H3C SR6602-I[IE]

AI-Powered ICT Converged Gateways

Installation Quick Start

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http://www.h3c.com

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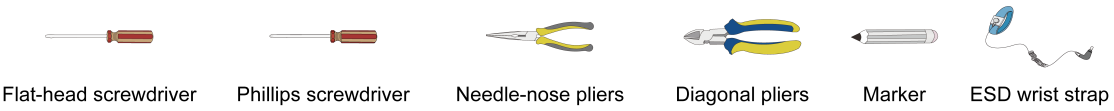
Contents

1 Tool list

No installation tools are provided with the device. Prepare tools yourself as required.

The screwdrivers of different specifications are required to install the device. Prepare flat-head screwdrivers with a tip width of 2.5 mm (0.10 in), 5 mm (0.20 in), and 6 mm (0.24 in). Prepare Phillips screwdrivers with a tip width of 2.5 mm (0.10 in) and 6 mm (0.24 in).

Figure1-1 Tool list

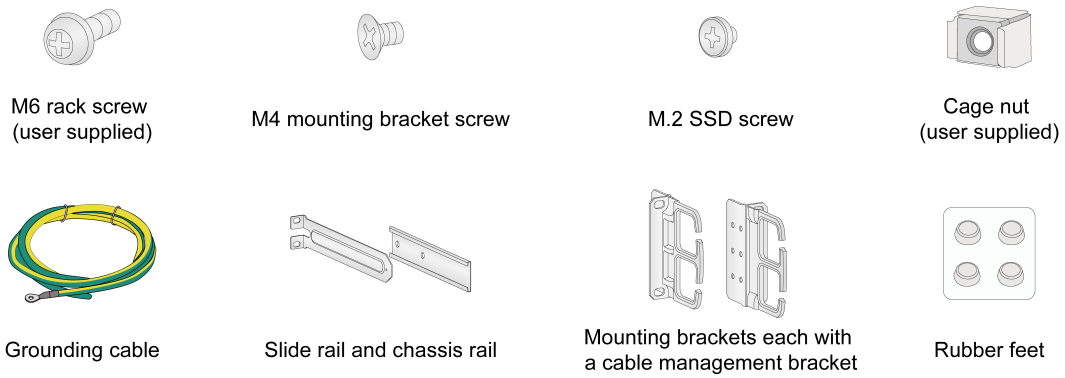


2 Installation accessories

CAUTION:

Wear an ESD wrist strap when installing the device. Make sure the wrist strap makes good skin contact and is reliably grounded.

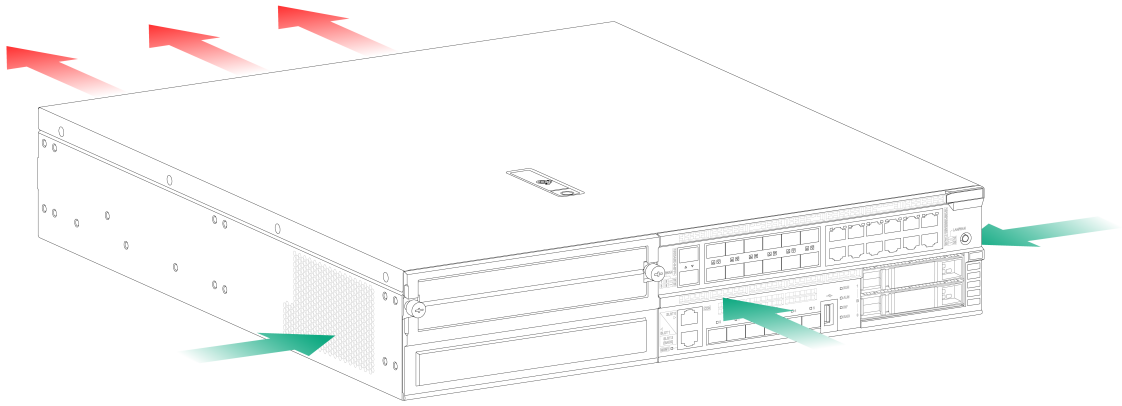
Figure2-1 Installation accessories



3 Airflow of the device

To ensure good ventilation, keep the air inlet and outlet vents of the device free of obstruction and make sure the installation site has a good cooling system.

Figure3-1 Airflow of the device



4 Installing the device in a 19-inch rack

WARNING!

The device is heavy. To avoid bodily injury and device damage, use a minimum of two people to install the device in a rack.

Rack-mounting the device by using the mounting brackets and slide rails

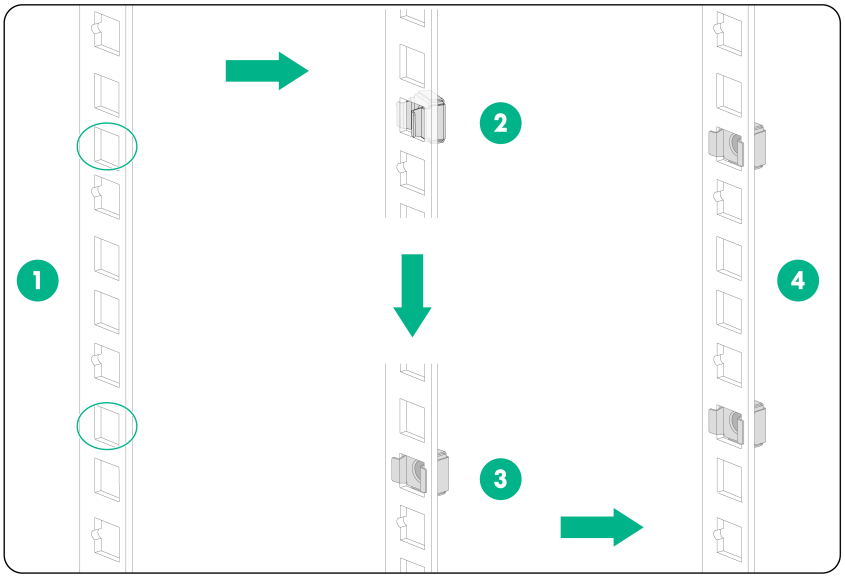
The device provides multiple chassis rail installation positions on its side panels. Attach the chassis rails to the correct positions based on the rack depth. For security purposes, make sure the front end of each slide rail slides a minimum length of 68 mm (2.68 in) into the chassis rail.

To rack-mount the device by using the mounting brackets and slide rails:

1. Wear an ESD wrist strap and make sure the strap makes good skin contact and is reliably grounded.

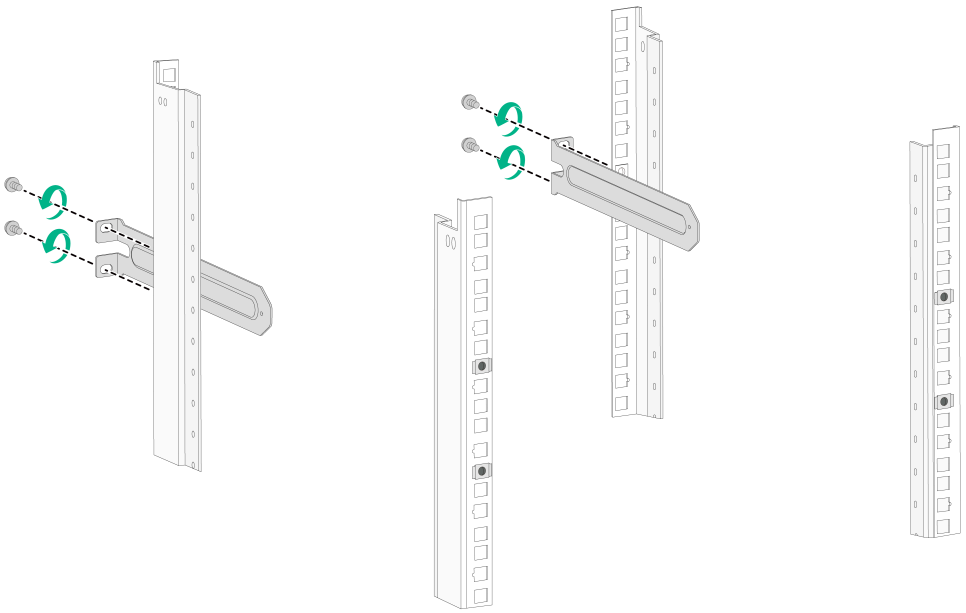
2. Use a mounting bracket to mark the cage nut installation positions on the front rack posts. Install cage nuts at the marked positions.

Figure4-1 Attaching cage nuts to the rack



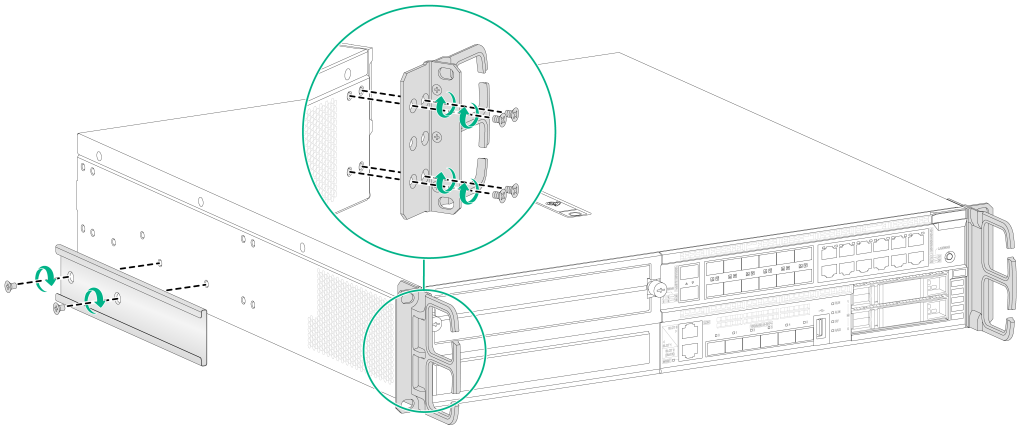
3. Use a slide rail to mark the cage nut installation positions on the rear rack posts. Install cage nuts at the marked positions and attach slide rails to the rack.

