31504956-SmartAX MA5620/MA5626
Installation Pocket Guide
快速安装指南-(V800R308_03)

HUAWEI

Before you start, prepare the following tools:
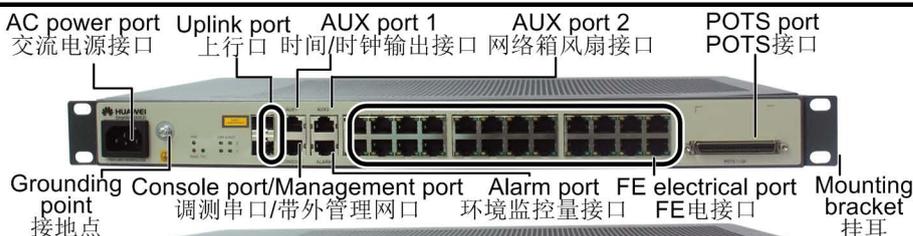在安装前，请准备下面的工具：

Phillips screwdriver 十字螺丝刀	Flathead screwdriver 一字螺丝刀	Marker pen 记号笔	Diagonal pliers 斜口钳	Combination spanner 两用扳手	Socket spanner 套筒扳手	Multimeter 万用表

Outline and Structure
机箱外观结构

AC-powered
交流供电

AC power port 交流电源接口　Uplink port 上行口　AUX port 1 时间/时钟输出接口　AUX port 2 网络箱风扇接口　POTS port POTS接口

MA5620
(8FE+8POTS)
(16FE+16POTS)
(24FE+24POTS)

Grounding point 接地点　Console port/Management port 调测串口/带外管理网口　Alarm port 环境监控量接口　FE electrical port FE电接口　Mounting bracket 挂耳

MA5626
(16/24FE)

MA5626
(8FE)

MA5626
(8FE POE)

REVERSE PoE
反向POE供电

MA5626
8FE反向POE
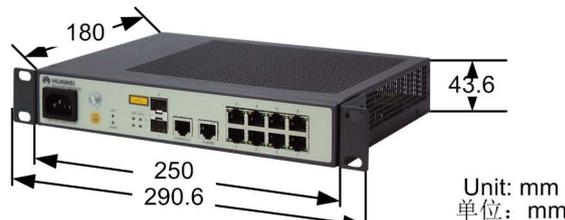
REVERSE PoE
反向POE供电

The 19-inch dimensions of MA5620/MA5626
19英寸MA5620/MA5626机箱尺寸

220
43.6
442
482
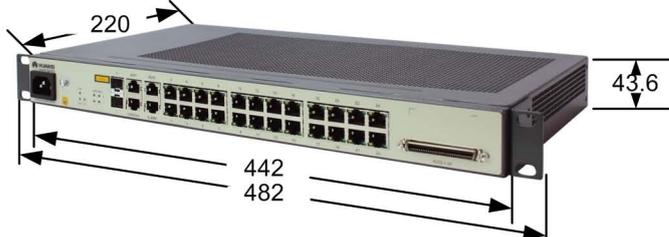
The 11-inch dimensions of MA5626(8FE/8FE REVERSE PoE)
11英寸MA5626(8FE/8FE反向POE)机箱尺寸

180
43.6
250
290.6

Unit: mm
单位：mm

Collecting the MAC and SN Labels
采集MAC和序列号标签

- On the installation site, the hardware installation engineer should collect the MAC and SN Labels of the MA5620/MA5626 for the software commissioning engineer to configure and manage the MA5620/MA5626 remotely.
  现场施工时，硬件安装工程师需采集MA5620/MA5626的MAC和序列号标签，提供给软调工程师用于远程配置管理MA5620/MA5626。
- When collecting the MAC and SN Labels, the hardware installation engineer only needs to affix one of the MAC and SN labels to the corresponding place of the following table, and then record the actual installation location of the MA5620/MA5626.
  硬件安装工程师采集时，需把MAC和序列号标签粘贴到下面表格中的对应位置，并记录下MA5620/MA5626安装的实际位置。
- After the hardware installation, transfer this piece of paper to the software commissioning engineer.
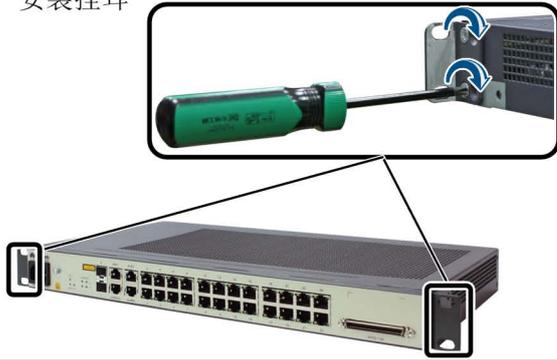 硬件施工完毕，将该纸张提供给软调工程师。

NO. 序号	Device type 设备类型	MAC and SN Labels MAC和序列号标签	Device Installation Location 设备所处位置
1	MA5620	00259EDEFA29-2A (2)　48575443DEFA2902	** Building ** Floor ONU-1 **大厦**楼ONU-1

