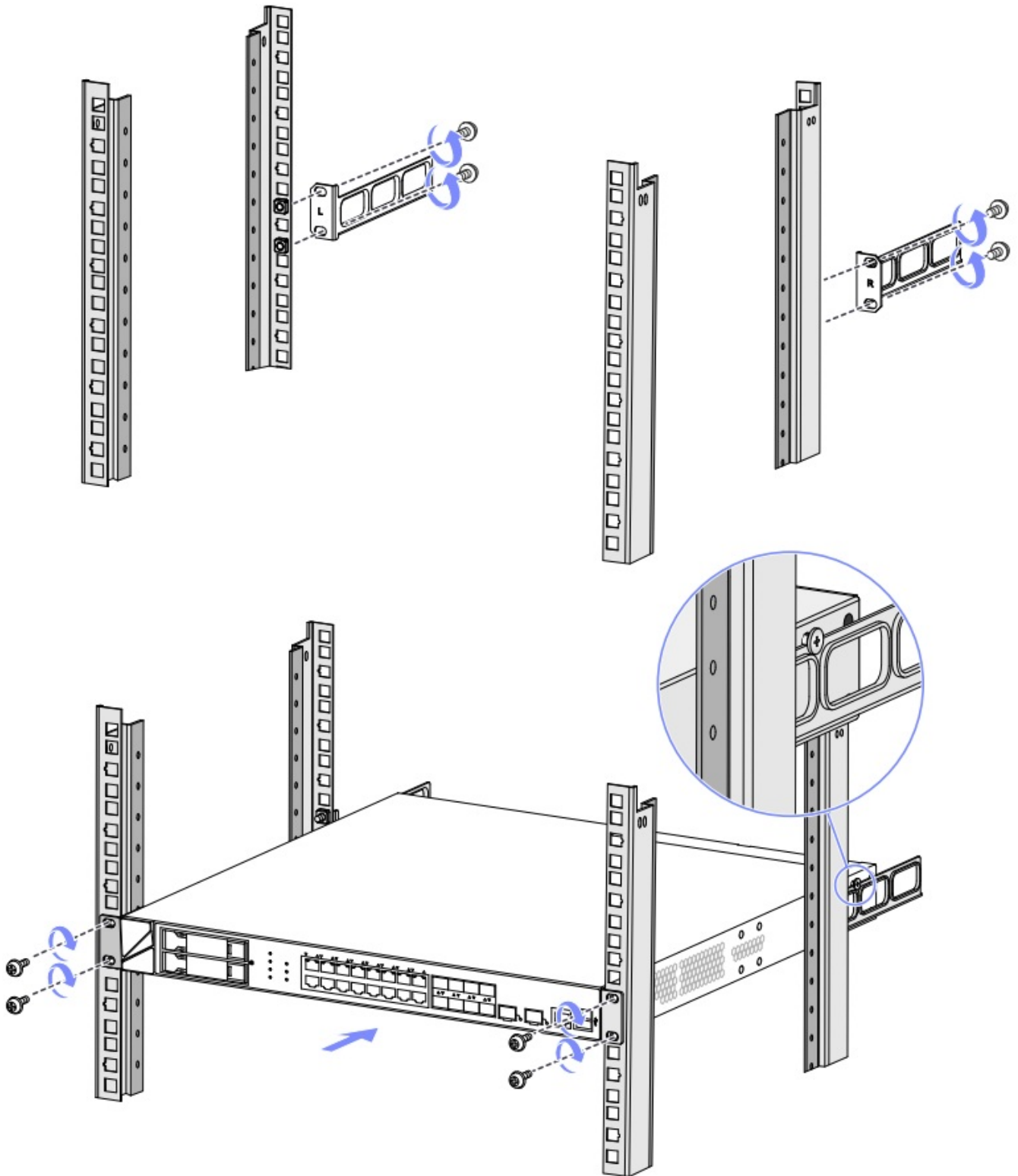
	Attach the rear mounting brackets to the rack with the wide flange inside or outside the rack based on the distance between the front and rear rack posts (rack depth).
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Rack depth	Rear mounting brackets installation method
15.94 in to 22.40 in	With the wide flange inside the rack
9.72 in to 16.18 in	With the wide flange outside the rack

