

### Tool list 工具参考

The installation tools are not provided with the switch. Prepare them yourself.  
交换机不随机提供安装工具，请用户根据实际安装需求自己准备安装工具。



Flathead screwdriver  
一字螺丝刀



Phillips screwdriver  
十字螺丝刀



Needle-nose pliers  
尖嘴钳



Marker  
记号笔



Diagonal pliers  
斜口钳



ESD wrist strap  
防静电腕带



Blow dryer  
热吹风

### Introduction to installation accessories 安装附件介绍



Grounding cable  
地线



Front mounting brackets and M4 screw  
前挂耳和M4螺钉



Rear mounting bracket and shoulder screw  
后挂耳和承重螺钉



Rubber feet  
脚垫



Cage nut and M6 screw  
(user supplied)  
浮动螺母和M6螺钉(用户自备)



Removable cable tie  
(user supplied)  
可拆卸式扎带(用户自备)

⚠ Wear an ESD-preventive wrist strap, and make sure the wrist strap makes good skin contact and is well grounded.  
操作者需佩戴防静电腕带，确保防静电腕带与皮肤良好接触，并确认防静电腕带已经良好接地。

### Mounting the switch to a rack 安装交换机到机柜

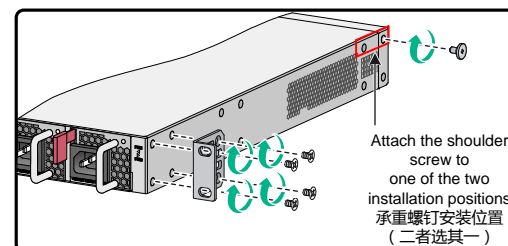
Use front and rear mounting brackets to rack-mount the switch. Front mounting brackets only cannot bear the weight.  
请使用前挂耳和后挂耳配合的方式将交换机安装到机柜，单独使用前挂耳进行安装无法满足承重要求。  
You can install the front mounting brackets at the port side or power side of the switch as needed. (This section describes installation at the power side, which is similar to installation at the port side.)  
用户可以根据安装场景的需要，将前挂耳安装在设备端口侧或电源侧（安装方法类似，仅以前挂耳安装在设备电源侧为例介绍安装过程）。  
Installation methods for the rear mounting brackets vary by the rack depth.

- Method 1: Orient the bracket with the wide flange inside the rack if the rack depth is in the range of 327 to 494 mm (12.87 to 19.45 in).
- Method 2: Orient the bracket with the wide flange outside the rack if the rack depth is in the range of 172 to 339 mm (6.77 to 13.35 in) and the distance from the rear rack posts to the inner surface of the cabinet door is longer than 153 mm (6.02 in).

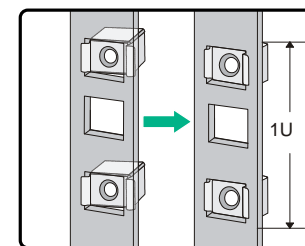
后挂耳固定到机柜方孔条时，支持正向安装和反向安装两种安装方式：

- 方式一：正向安装，适用于前后立柱方孔条间距在327mm ~ 494mm范围内的机柜。
- 方式二：反向安装，适用于前后立柱方孔条间距在172mm ~ 339mm范围内的机柜，且固定后挂耳的机柜方孔条到机柜门内侧的垂直距离应大于153mm，否则安装完成后，后挂耳会妨碍机柜门的正常关闭。

Attach the front mounting brackets and the shoulder screw to the switch 安装前挂耳和承重螺钉到交换机