Figure4-2 Attaching slide rails to the rack



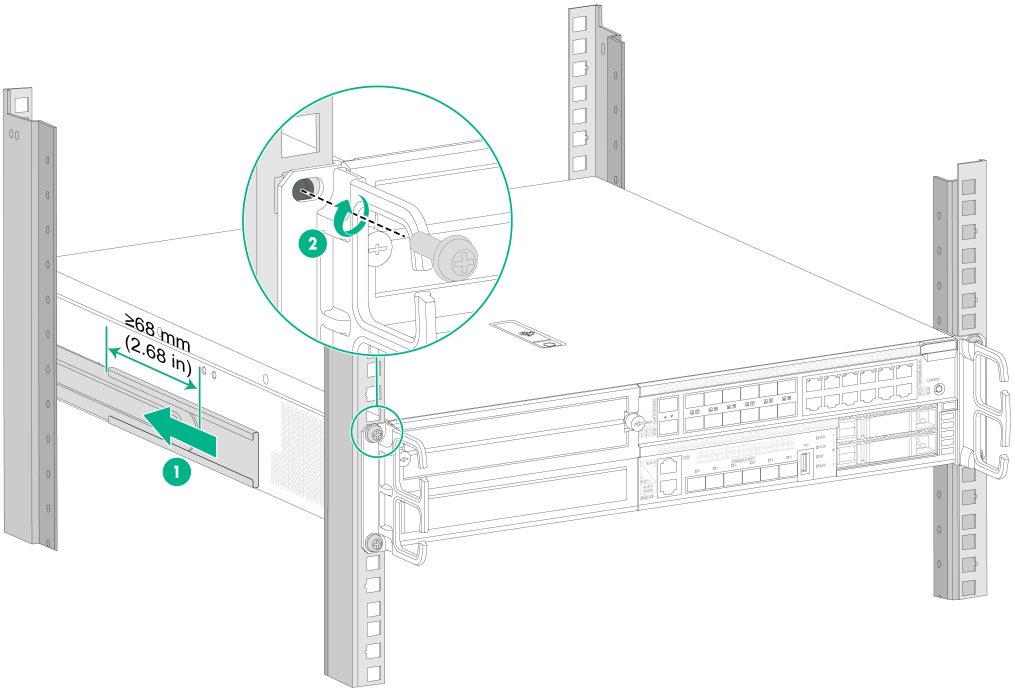
4. Use M4 mounting bracket screws to attach the chassis rails and mounting brackets to both sides of the device.

Figure4-3 Attaching the mounting brackets and chassis rails to the chassis



5. One person supports the bottom of the device, aligns the chassis rails with the slide rails, and slides the slide rails into the chassis rails until the mounting brackets are flush against the front rack posts.
6. Use the M6 rack screws to secure the mounting brackets to the front rack posts.

Figure4-4 Securing the device to the rack



Rack-mounting the device by using the mounting brackets and a rack shelf

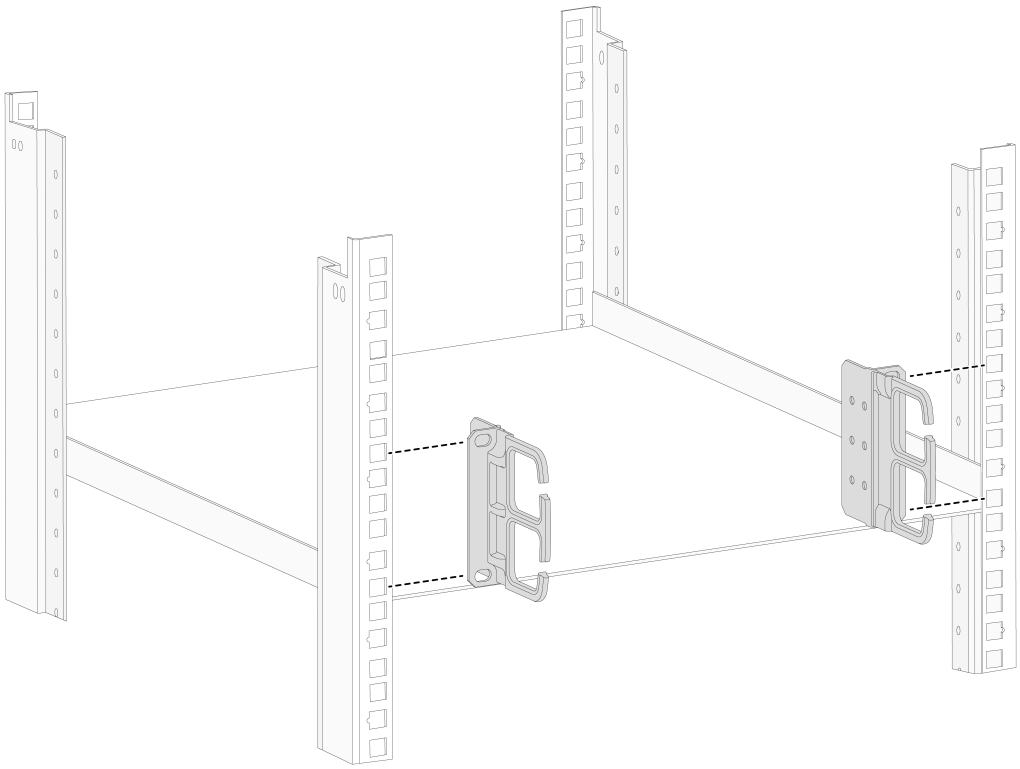
IMPORTANT:

Mounting brackets are not used for load bearing but for securing the device to the rack. To use a rack shelf for load bearing, make sure a rack shelf that can bear the weight of the device and its accessories is installed in the rack before rack-mounting the device.

To rack-mount the device by using the mounting brackets and a rack shelf:

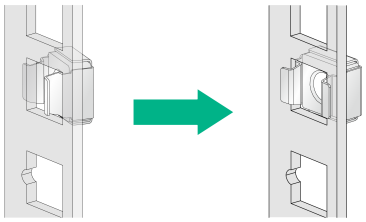
1. Wear an ESD wrist strap and make sure the strap makes good skin contact and is reliably grounded.
2. Identify the device installation position and secure the rack shelf to the rack.
3. Use the mounting brackets to mark the cage nut installation positions on the front rack posts according to the rack shelf position.

Figure4-5 Marking the cage nut installation positions



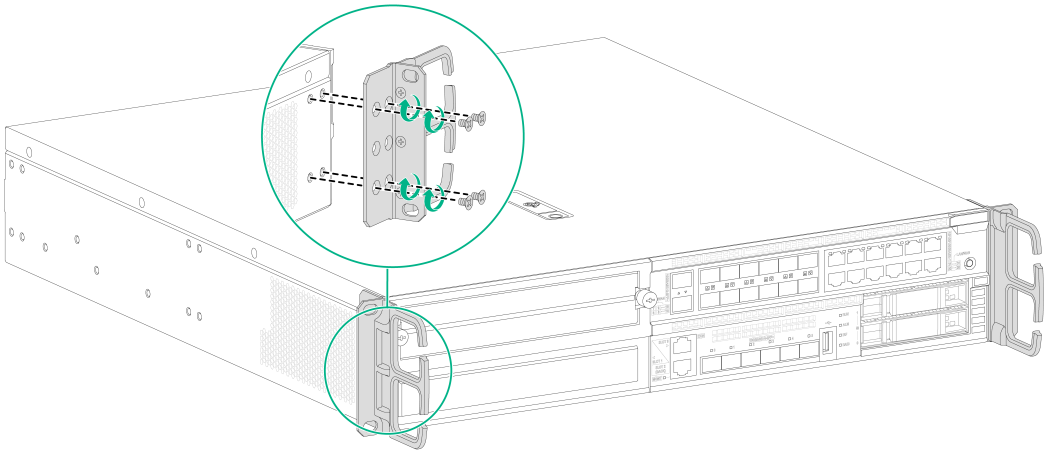
4. Install cage nuts at the marked positions.

Figure4-6 Installing cage nuts



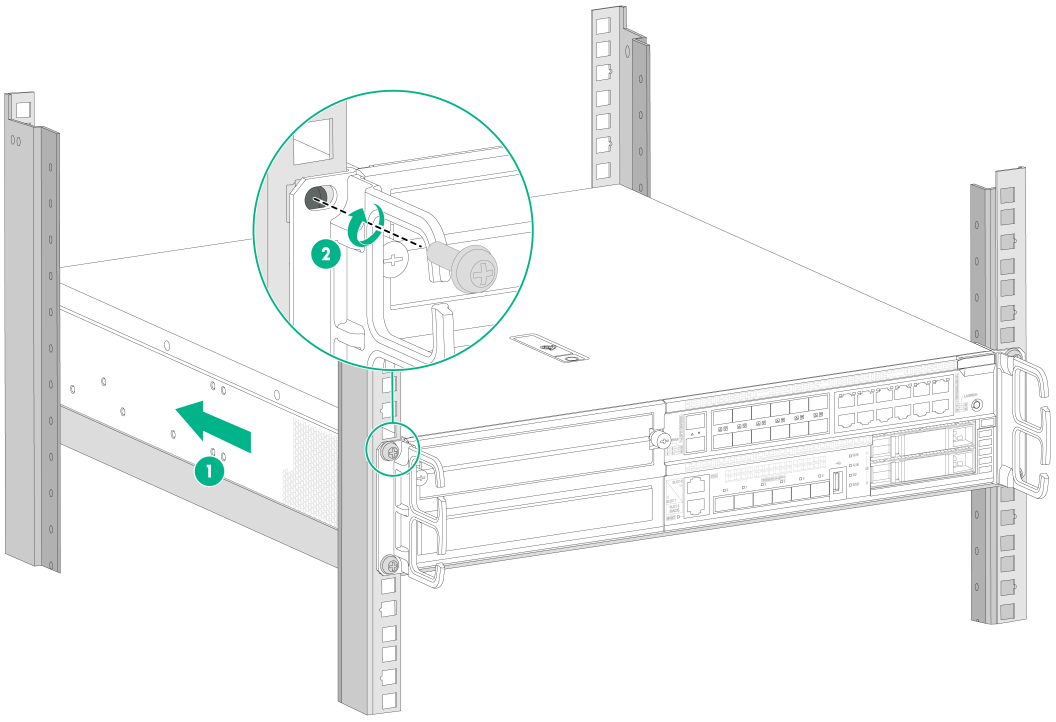
5. Use M4 mounting bracket screws to attach the mounting brackets to both sides of the device front panel.

Figure4-7 Attaching the mounting brackets to the device



6. Place the device horizontally on the rack shelf. Move the device along the rack shelf until the mounting brackets of the device are flush against the front the rack posts.
7. Use the M6 rack screws to secure the mounting brackets to the front rack posts.