Attaching the rear mounting brackets with the wide flange inside the rack



Attaching the rear mounting brackets with the wide flange outside the rack

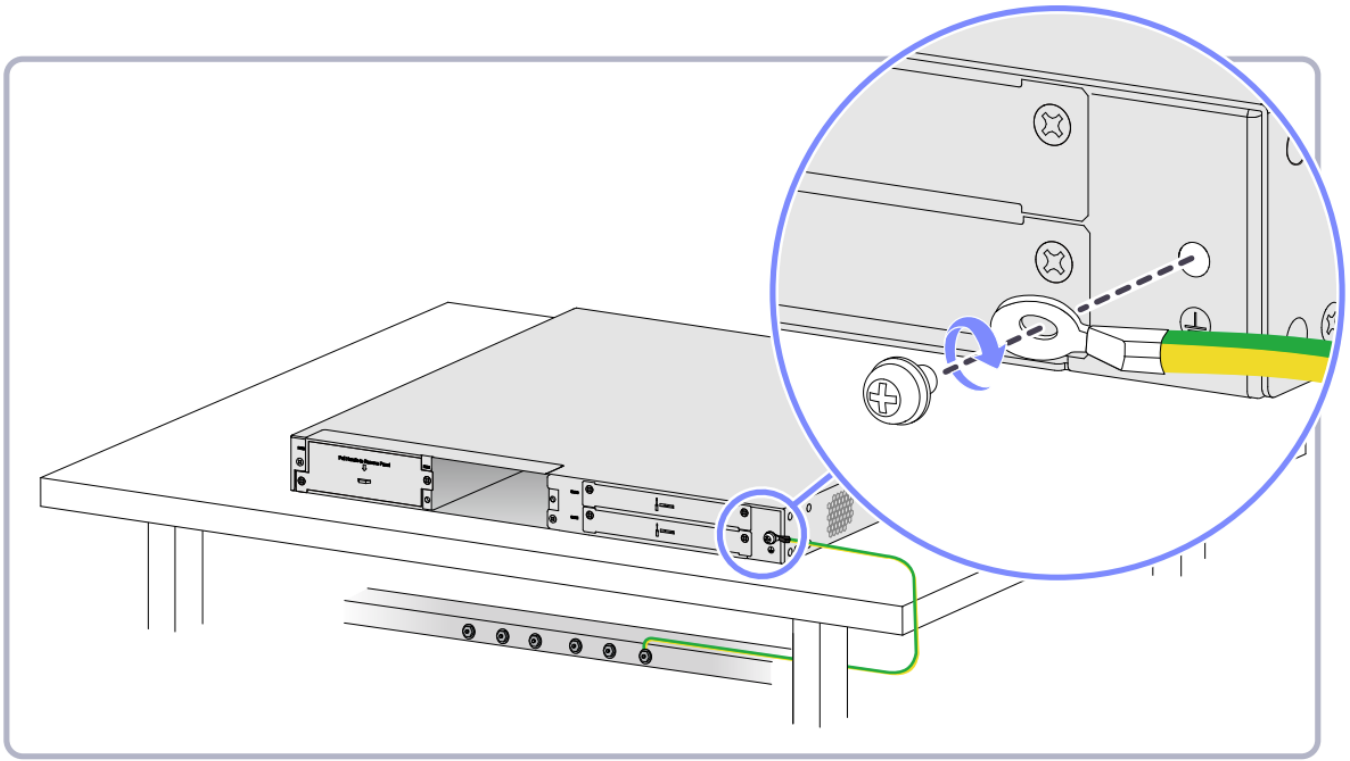


Connecting the grounding cable



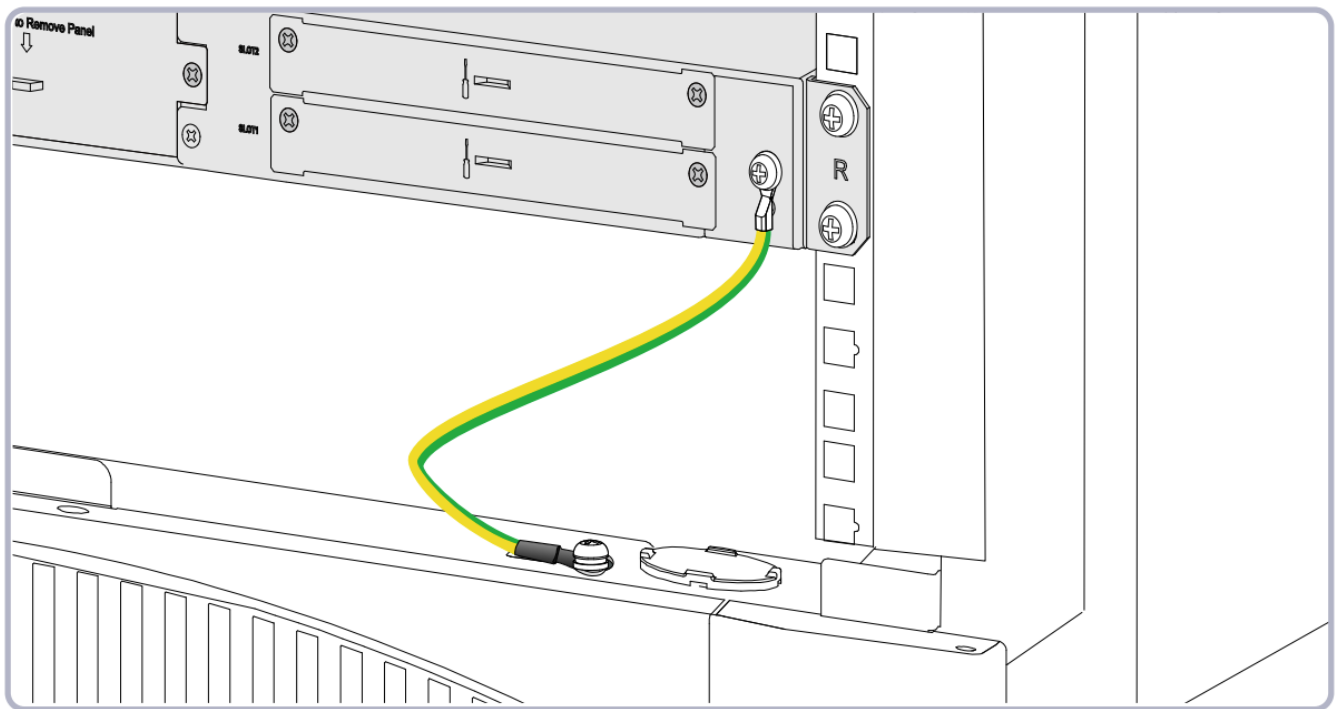
Correctly connecting the grounding cable is crucial to lightning protection and EMI protection. To guarantee the grounding effect, use the grounding cable provided with the device

Grounding the device mounted on a workbench



If a grounding strip is available, connect the grounding cable to the grounding strip.

Grounding the device mounted in a rack



Connect the grounding cable to the grounding screw on the rack.

Installing interface modules

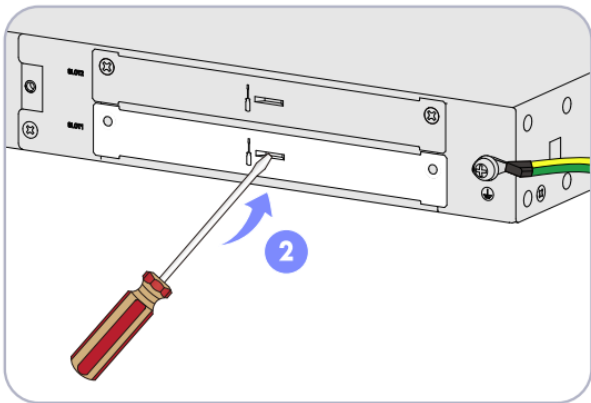
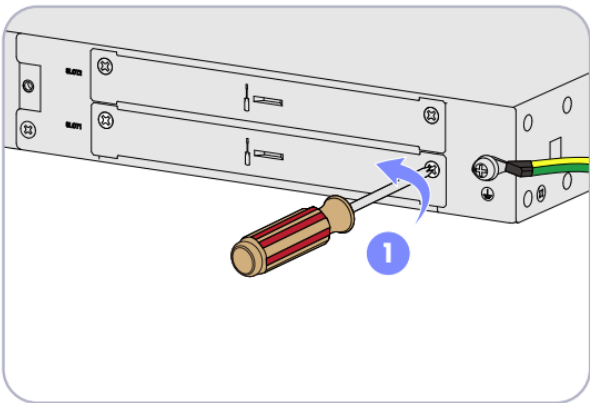
	• Interface modules are not provided with the device. Prepare them yourself if required. • Interface modules are not hot swappable. • The installation method is similar for the interface modules. This section installs an NSQM1GP4 FBA interface module. • Keep the filler panel in the interface module slot if you are not to install an interface module in the slot.
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Compatible slots for the interface modules

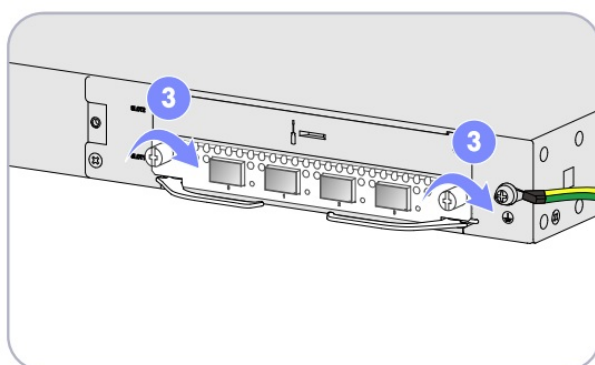
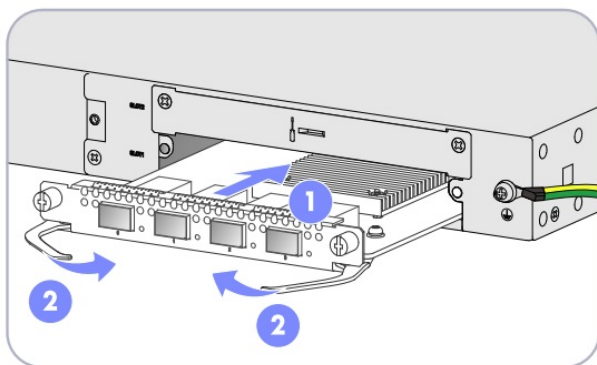
The following table describes the compatible slots for the interface modules.