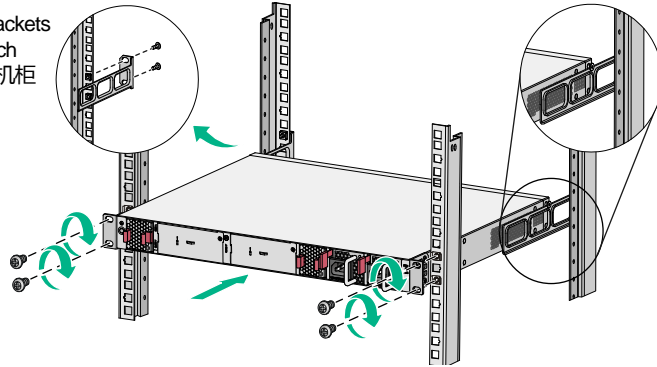


Install cage nuts 安装浮动螺母

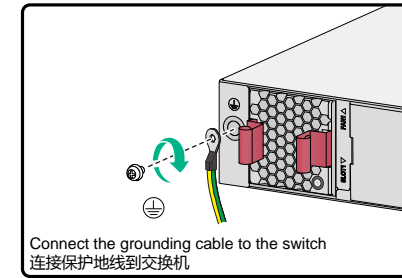
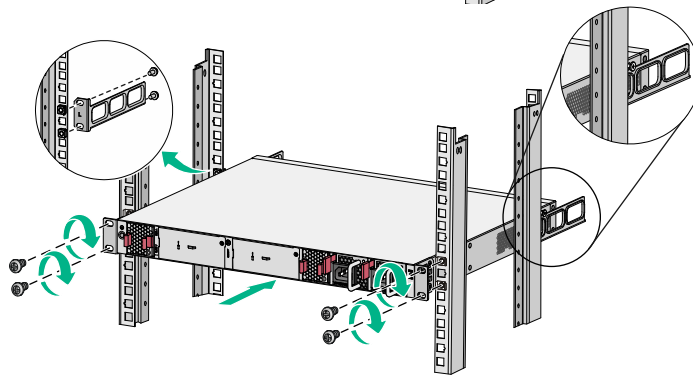


Attach rear mounting brackets and rack mount the switch  
安装后挂耳和交换机到机柜

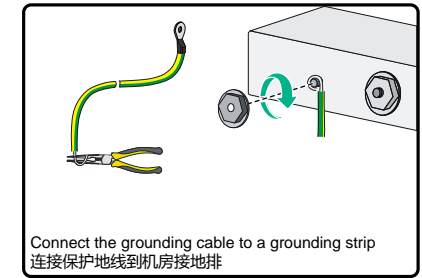
Method 1 方式一



Method 2 方式二



Connect the grounding cable to the switch  
连接保护地线到交换机

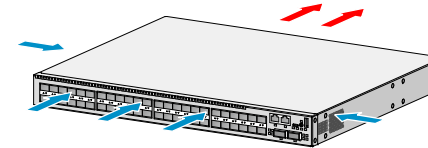


Connect the grounding cable to a grounding strip  
连接保护地线到机房接地排

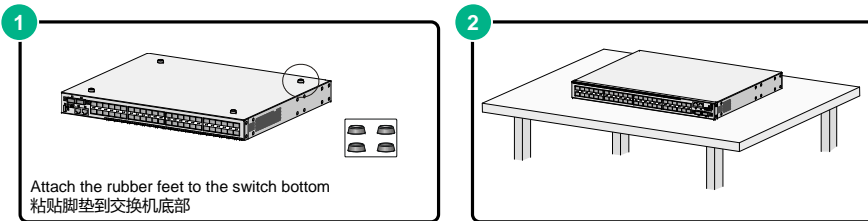
## Airflow design of the switch 交换机的风向设计

Make sure the air inlet and outlet vents are not blocked and the installation site has a good ventilation system.  
请确保交换机的进、出风孔不被遮挡，并将交换机安装在具有良好通风散热系统的环境中。

You can provide airflow for the switch from the port side to the power module side by installing DS-3E3900-FAN-H fan trays.  
通过安装DS-3E3900-FAN-H风扇模块，可提供“端口侧到电源侧”气流方向。DS-3E3900-FAN-H draws air from the port side to power side, and the color of the handle is red.  
DS-3E3900-FAN-H为抽风风扇，风向为端口侧进风，电源侧出风，风扇把手为红色。