Figure4-8 Securing the device to the rack



5 Installing the device on a workbench

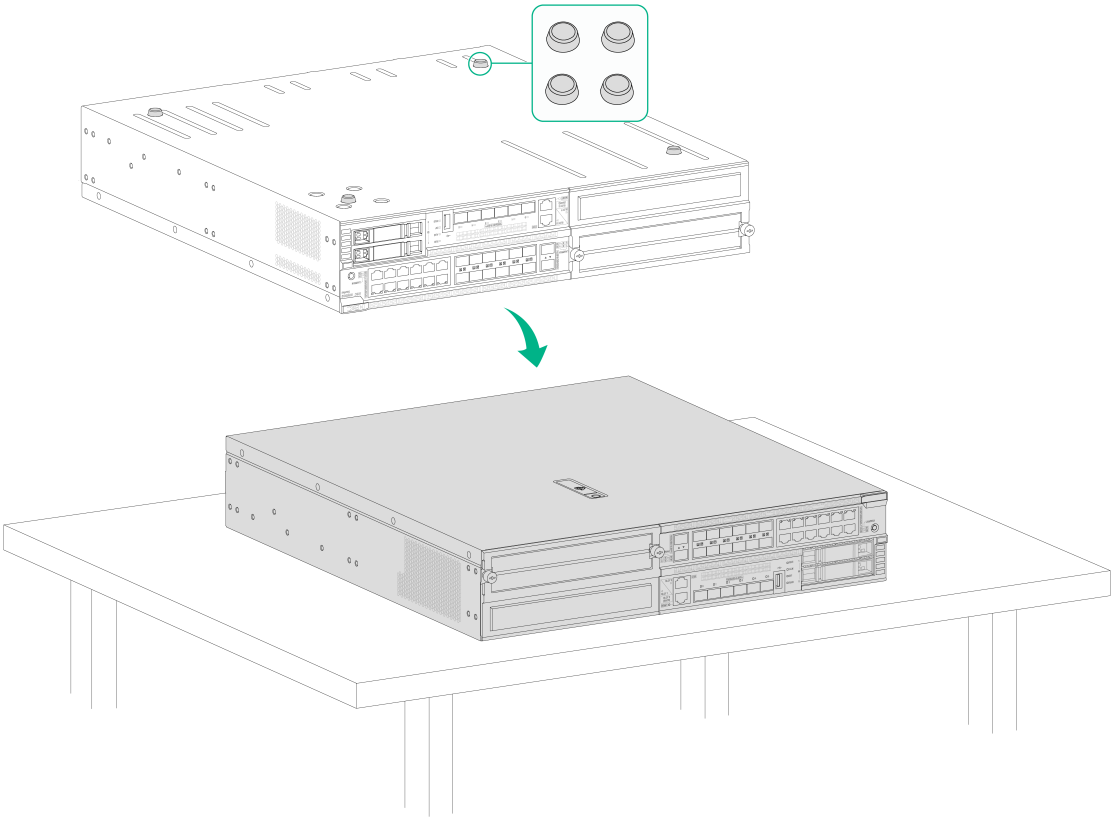
CAUTION:

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

To install the device on a workbench:

1. Place the device upside down on the workbench and clean the four round holes in the chassis bottom with a dry cloth.
2. Attach the four rubber feet to the round holes in the chassis bottom.
3. Place the device with upside up on the workbench.

Figure5-2 Installing the device on a workbench



6 Grounding the device

CAUTION:

Correctly connecting the grounding cable is crucial to lightning protection and EMI protection.

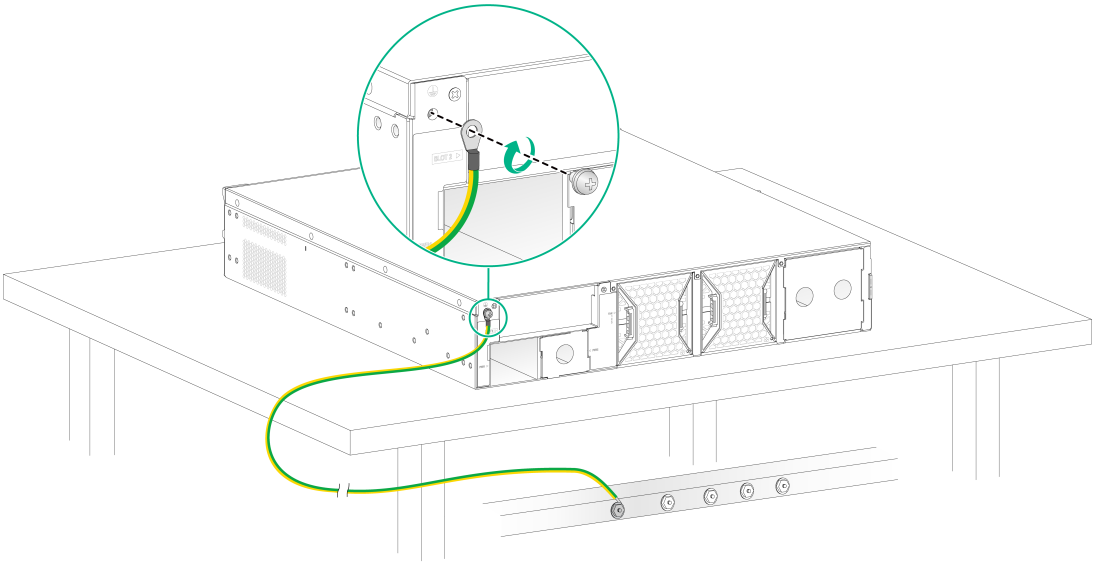
Grounding the device mounted on a workbench

If a grounding strip is available at the installation site, you can connect the grounding cable of the device to the grounding strip.

To ground the device installed on a workbench by using a grounding strip:

1. Use a Phillips screwdriver to remove the grounding screw from the device chassis.
2. Attach the grounding screw to the ring terminal of the grounding cable.
3. Use a Phillips screwdriver to fasten the grounding screw into the grounding hole on the device.
4. Remove the hex nut from a grounding terminal on the grounding strip.
5. Use the needle-nose pliers to bend a hook at the other end of the grounding cable. Attach the hook to the grounding post, and secure the hook with the nut.

Figure6-1 Grounding the device mounted on a workbench



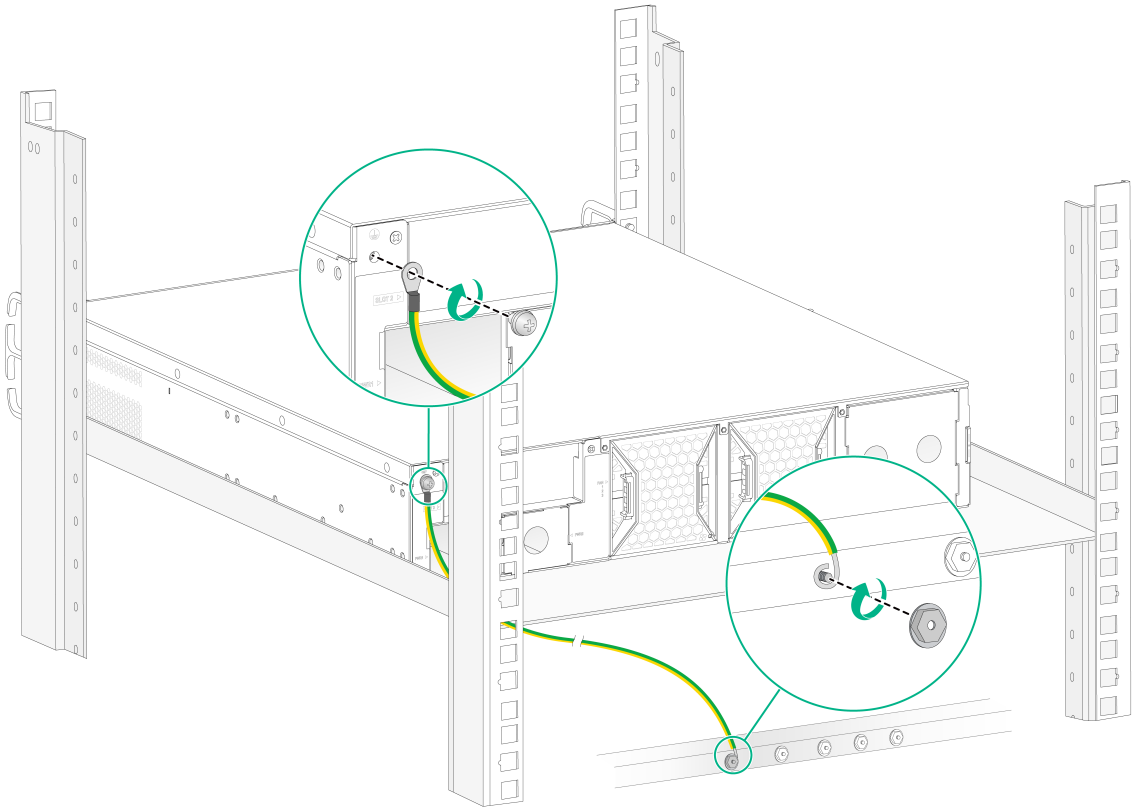
Grounding the device mounted in a rack

If the device is installed in a rack, you can connect the grounding cable of the device to a grounding terminal on the rack.

To ground the device by using a grounding terminal on the rack:

1. Make sure the rack is reliably grounded.
2. Remove the grounding screw from the device chassis.
3. Attach the grounding screw to the ring terminal of the grounding cable.
4. Use a Phillips screwdriver to fasten the grounding screw into the grounding hole on the device.
5. Remove the nut from a grounding terminal on the rack.
6. Use needle-nose pliers to bend a hook at the other end of the grounding cable. Attach the hook to the grounding post, and secure the hook with the nut.

Figure6-2 Grounding the device mounted in a rack



7 Installing internal removable components

WARNING!

To avoid injury, remove the access panel only when the fans stop rotating.

CAUTION:

The internal removable components and cables in the chassis are not hot swappable. To install or maintain them, first power off the device.

The internal removable components supported by the device include riser modules, GPUs, storage controllers, DIMMs, and M.2 SSD drives. These internal removable components are not provided with the device. Purchase them yourself as required.

One GPU support bracket and four screws are shipped with a riser module. Three screws are used to attach the GPU support bracket to the GPU. One screw is used to secure the storage controller or GPU to the riser module.

Installing a storage controller

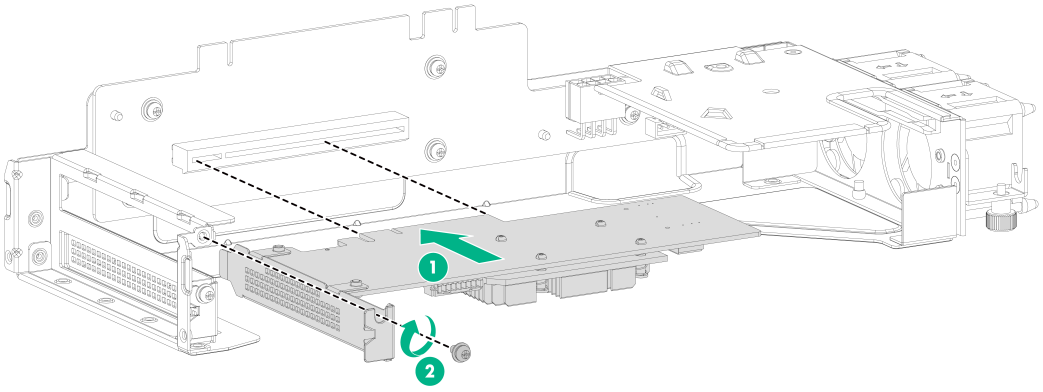
IMPORTANT:

No cable is shipped with a storage controller. Purchase one yourself as required.