Item Device model	Slot number	Speed mode	Applicable interface modules
F1000-AI-10	/	/	Not supported
F1000-AI-20/F1000-AI-30/F1000-AI-50	Slot 1 and Slot 2	Low speed	• NSQM1GT4PFC • NSQM1GP4FBA
F1000-AI-60	Slot 1	High speed	NS-NIM-TG6A
	Slot 2	Low speed	• NSQM1GT4PFC • NSQM1GP4FBA
F1000-AI-70/F1000-AI-80/F1000-AI-90	Slot 1 and Slot 3	High speed	NS-NIM-TG6A
	Slot 2 and Slot 4	Low speed	• NSQM1GT4PFC • NSQM1GP4FBA

Removing the filler panel



Installing an interface module



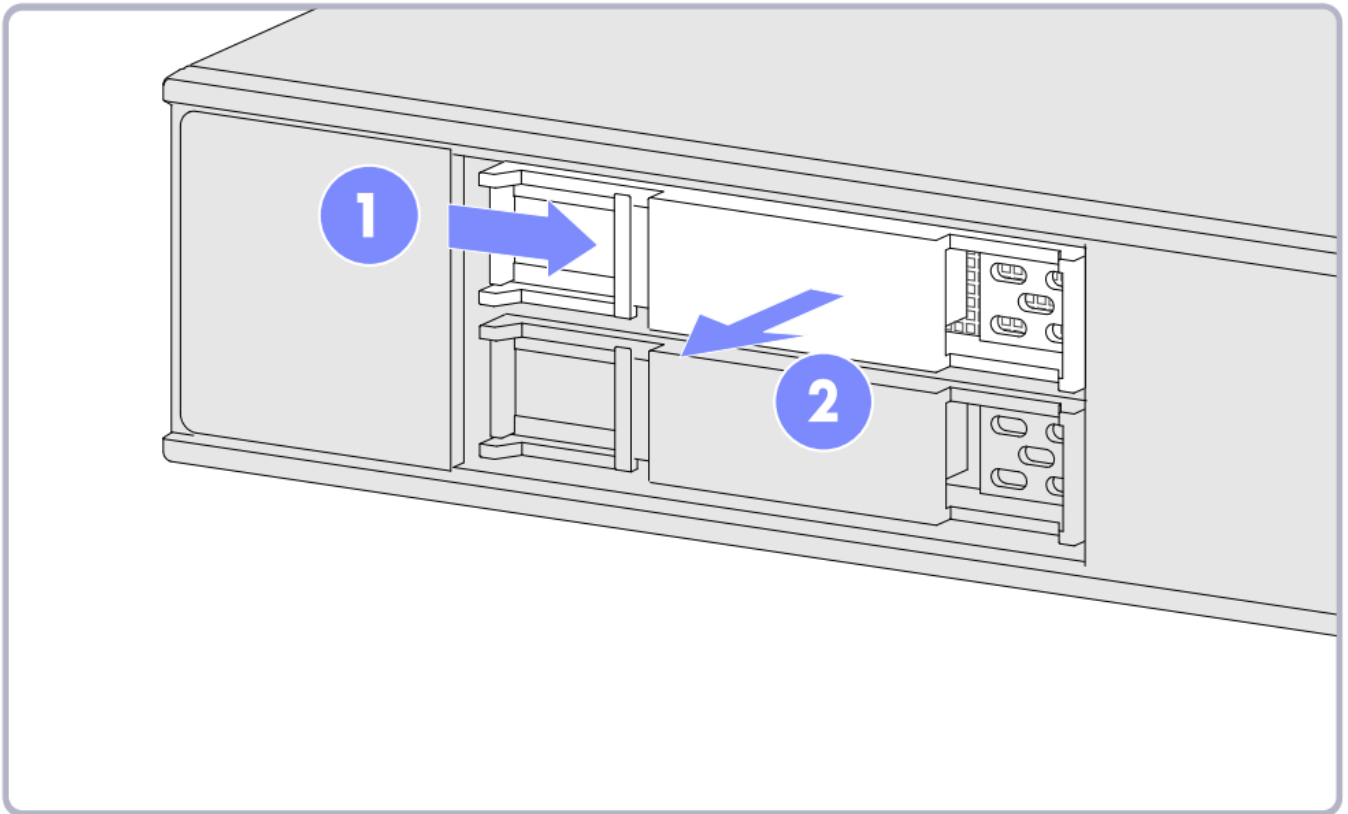
Installing drives



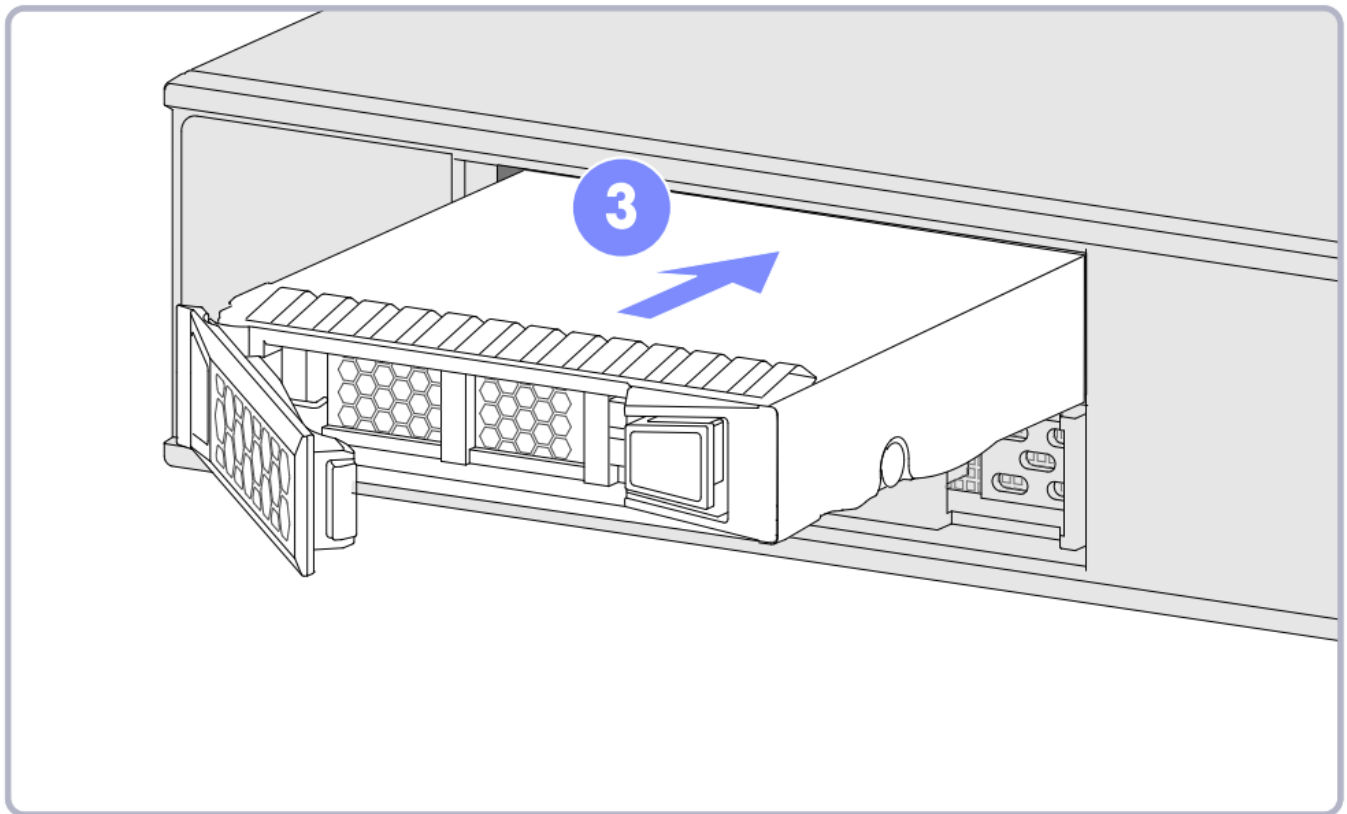
- Drives are not provided with the device. Prepare them yourself if required.
- For the system to identify the drive, use the drive from H3C.
- The drive is not hot swappable.
- Wear an ESD wrist strap when you install or remove a drive to protect the disk from ESD damage.
- Hold the drive by its two edges. Do not touch the components on the drive. Do not squeeze, rock, or hit the drive.
- Install a filler panel in the empty drive slot to prevent dust and other objects from entering the device.

Installing a drive for an F1000-AI-10 firewall

Remove the filler panel from the drive slot.