## Mounting the switch on a workbench 安装交换机到工作台



## Connecting the grounding cable 连接保护地线

Correctly connecting the switch grounding cable is crucial to lightning protection and EMI protection.  
交换机地线的正确连接是交换机防雷、防干扰的重要保障，请使用设备随机提供的保护地线正确接地。

## Installing a fan tray 安装风扇模块

Make sure the airflow direction of the fan tray is as required by the installation site.  
请确认风扇模块气流方向和安装环境的通风要求一致。

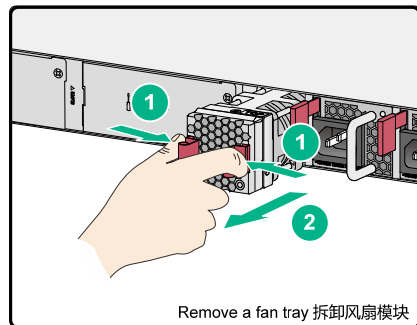
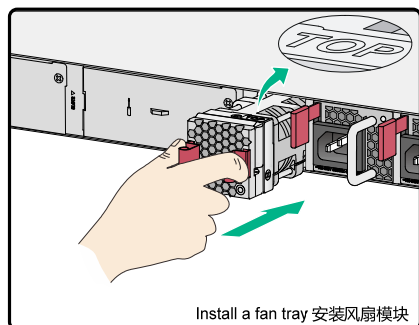
Install two fan trays of the same model on the switch.  
设备必须安装两个相同型号的风扇模块，否则禁止上电运行。

Make sure the "TOP" mark stays on top when you install the fan tray.  
安装风扇模块时，请确保“TOP”丝印朝上。

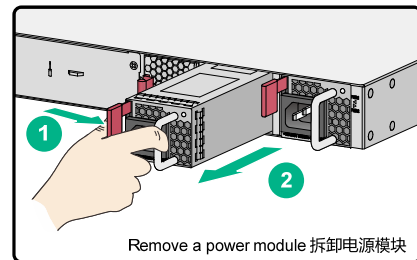
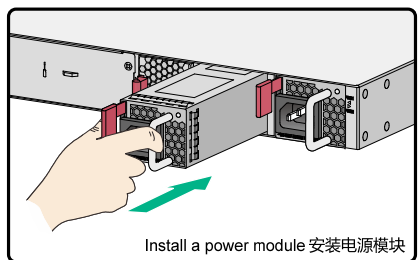
Make sure all slots have a module during the switch is operating.  
设备运行时，必须确保所有可插拔模块插槽不能为空，请务必安装相应的模块。

If both fan trays fail during the switch is operating, replace the fan trays within 2 minutes.  
设备运行时，如果两个风扇模块均出现故障，必须在2分钟内完成故障风扇模块的更换。

**▲** If one fan tray fails and the operating temperature is not higher than 27°C (80.6°F), replace the fan tray within 24 hours, and make sure the failed fan tray is in position before replacing it. If the operating temperature is higher than 27°C (80.6°F), replace the fan tray immediately.  
 设备运行时，如果一个风扇模块出现故障，则当环境温度不高于27°C时，必须在24小时内完成故障风扇模块的更换，且更换前需保持故障风扇模块在位；当环境温度高于27°C时，请立即进行更换。



## Installing a power module 安装电源模块



## Connecting the power cord 连接电源线

**▲** Before connecting the power cord, make sure the router is reliably grounded.  
 在连接电源线前，需保证设备已正确接地。  
 To avoid bodily injury, connect the power cord first to the switch and then to the equipment-room power supply system.  
 在连接电源线时，先完成电源线与交换机侧的连接，再进行电源线与机房供电系统的连接，以免造成人身伤害。