To install a storage controller:

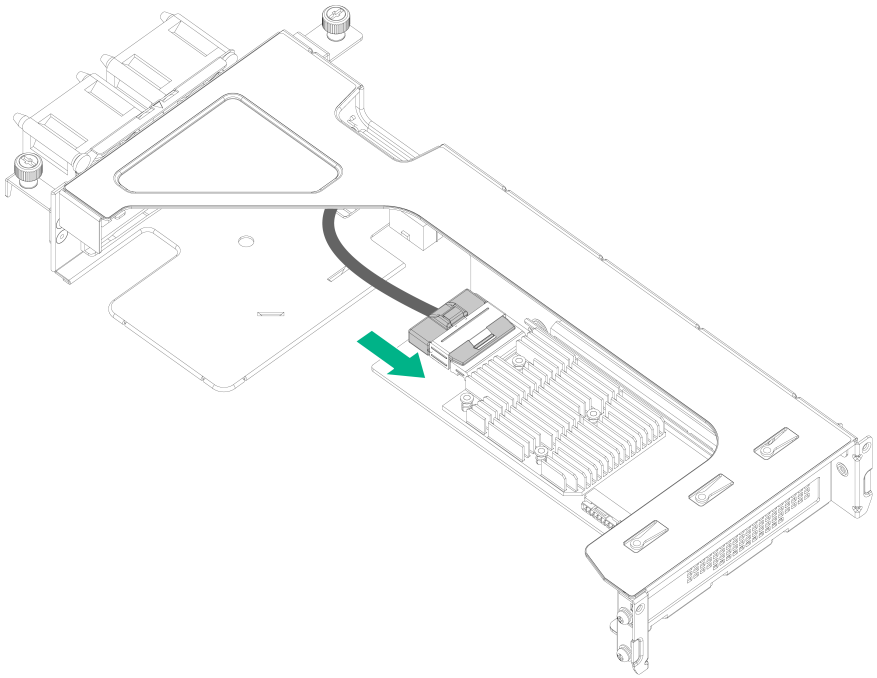
1. Wear an ESD wrist strap and make sure the strap makes good skin contact and is reliably grounded.
2. Power off the device.
3. Install the storage controller in the riser module:
   a. Align the golden plating of the storage controller with the PCIe slot in the riser module and insert the storage controller into the PCIe slot.
   b. Use a Phillips screwdriver to fasten the screw provided with the riser module to secure the storage controller to the riser module.

Figure7-1 Installing the storage controller in the riser module



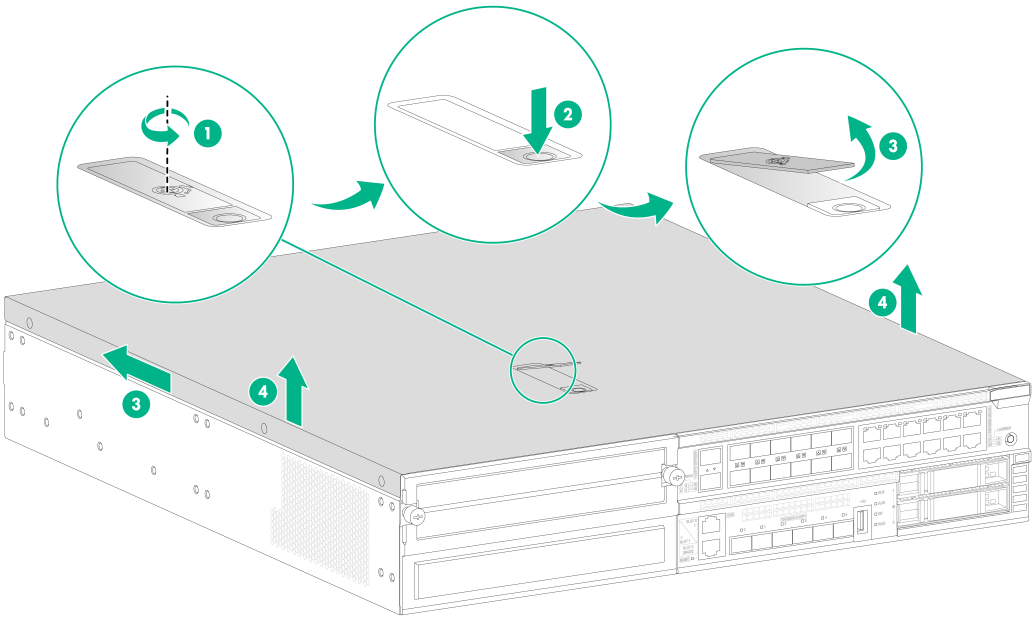
4. Connect one end of the storage controller cable to the storage controller.

Figure7-2 Connecting one end of the storage controller cable to the storage controller



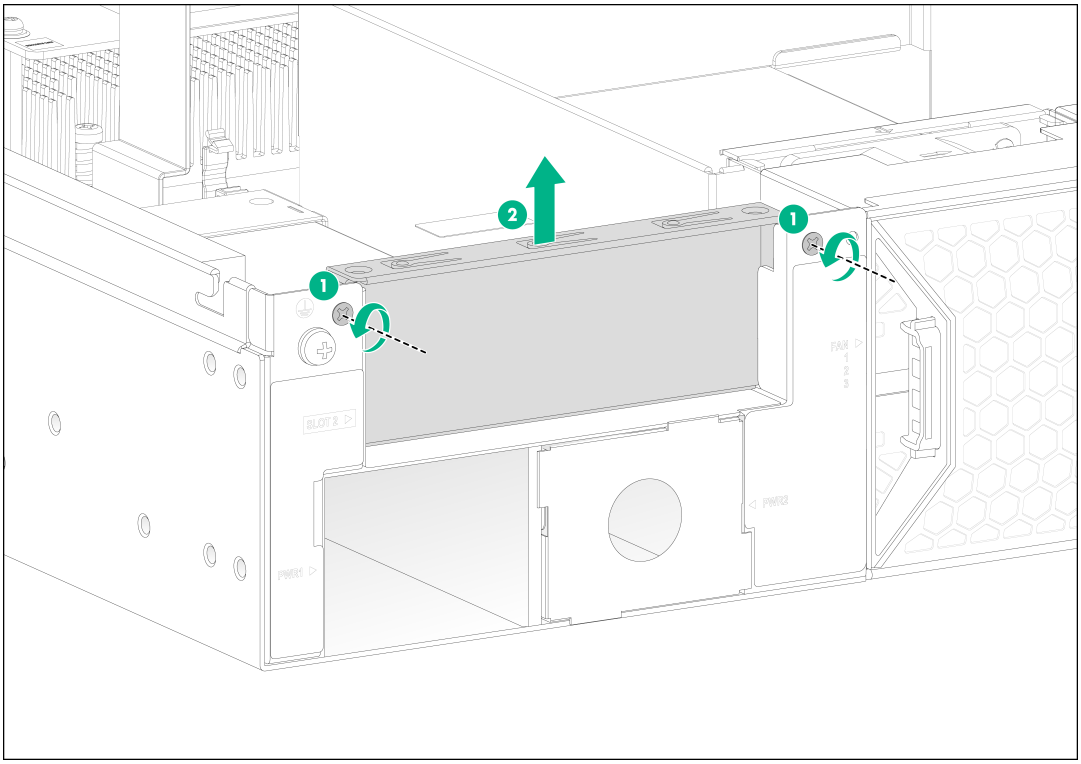
5. Remove the access panel.
   a. Face the front panel of the device and use a Phillips screwdriver to unlock the screw on the locking lever.
   b. Press the blue unlock button on the locking lever to release the locking lever, and pull the lever upward. The access panel will slide back slightly.
   c. Use both hands to hold and lift the access panel.

Figure7-3 Removing the access panel



6. Face the rear panel of the device, use a Phillips screwdriver to remove the screws from the riser module blank, and lift the riser module blank from the device.

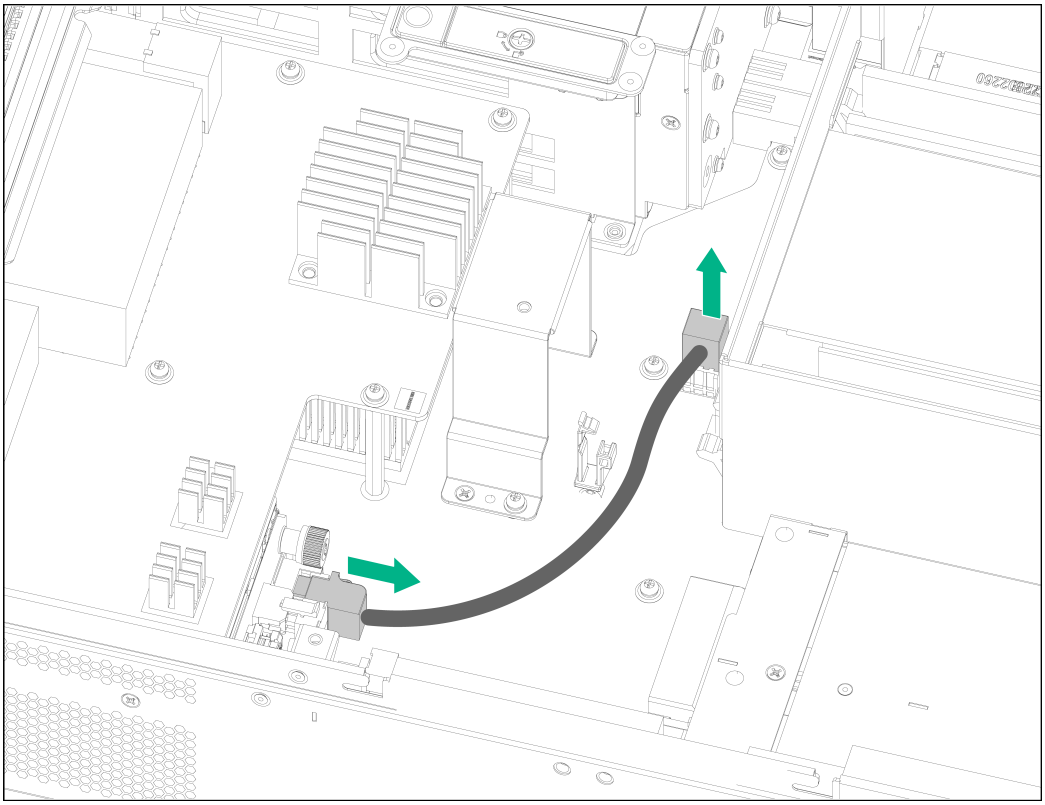
Figure7-4 Removing the riser module blank