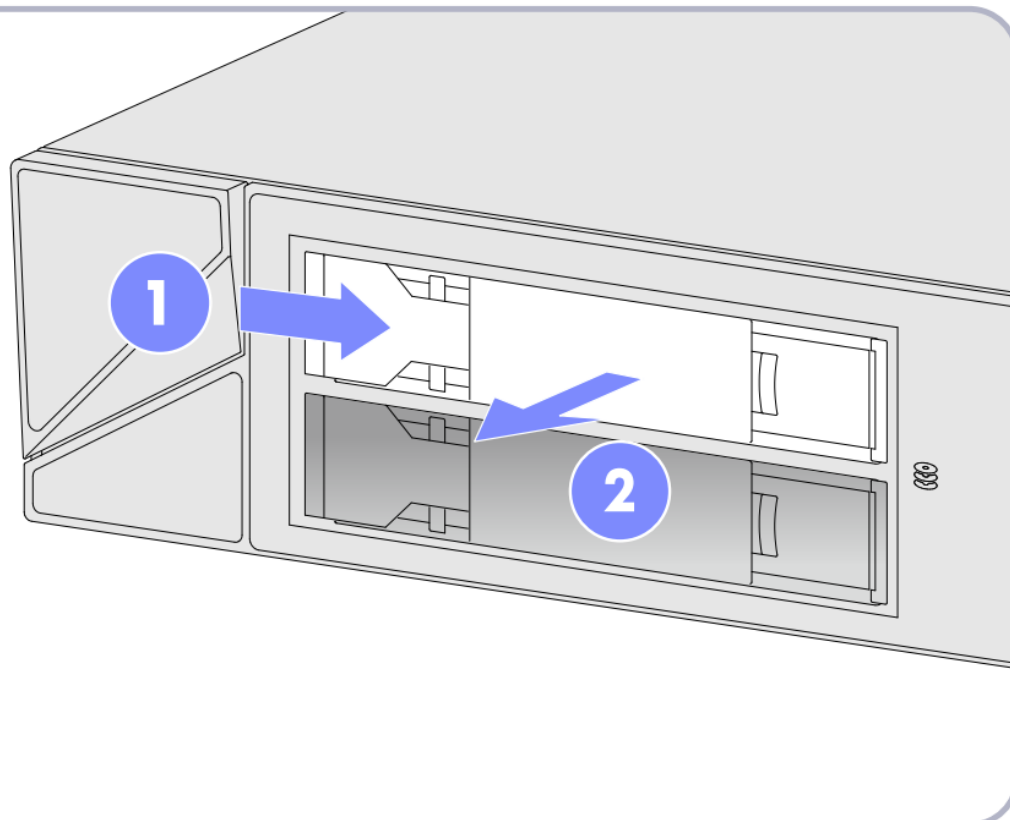


Push the drive slowly into the slot along the guide rails.

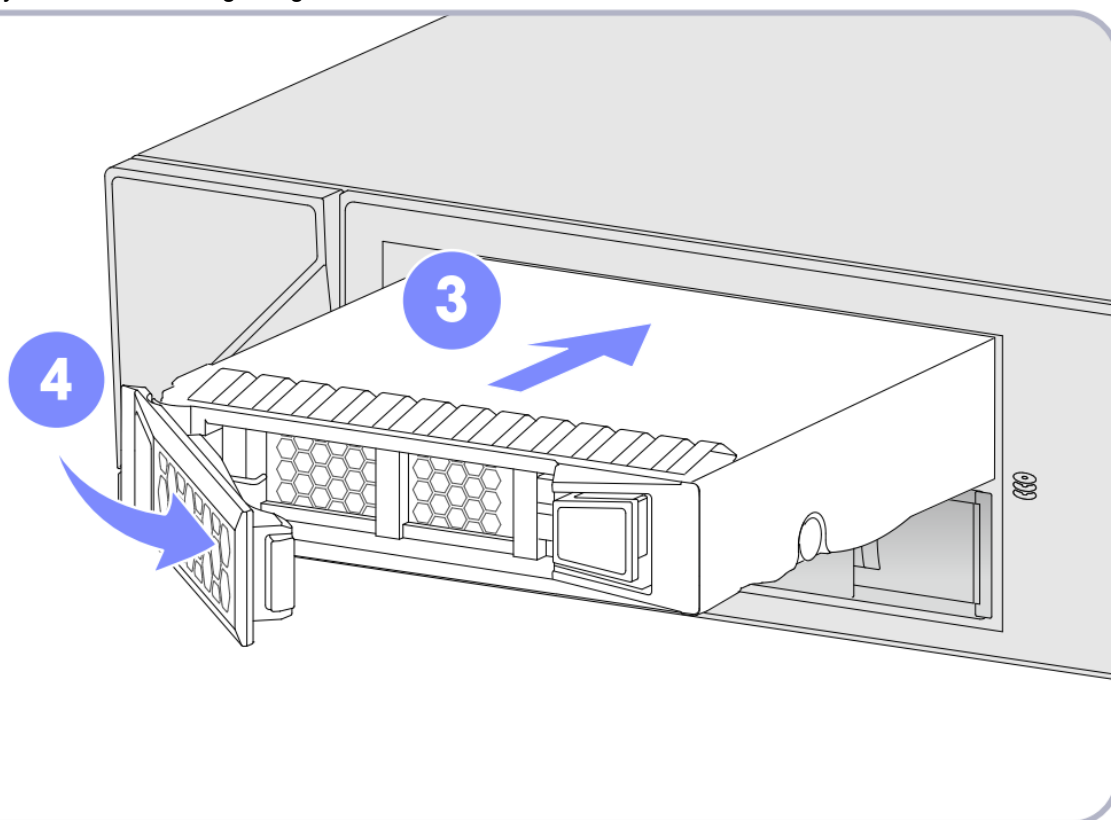


Installing a drive for an F1000-AI-20/F1000-AI-30/F1000-AI-50/F1000-AI 60/F1000-AI-70/ F1000-AI-80/F1000-AI-90 firewall

Remove the filler panel from the drive slot.



Push the drive slowly into the slot along the guide rails.