7. Remove the cable from the drive backplane.

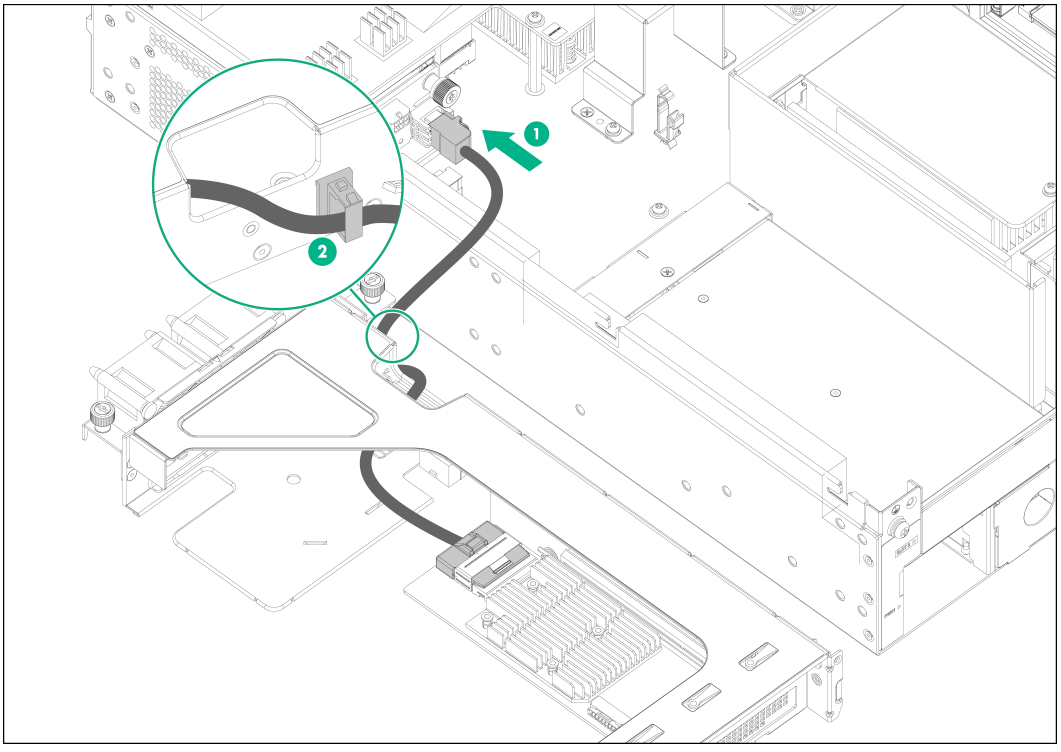
   The cable is used by the system to identify the external SATA drives. Keep the removed cable secure.

Figure7-5 Removing the cable from the drive backplane



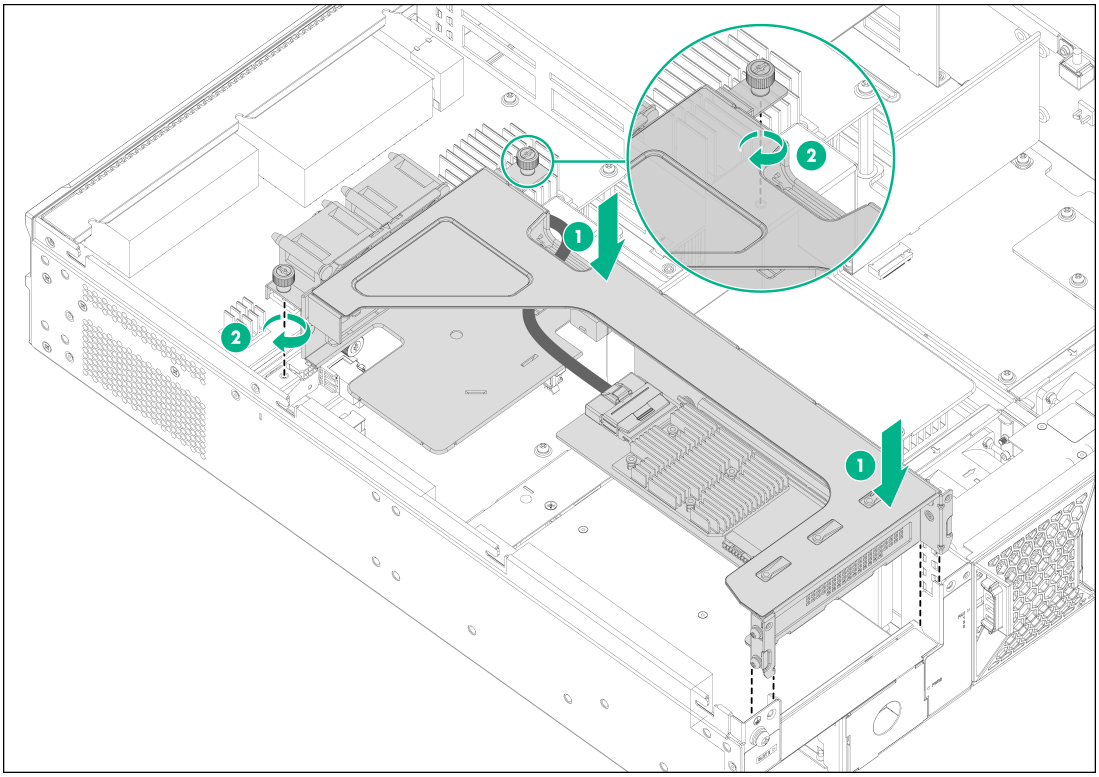
8. Connect the other end of the storage controller cable to the drive backplane and use a cable clamp to secure the storage controller cable to the side panel of the storage controller.

Figure7-6 Connecting the storage controller cable to the drive backplane



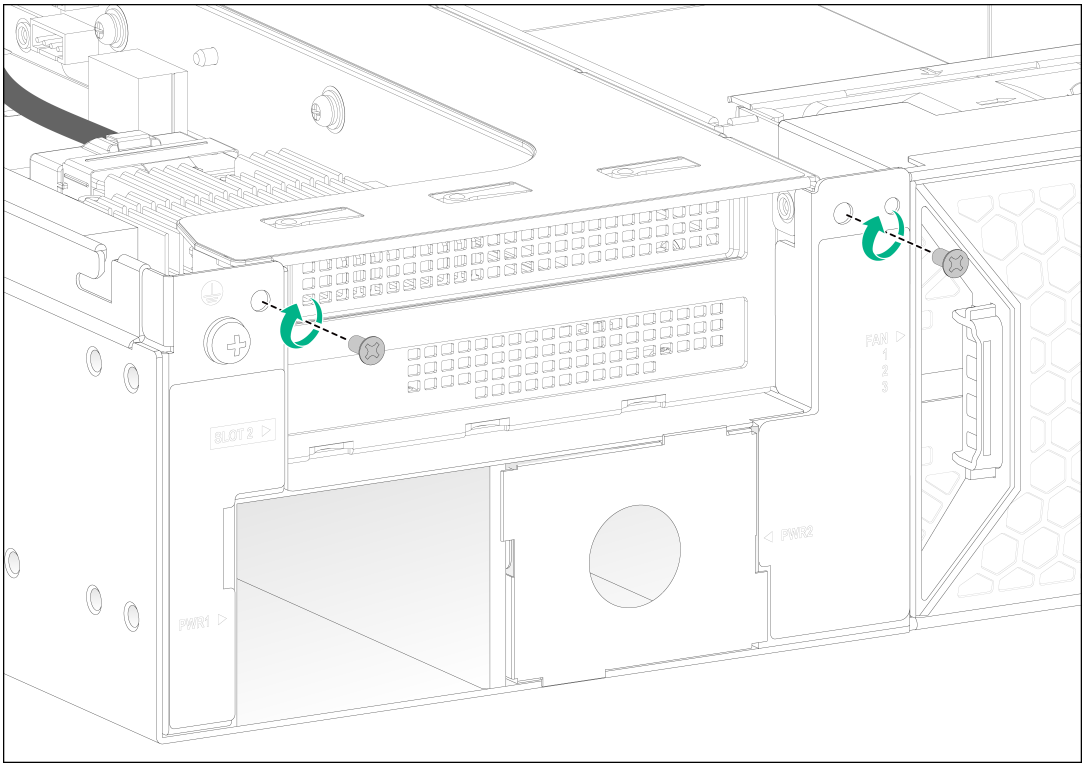
9. Install the riser module installed with the storage controller in the device:
   a. Align the front tabs of the riser module with the guide rails on the system board and align the captive screw with the screw hole on the system board.
   b. Align the golden plating of the riser module with the PCIe riser connector on the main board, and insert the riser module vertically onto the system board.
   c. Fasten the captive screws to secure the riser module to the system board.

Figure7-7 Installing the riser module in the device



10. Fasten the screws with a Phillips screwdriver to secure the riser module to the chassis.

Figure7-8 Securing the riser module to the device



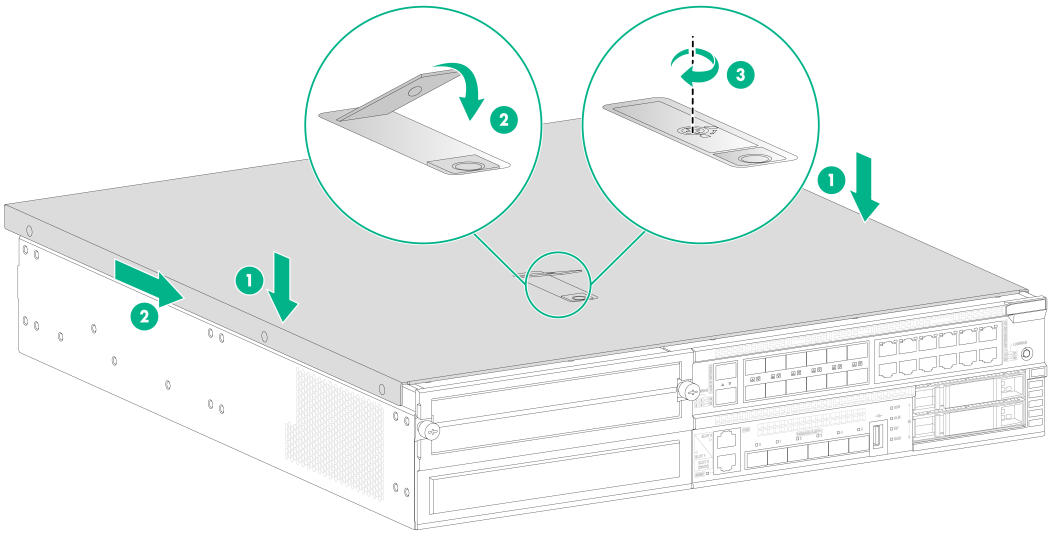
11. Install the access panel:

a. Face the front panel of the device, place the access panel on top of the device chassis, and align the pegs inside the access panel with the slots on the device side panels.

b. Press the locking lever downwards until it is locked in place.

c. Fasten the screw on the locking lever with a Phillips screwdriver to lock the locking lever.

Figure7-9 Installing the access panel.