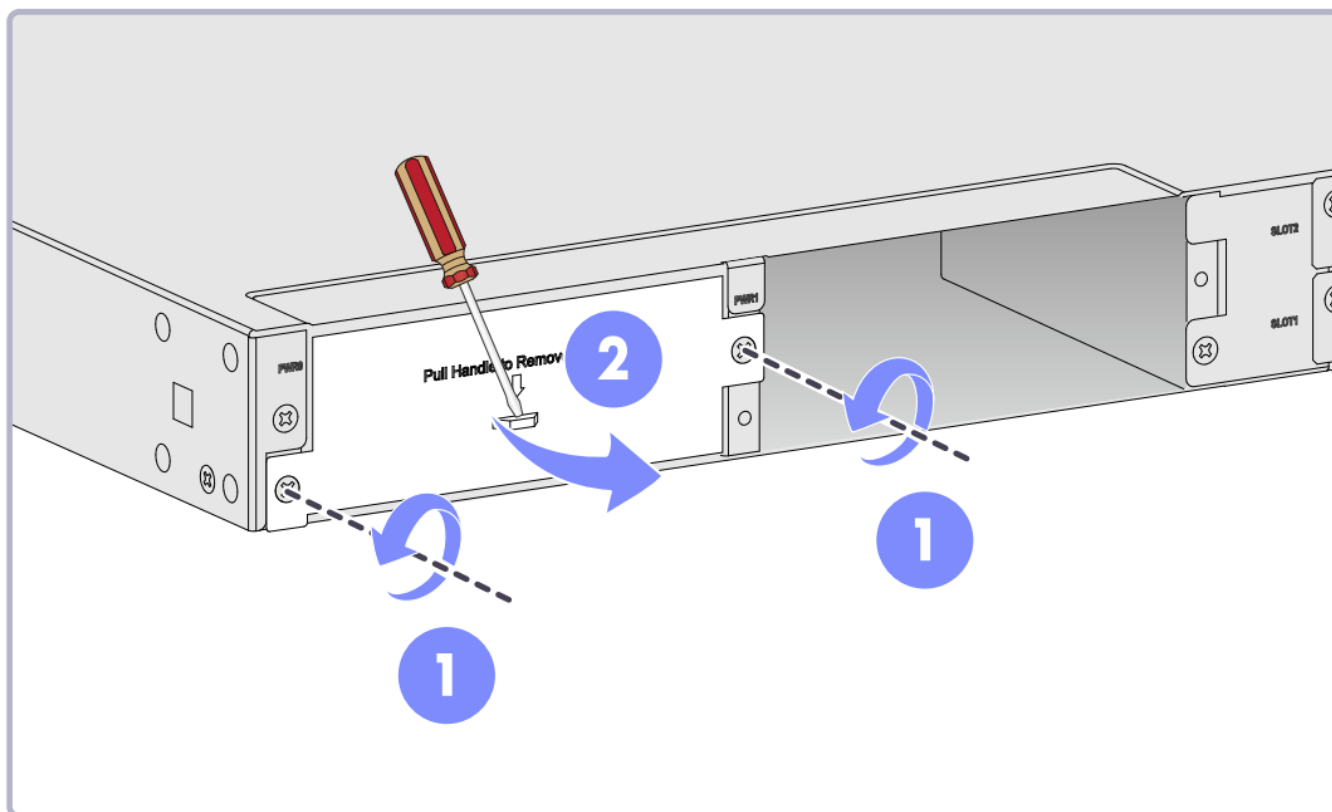
Installing power supplies



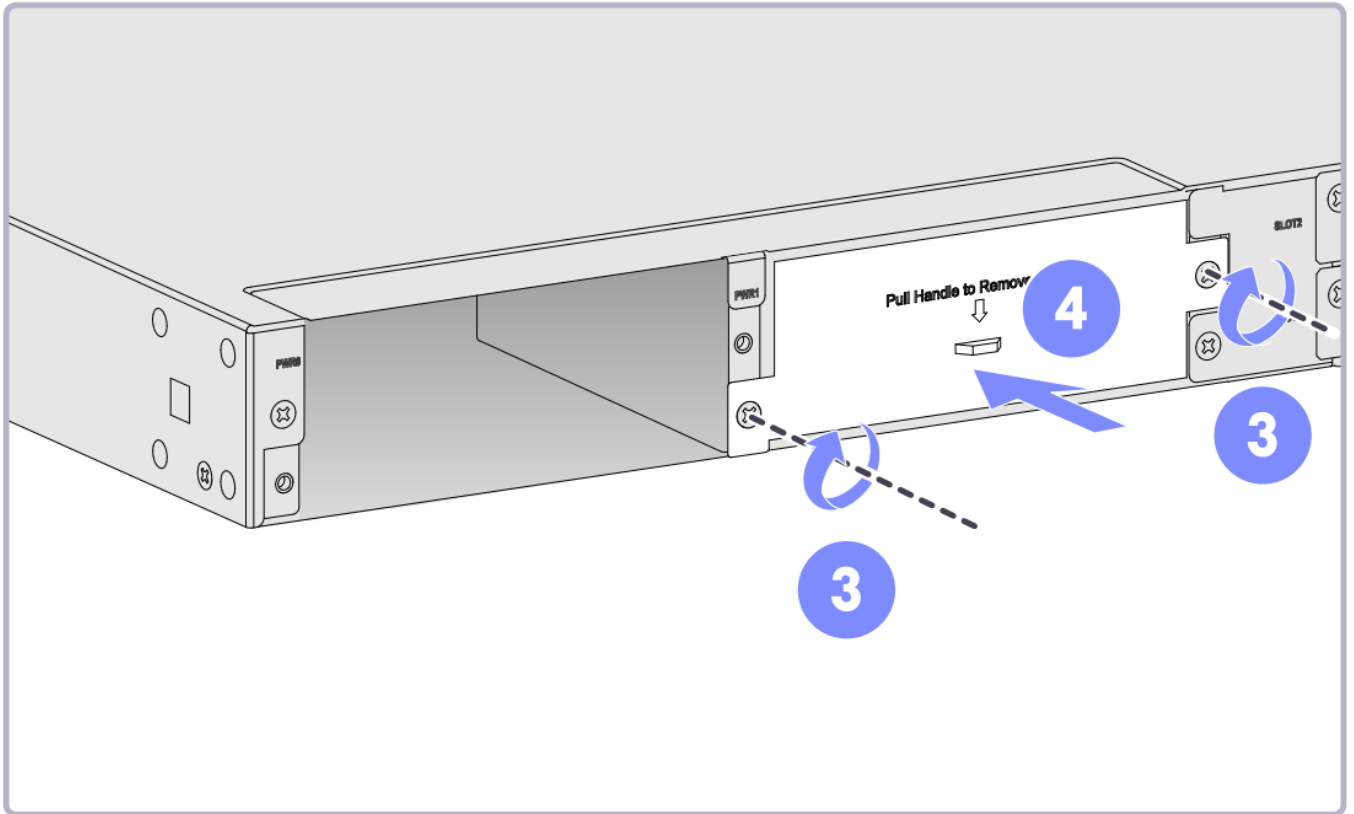
- Before installing a power module, make sure the power is disconnected and the device is reliably grounded.
- Do not install AC and DC power modules on the same firewall.
- Only the F1000-AI-20, F1000-AI-30, F1000-AI-50, F1000-AI-60, F1000-AI-70, F1000-AI-80, and F1000-AI-90 firewalls support removable power supplies.
- The F1000-AI-20, F1000-AI-30, and F1000-AI-50 firewalls support the PSR150-A1 and PSR150-D1 power supplies. The power supply installation procedure is the same for these firewalls. The F1000-AI-50 firewall is used as an example.
- The F1000-AI-60, F1000-AI-70, F1000-AI-80, and F1000-AI-90 firewalls support the PSR250-12A1, PSR450-12AHD, and PSR450-12D power supplies. The power supply installation procedure is the same for these firewalls. The F1000-AI-90 firewall is used as an example.

Installing power supplies for an F1000-AI-20/F1000-AI-30/F1000-AI-50 firewall

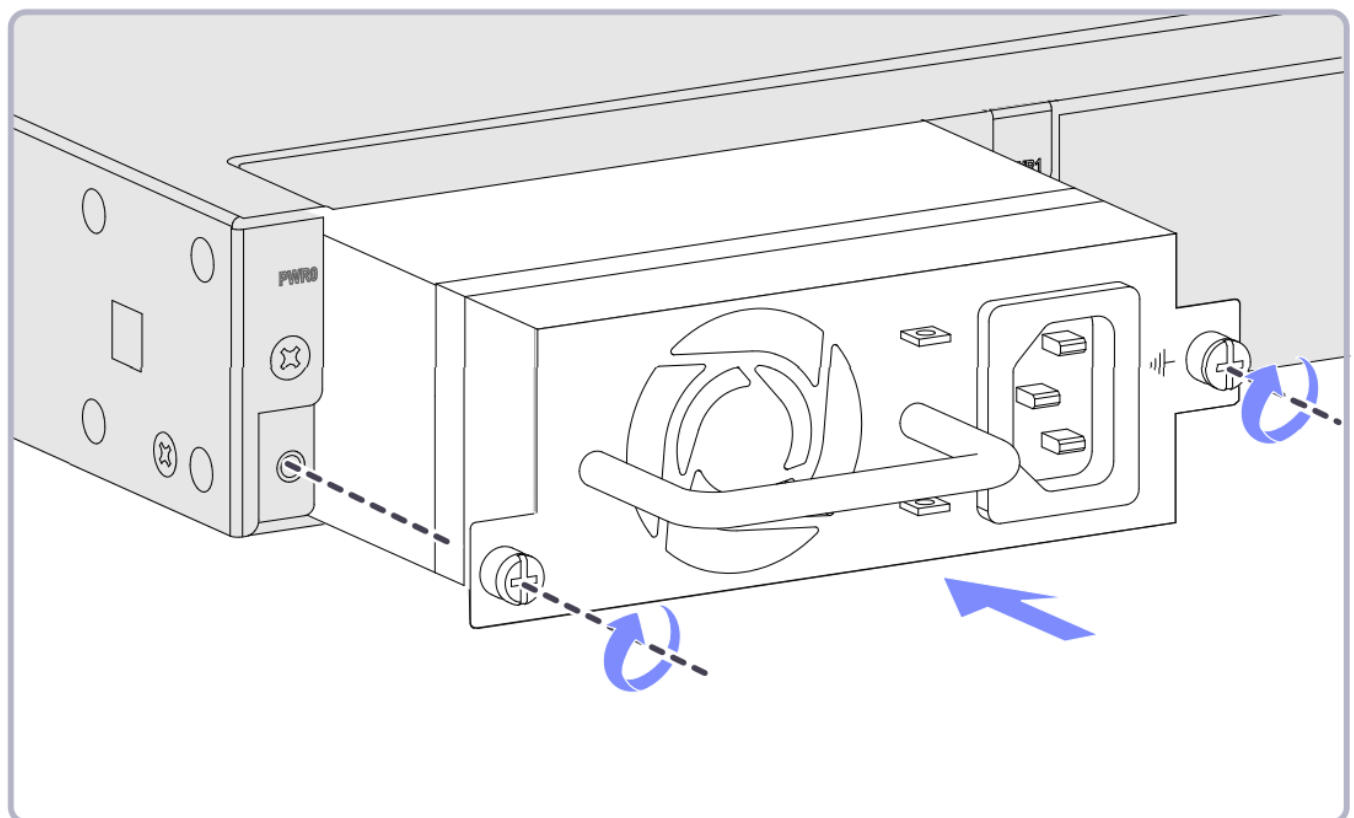
Remove the filler panel from the target power supply slot.



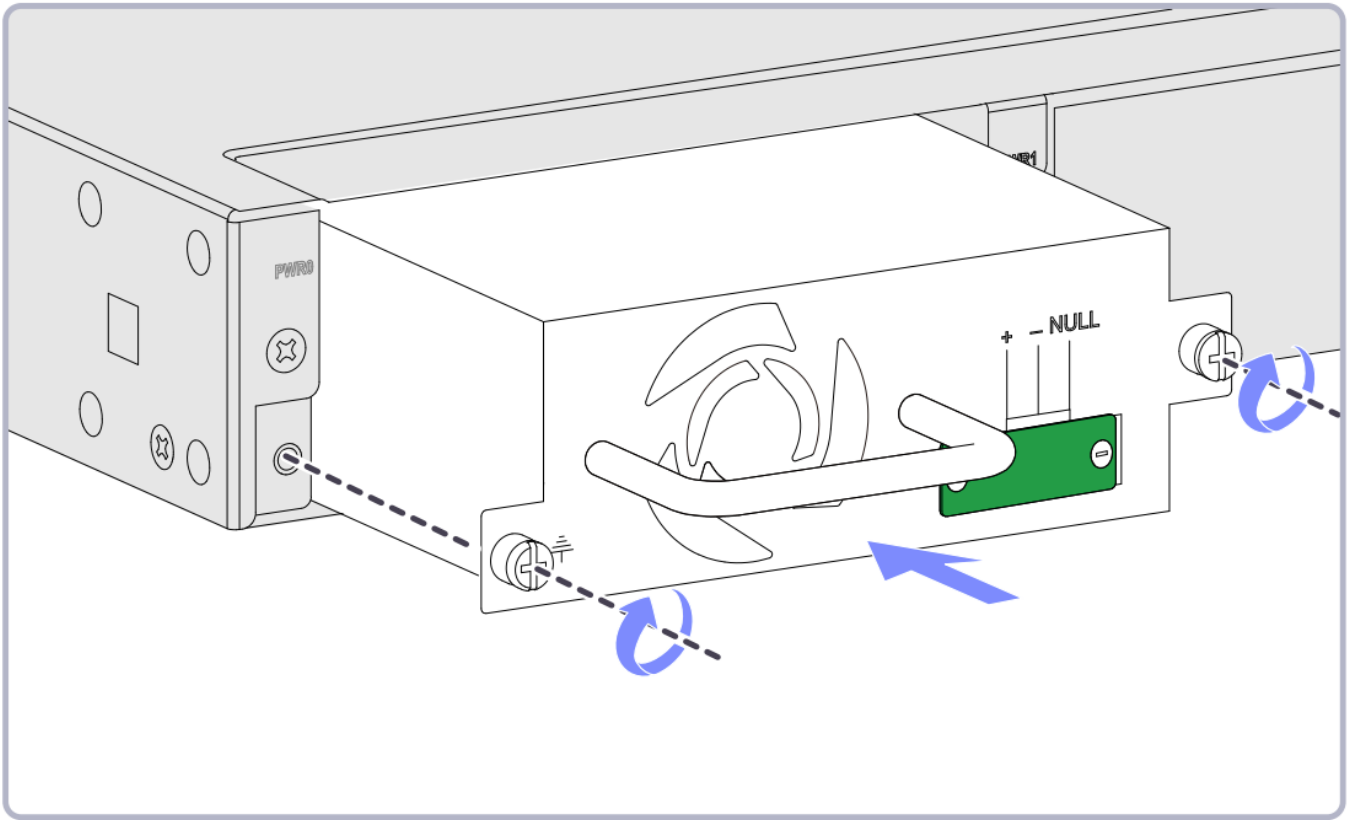
Install the removed filler panel in the unused power supply slot.