Installing a GPU

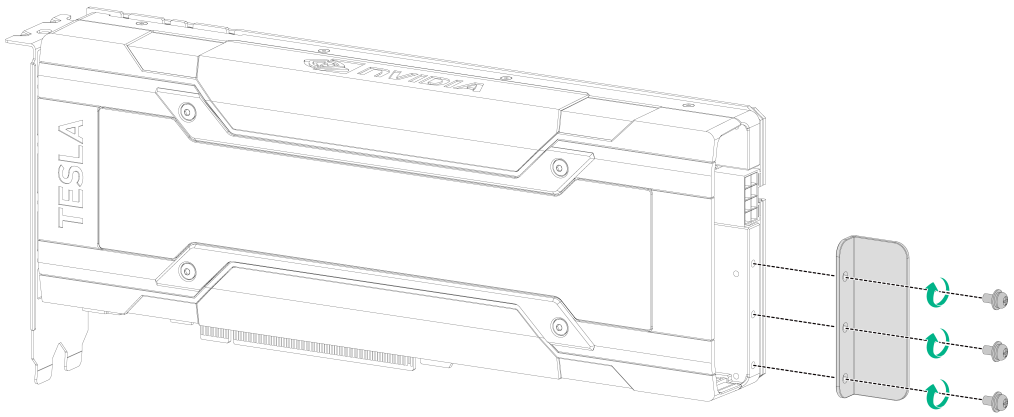
IMPORTANT:

- A GPU support bracket and three screws are shipped with a riser module. Keep them secure before installing a GPU.
- Use the GPU support bracket and screws provided with the riser module to install a GPU in the riser module. The GPU support bracket and screws provided with a GPU might not fit the riser module structure.

To install a GPU:

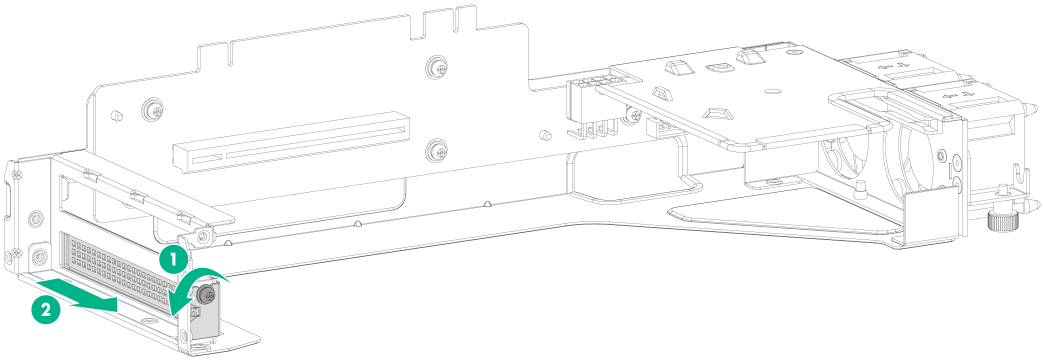
1. Wear an ESD wrist strap and make sure the strap makes good skin contact and is reliably grounded.
2. Power off the device.
3. Attach the GPU support bracket to the GPU. Align the three screw holes in the GPU support bracket with the installation holes in the GPU, and then use screws to attach the GPU support bracket to the GPU.

   Figure7-10 Attaching the GPU support bracket to the GPU



4. Remove the module blank from the riser module. Use a Phillips screwdriver to loosen the screw on the module blank and then pull the module blank slowly out of the riser module.

   Figure7-11 Removing the module blank from the riser module



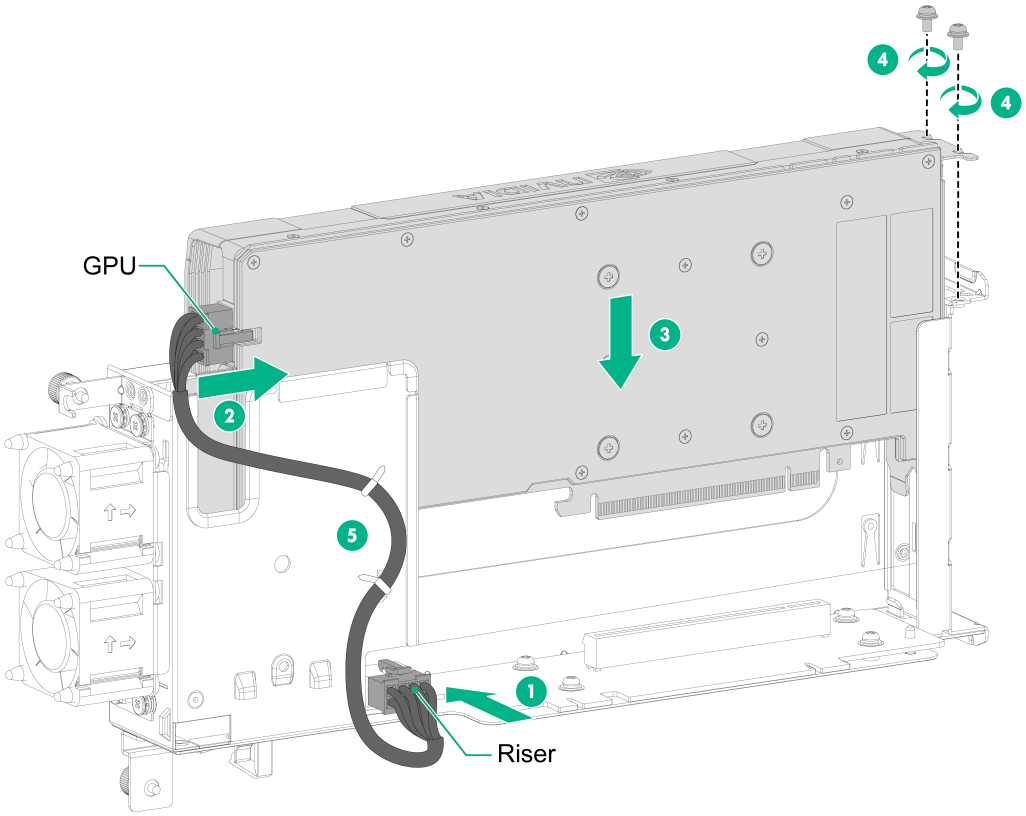
5. Install the GPU in the riser module and connect the GPU power cord:

a. Connect the end marked "Riser" of the GPU power cord to the riser module and then connect the other end of the power cord to the GPU module.

b. Insert the GPU into PCIe slot along the guide rails and fasten the screws to secure the GPU to the riser module.

c. Use the cable ties provided with the riser module to secure the GPU power cord to the cable tie holders on the side panel.

Figure7-12 Installing the GPU in the riser module



6. Remove the access panel. For more information, see "Installing a storage controller."
7. Remove the riser module blank. For more information, see "Installing a storage controller."
8. Install the riser module installed with the GPU in the device. With a GPU or storage controller installed, the riser module installation procedure is the same. For more information, see "Installing a storage controller."
9. Use screws to secure the riser module to the chassis. For more information, see "Installing a storage controller."
10. Install the access panel. For more information, see "Installing a storage controller."

Installing a DIMM

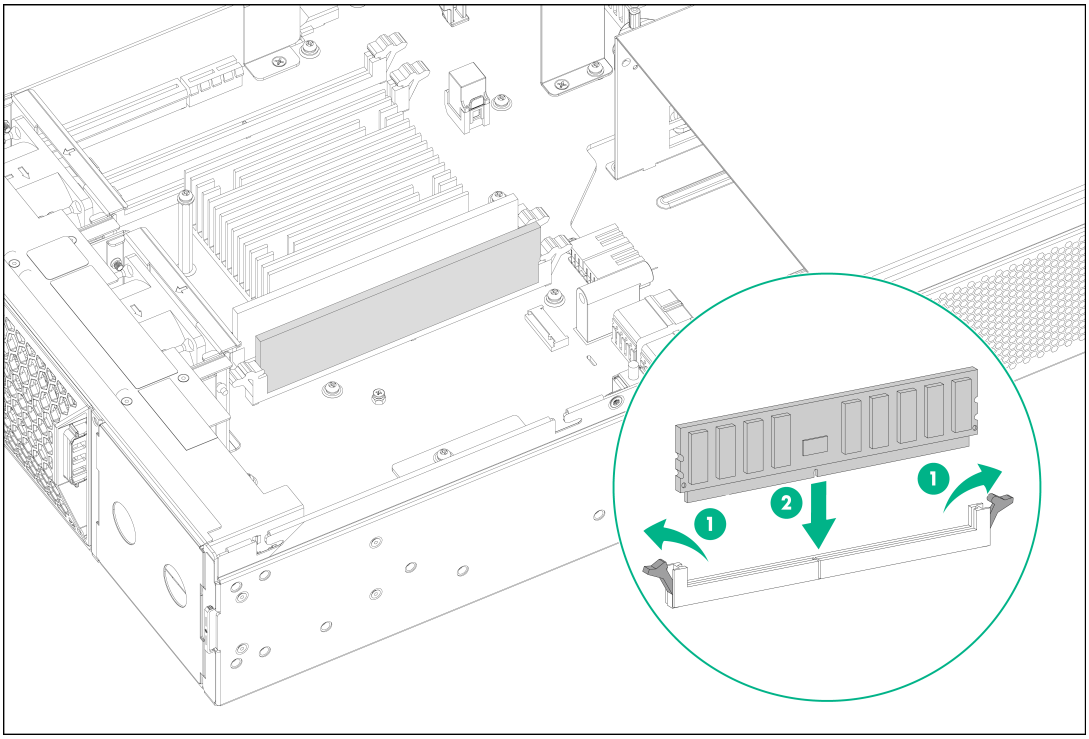
IMPORTANT:

For system identification, use the DIMMs recommended by H3C.

To install a DIMM:

1. Wear an ESD wrist strap and make sure the strap makes good skin contact and is reliably grounded.
2. Power off the device.
3. Remove the access panel. For more information, see "Installing a storage controller."
4. Install a DIMM:
   a. Identify the location of the DIMM slot and open the DIMM slot latches.
   b. Align the notch on the DIMM with the connector key in the DIMM slot and press the DIMM into the socket until the latches lock the DIMM in place.

Figure7-13 Installing a DIMM



5. Install the access panel. For more information, see "Installing a storage controller."

Installing an M.2 SSD drive

IMPORTANT:

- For system identification, use M.2 SSD drives recommended by H3C.
- The M.2 SSD drive screw is shipped with the document bag for the chassis. Before installing an M.2 SSD drive, keep the screw secure.

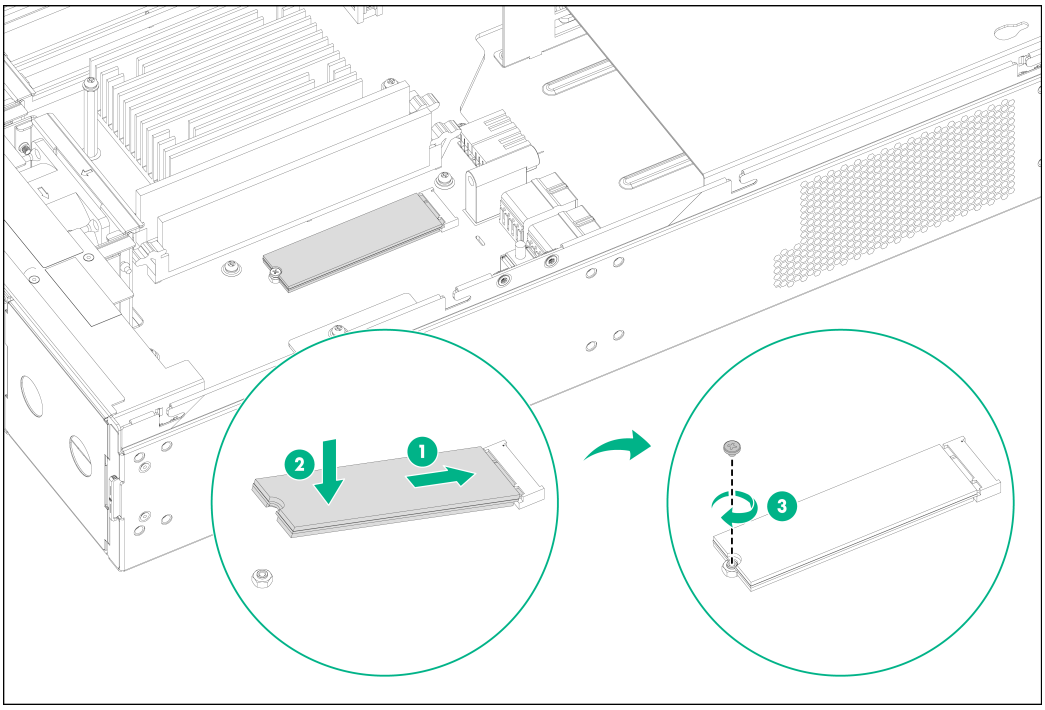
The device supports M.2 SSD drives with dimensions of 22 × 80 mm (0.87 × 3.15 in) and M.2 SSD drives with dimensions of 22 × 60 mm (0.87 × 2.36 in). To install an M.2 SSD drive with dimensions of 22 × 60 mm (0.87 × 2.36 in), adjust the stud location in the system board. The following procedure installs an M.2 SSD drive with dimensions of 22 × 80 mm (0.87 × 3.15 in).

To install an M.2 SSD drive:

1. Wear an ESD wrist strap and make sure the strap makes good skin contact and is reliably grounded.
2. Power off the device.
3. Remove the access panel. For more information, see "Installing a storage controller."

4. Insert the golden plating end of the M.2 SSD drive slowly into the M.2 slot at an angle.
5. Slightly press the other end of the golden plating until the golden plating of the M.2 SSD drive is in close contact with the connector in the M.2 slot.
6. Use a Phillips screwdriver to screw the M.2 SSD drive into place.

Figure7-14 Installing an M.2 SSD drive



7. Install the access panel. For more information, see "Installing a storage controller."

8 Installing external removable components

CAUTION:

- Install a module or filler panel in each slot. Make sure no slot is empty during the device operation.
- Do not hold the handle of a power supply or of a module to move the device. Doing so might cause device damage.

No FIP modules, MIC-X interface cards, SATA drives, or power supplies are provided with the device. Purchase them yourself as required.

Installing MIC-X interface cards

CAUTION:

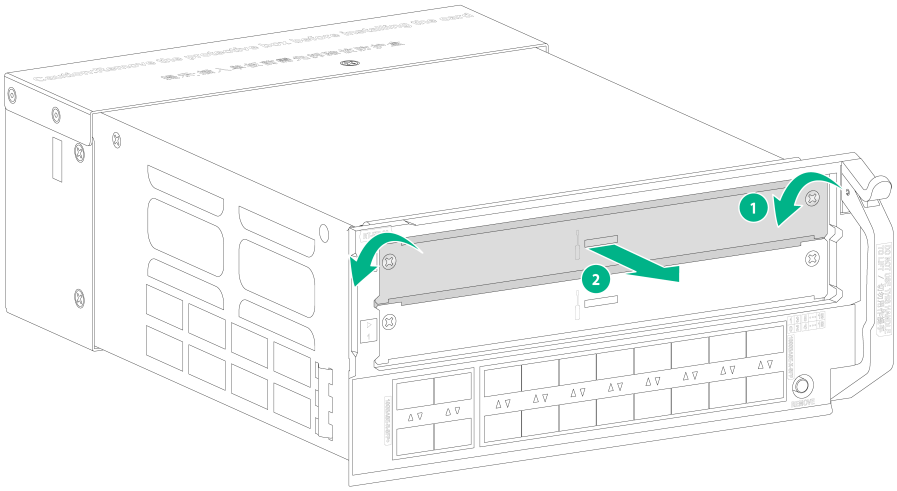
- Do not install a MIC-X interface card when the device is operating.
- To avoid configuration loss of a MIC-X interface card, first install it on a FIP module, and then install the FIP module with it on the device.
- To install two MIC-X interface cards on the FIP module, install one first in slot 2 and then another in slot 1 as a best practice. Otherwise, the access panel of the device might hinder the interface card installation in slot 2. If you have installed an interface card in slot 1, you must press down the ejector levers of the interface card and then insert it into slot 2 slowly.

To install an MIC-X interface card:

1. Wear an ESD wrist strap and make sure the strap makes good skin contact and is reliably grounded.
2. Locate the target slot on the FIP module.
3. Use a Phillips screwdriver to loosen the captive screws on the filler panel. Insert a flat-head screwdriver into the hole on the filler panel to pull the filler panel out the slot.

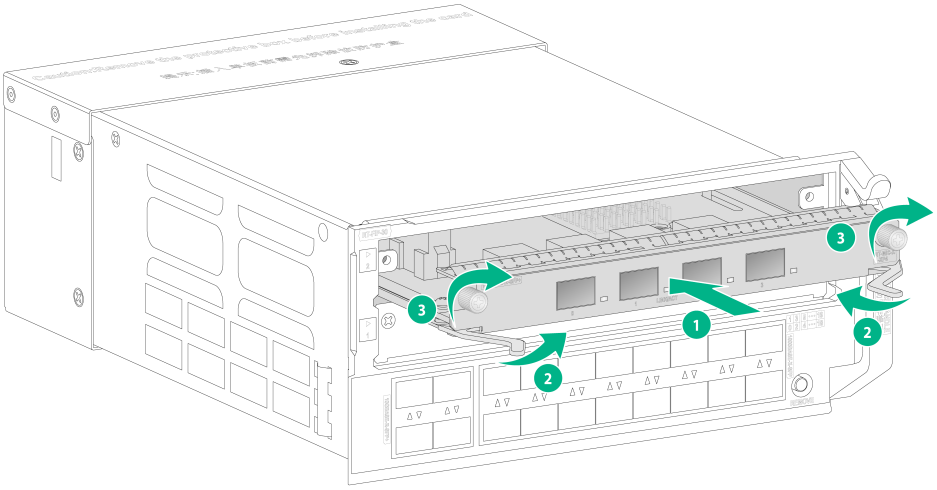
   Keep the removed filler panel secure.

   Figure8-1 Removing the filler panel



4. Open the ejector levers on the MIC-X interface card and push the MIC-X interface card slowly into the slot along the guide rails.
5. Close the ejector levers until the MIC-X interface card is securely seated in the slot.
6. Use a Phillips screwdriver to fasten the captive screws on the MIC-X interface card.

Figure8-2 Installing a MIC-X interface card



7. Install the FIP with the MIC-X interface card in the target slot on the device. For the installation procedure, see "Installing a FIP module."

Installing a FIP module

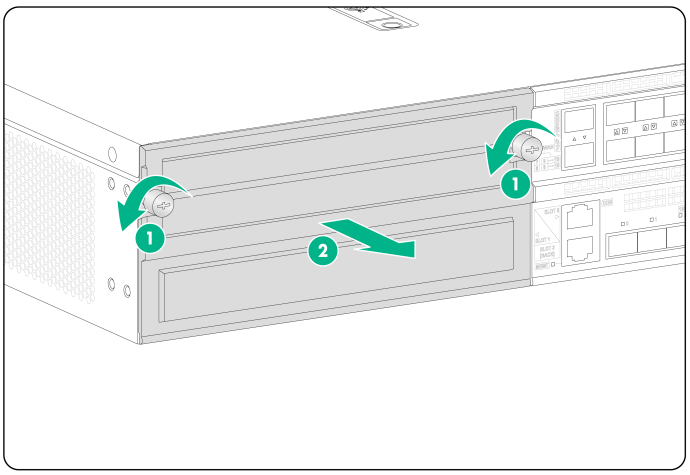
CAUTION:

- The FIP modules are hot swappable.
- If you are to install a MIC-X interface card on the device, first install it on a FIP module, and then install the FIP module with it on the device.

To install a FIP module:

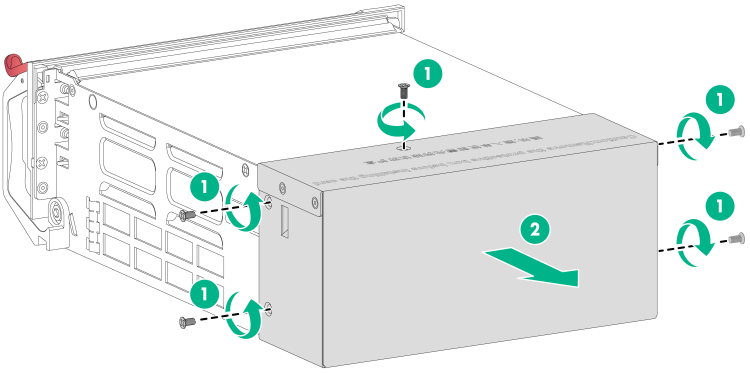
1. (Optional.) Install MIC-X interface cards on the FIP module. For the MIC-X interface card installation procedure, see "Installing MIC-X interface cards."
2. Wear an ESD wrist strap and make sure the strap makes good skin contact and is reliably grounded.
3. Face the front panel of the device, use a Phillips screwdriver to loosen the captive screws on the filler panel, and then remove the filler panel.