Install an AC power supply

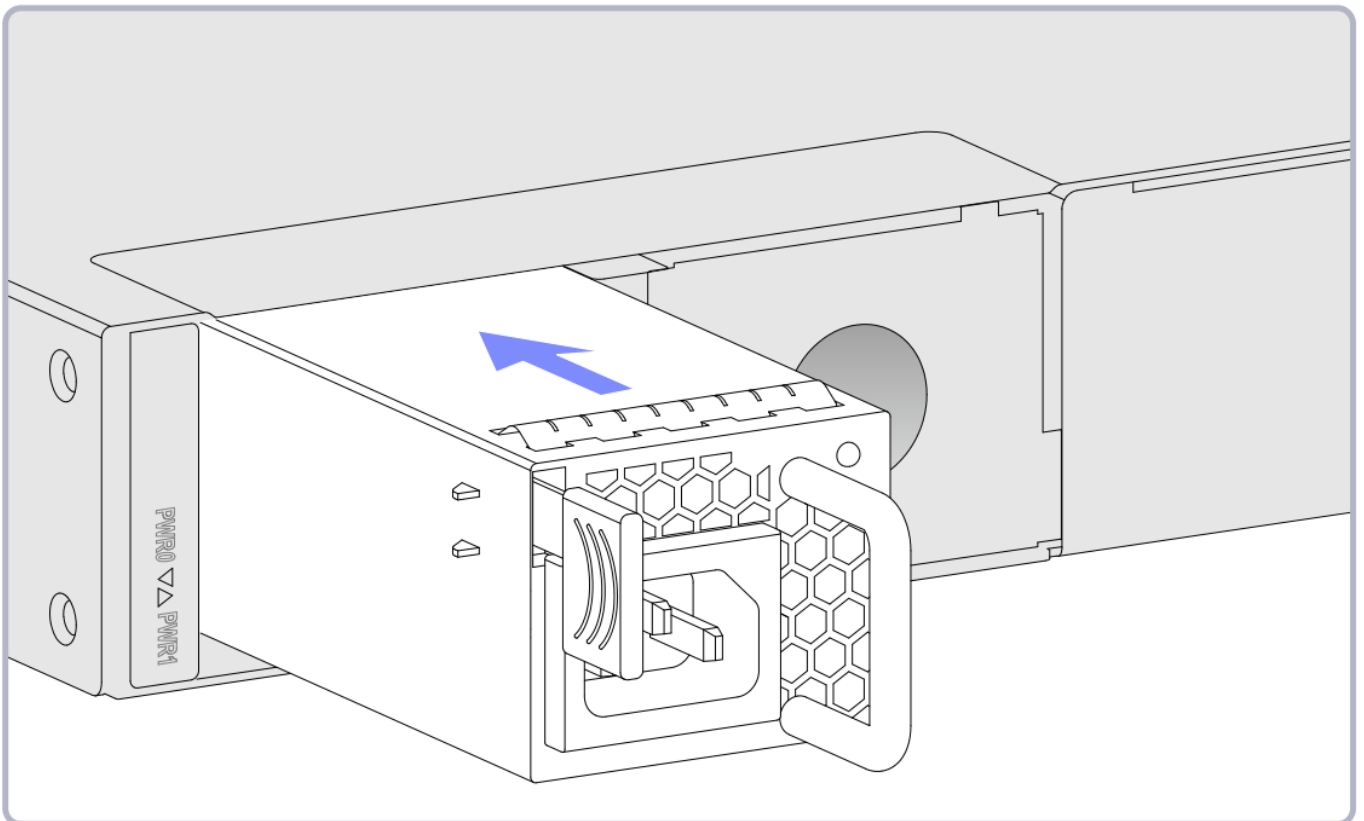


Install a DC power supply

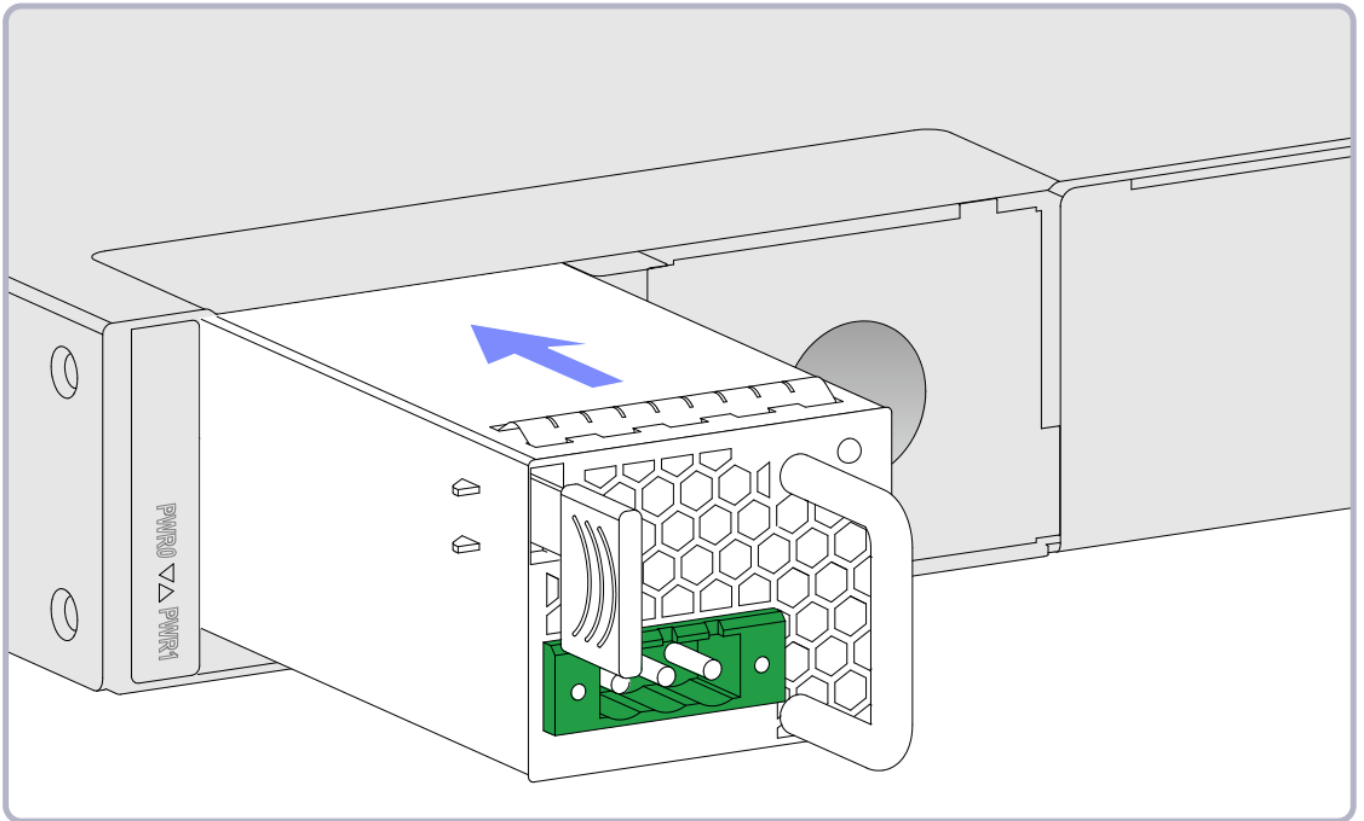


Installing power supplies for an F1000-AI-60/F1000-AI-70/F1000-AI-80/F1000-AI-90 firewall

Install an AC power supply



Install a DC power supply

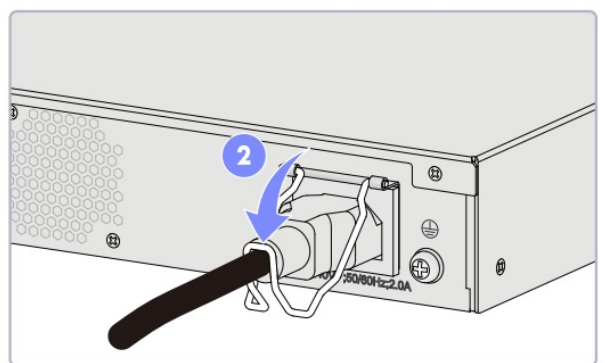
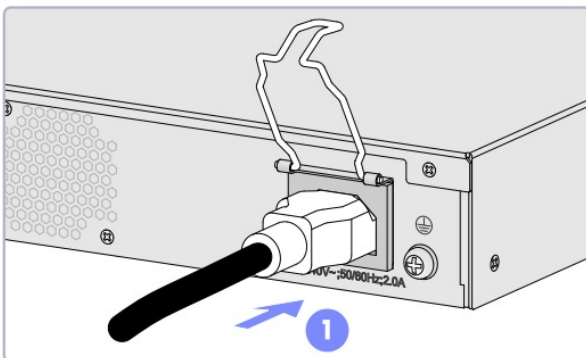


Connecting power cords



- Before connecting a power cord, make sure the power is disconnected and the device is reliably grounded.
- Only the F1000-AI-20, F1000-AI-30, F1000-AI-50, F1000-AI-60, F1000-AI-70, F1000-AI-80, and F1000-AI-90 firewalls support AC and DC power supply. The other firewall models support only AC power supply.