Figure8-3 Removing the filler panel



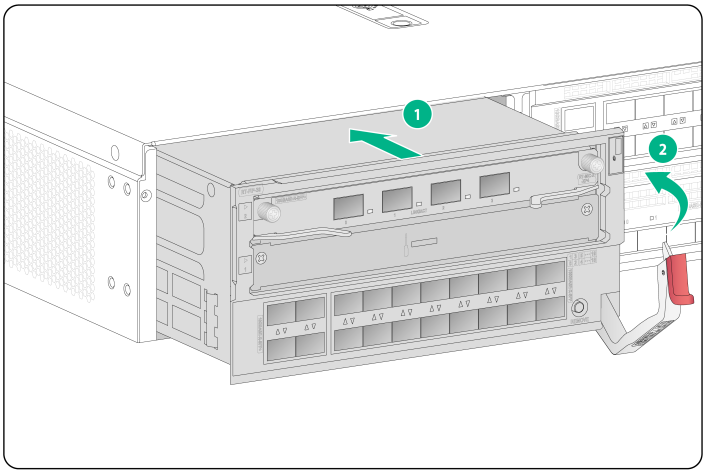
4. (Optional.) If the FIP module has a protective cover at the connector end, remove the cover and keep it secure.

Figure8-4 Removing the protective cover



5. Press the red latch to disengage the ejector lever from the FIP module.
6. Holding the ejector lever by one hand and supporting the FIP module by the other, push the FIP module slowly into the slot along the guide rails.
7. Close the ejector lever until the FIP module is securely seated in the slot.

Figure8-5 Installing a FIP module



Installing SATA drives

CAUTION:

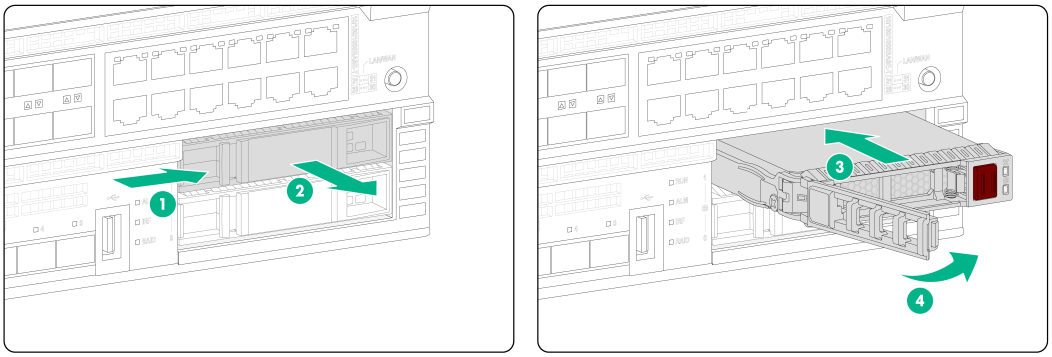
- The SATA drives are hot swappable. You can install a SATA drive, or remove a SATA drive in RAID configuration as indicated by the LED without power off the device. To remove a SATA drive not in RAD configuration, you must first power off the device.
- For system identification, use SATA drives recommended by H3C.

To install a SATA drive:

1. Wear an ESD wrist strap and make sure the strap makes good skin contact and is reliably grounded.

2. Remove the filler panel from the SATA drive slot and keep the removed filler panel secure.
3. Press the red button on the SATA drive tray to release the locking lever.
4. Push the SATA drive slowly into the slot along the guide rails and then close the locking lever.

Figure8-6 Installing a SATA drive



Installing power supplies

CAUTION:

- The power supplies are hot swappable.
- Do not install AC and DC power supplies on the same device.

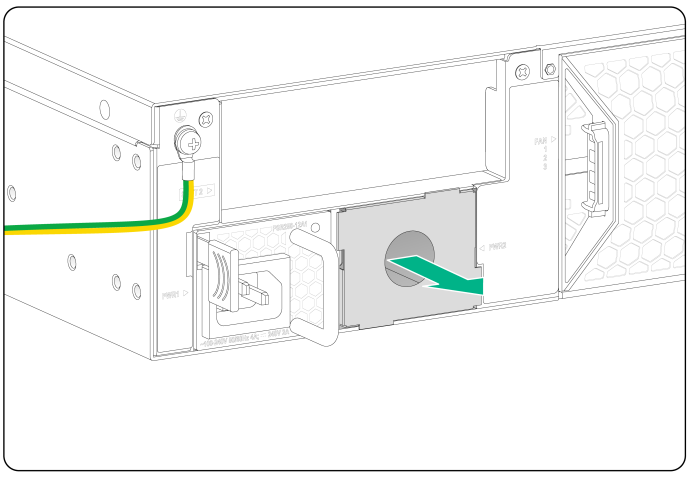
The installation procedure is similar for AC and DC power supplies. This following figure installs an AC power supply.

To install a power supply:

1. Wear an ESD wrist strap and make sure the strap makes good skin contact and is reliably grounded.
2. Remove the filler panel from the target power supply slot, if any.

   To install the power supply in slot PWR2, first remove the filler panel from the slot as shown in Figure8-7.

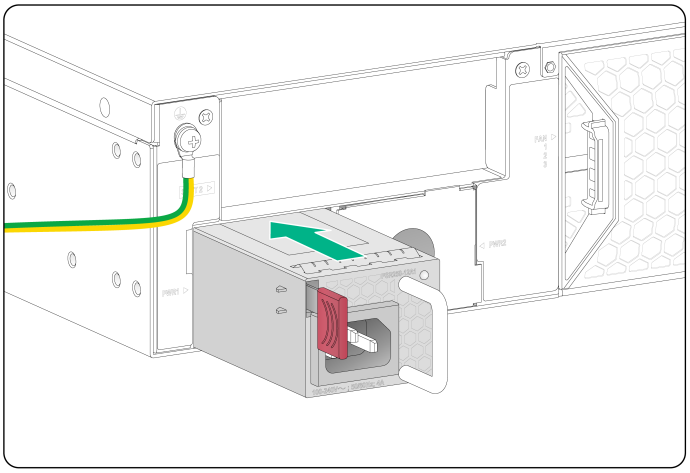
Figure8-7 Removing the filler panel from a power supply slot



3. Unpack the power supply and verify that the power supply model is correct.
4. Correctly orient the power supply with the power supply slot. Grasp the handle of the power supply with one hand and support its bottom with the other, and slide the power supply slowly along the guide rails into the slot.

   The slot is foolproof. If you cannot insert the power supply into the slot, re-orient the power supply rather than use excessive force to push it in.

   Figure8-8 Installing a power supply



9 Connecting power cords

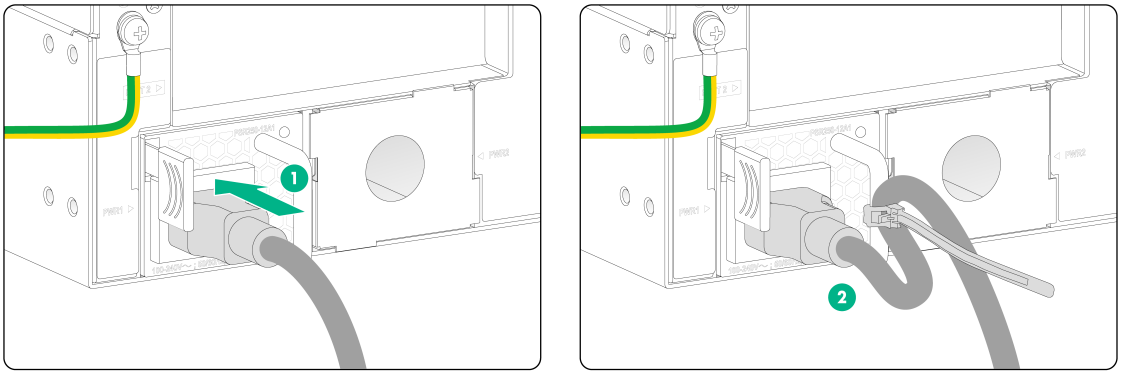
CAUTION:

- Before connecting a power cord, make sure the device is reliably grounded.
- Make sure each power cord has a separate circuit breaker. Before connecting a power cord, turn off the circuit breaker for it.
- Use the power cord provided with a power supply to connect power for it.

Connecting an AC power cord

1. Wear an ESD wrist strap. Make sure the wrist strap makes good skin contact and is reliably grounded.
2. Insert the female connector of the power cord into the AC power receptacle on the power supply.
3. Use a cable tie to secure the power cord to the handle of the power supply.
4. Connect the other end of the power cord to an AC power source.

Figure9-1 Connecting an AC power cord

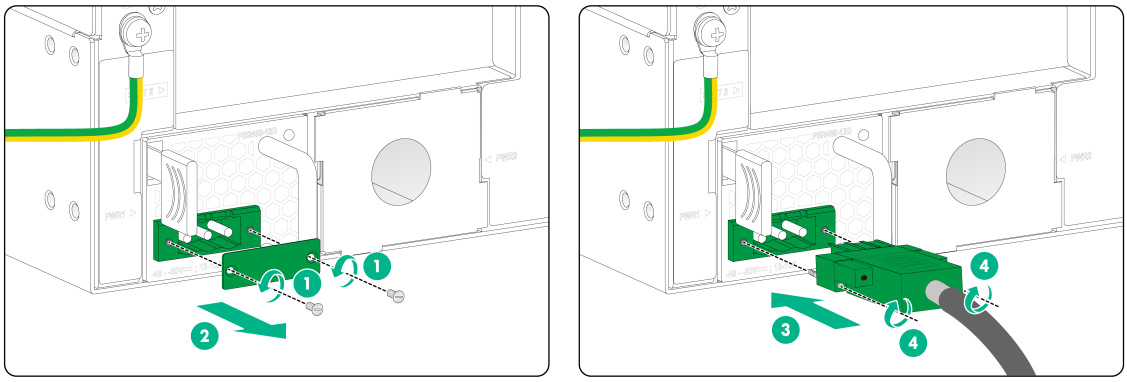


Connecting a DC power cord

1. Wear an ESD wrist strap. Make sure the wrist strap makes good skin contact and is reliably grounded.
2. Use a flat-head screwdriver to loosen the screws on the protective plate over the DC power receptacle and then remove the plate.
3. Correctly orient the DC power cord connector and insert it into the power receptacle.

   The DC power cord connector and DC power receptacle form an anti-misinsertion structure. If you orient the DC power cord connector upside down, you cannot insert it into the receptacle.
4. Use a flat-head screwdriver to fasten the screws on the power cord connector to secure the connector to the power receptacle.
5. Connect the other end of the DC power cord to the wiring terminals of a DC power source, with the negative wire (**–**) to the negative terminal (**–**) and the positive wire (**+**) to the positive terminal (**+**).

Figure9-2 Connecting a DC power cord



Connecting a high voltage DC power cord

1. Wear an ESD wrist strap. Make sure the wrist strap makes good skin contact and is reliably grounded.
2. Slide the cable clamp onto the tie mount on the power supply.

3. Connect the female connector of the power cord to the power receptacle on the power supply.
4. Close the cable clamp and slide it forward until it is flush against the edge of the female connector.
5. Connect the other end of the power cord to an AC or high-voltage DC power source.

Figure9-3 Connecting a high voltage DC power cord