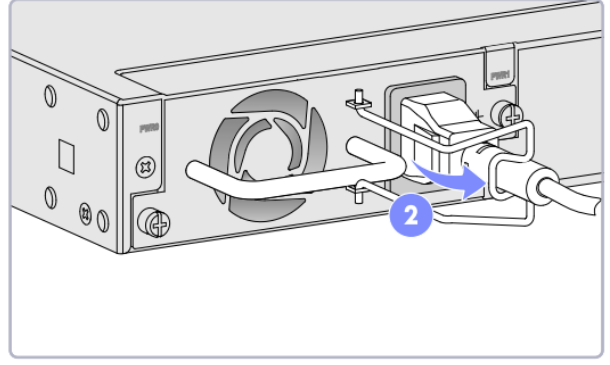
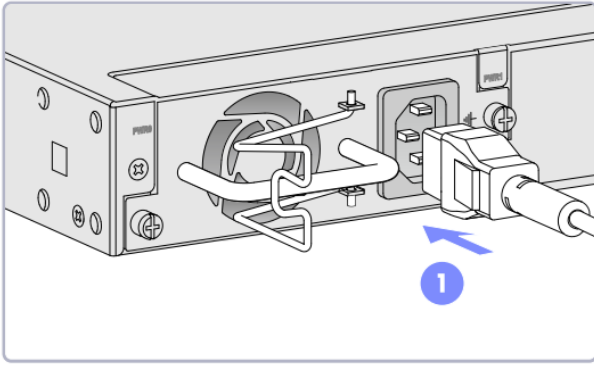
Connecting the power cord for an F1000-AI-10 firewall



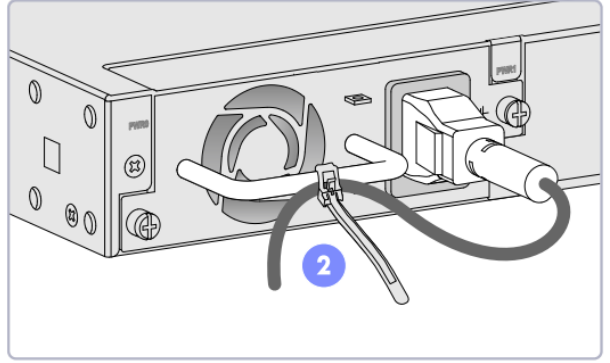
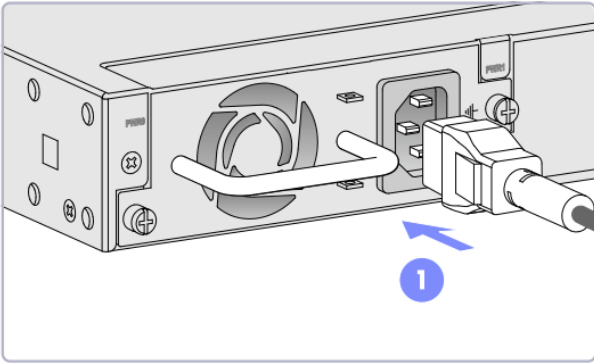
Connecting the power cord for an F1000-AI-20/F1000-AI-30/F1000-AI-50/F1000-AI-60/ F1000-AI-70/F1000-AI-80/F1000-AI-90 firewall

Connecting the AC power cord for a PSR150-A1 power supply

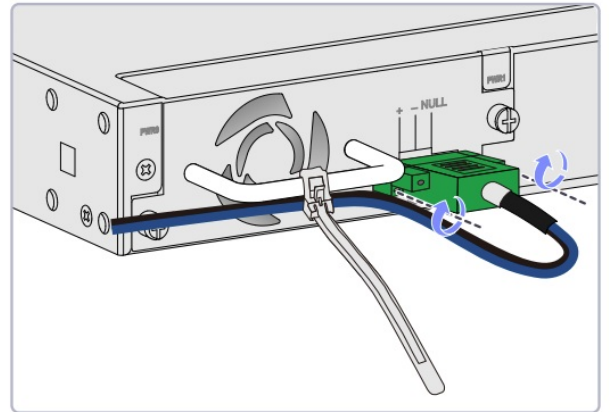
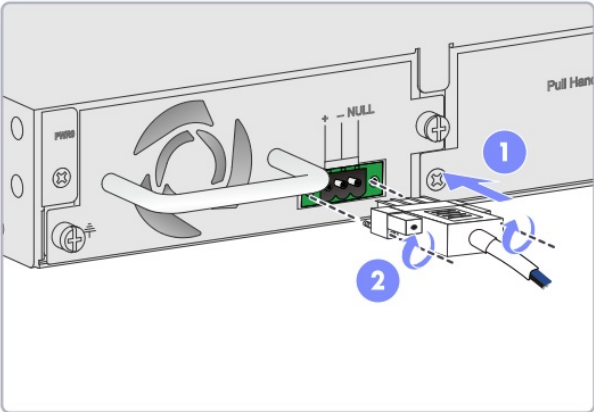
Using a power cord retainer clip to secure the power



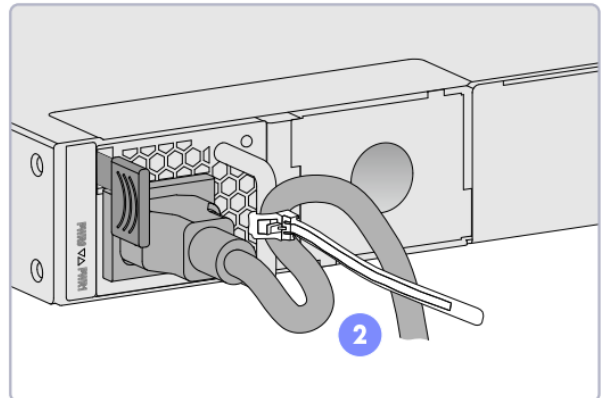
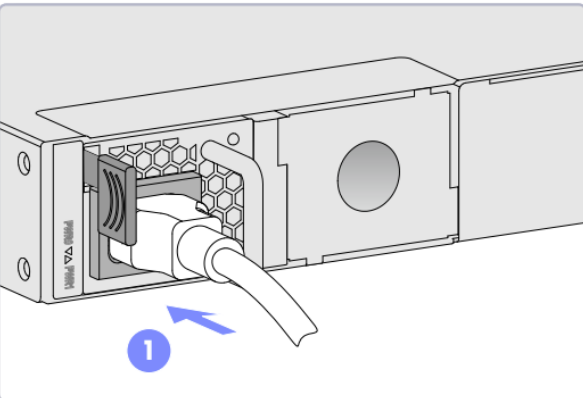
Using a cable tie to secure the power cord



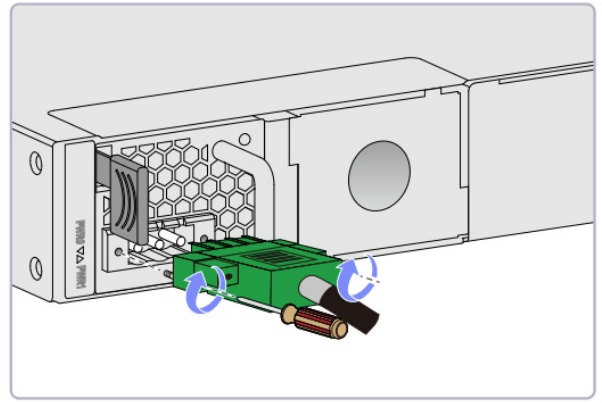
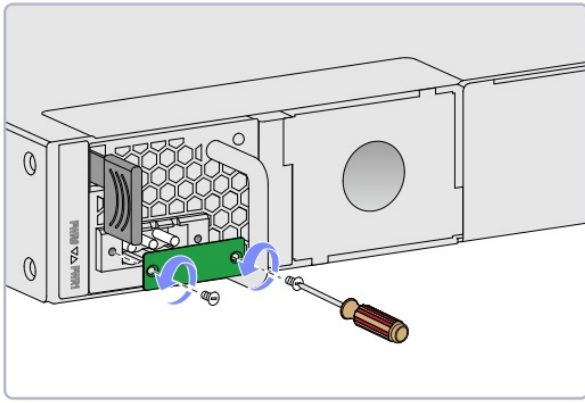
Connect the DC power cord for a PSR150-D1 power supply



Connecting the AC power cord for a PSR250-12A1 power supply and the high-voltage DC power cord for a PSR450-12AHD power supply



Connecting the DC power cord for a PSR450-12D power supply



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Documents / Resources