Installation in the 19-inch Cabinet
在19 英寸机柜中安装

1 Installing the Chassis
安装机箱

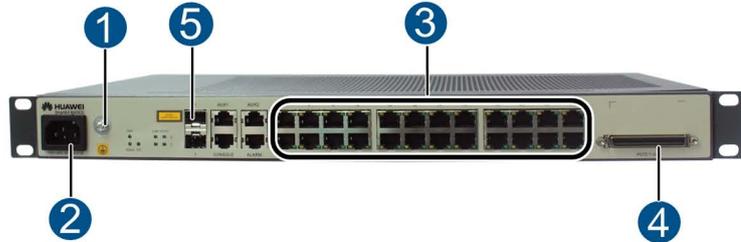**①** Install mounting brackets
安装挂耳

② Install the chassis
安装机箱

2 Routing cables
布放线缆

①

OT6-4 — PGND cable
保护地线
(* Move up cable in accordance with actual situation while small equipment's space.
*设备间隔紧密时，根据实际情况，线缆向上移）

To the grounding point of the cabinet
到机柜的接地点

②

AC power cable
交流电源线
(* Move up cable in accordance with actual situation while small equipment's space.
*设备间隔紧密时，根据实际情况，线缆向上移）

To AC power socket
到交流电源插排

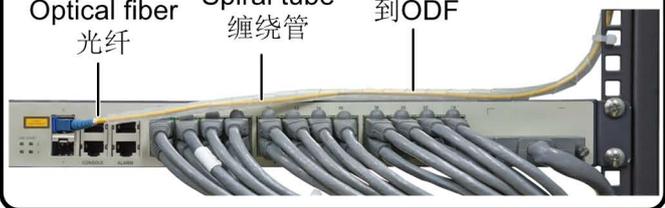**AC-powered** 交流供电

① ⑤ ③

② ④

REVERSE PoE 反向POE供电

① ⑤ ③
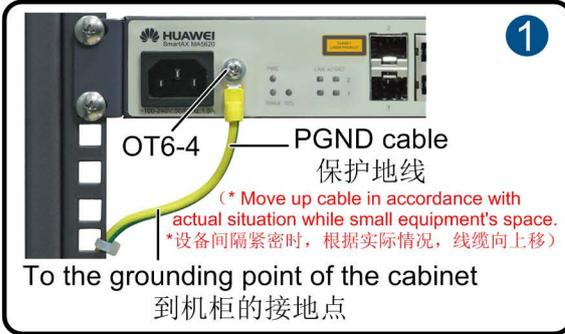
③ Network cable （* Cable transverse to the right in accordance with actual situation while small equipment's space.
网线 *设备间隔紧密时，根据实际情况，线缆横向往右走）

To subscriber device
到用户侧设备

④ （* Cable transverse to the right in accordance with actual situation while small equipment's space.
*设备间隔紧密时，根据实际情况，线缆横向往右走）

POTS subscriber cable
POTS用户电缆

To MDF
到MDF

⑤

Optical fiber   Spiral tube   To ODF
光纤   缠绕管   到ODF

PGND cable
保护地线

AC power cable
交流电源线

Optical fiber
光纤

Network cable
网线

POTS subscriber cable
POTS用户线缆

Installation in the Network Cabinet
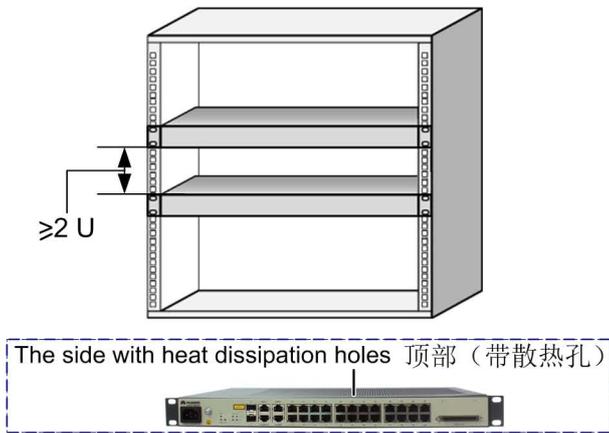## 在网络箱中安装

1 Installing the Chassis
安装机箱

📖 **NOTE**

- MA5620/MA5626 is includding in the Multiple Dwelling Unit (MDU) product series. Hereinafter, MA5620/MA5626 is referred as MDU for short.
  "MA5620/MA5626"属于"远端光接入单元（MDU）"产品系列。在下文中，"MA5620/MA5626"简称为"MDU"。

- The air intake vent and the air exhaust vent of the network cabinet should keep expedite for the MDU heat dissipation.
  网络箱的进出风通道须保持畅通，以利MDU散热。

- For how to install two stacked MDUs, contact Huawei Technologies Co., Ltd.
  对于2台MDU的堆叠安装，请与华为技术有限公司联系处理。

- If the network cabinet is installed indoors or in a corridor that is out of rain, the network cabinet must meet the requirements of IP31 class protection.(The first number "3" means the solid particle with a diameter equal to or larger than 2.5 mm can be prevented from entering the cabinet. The second number "1" means the drips fallen vertically cannot damage the device.)
  在室内或雨水未能淋到的楼道环境中安装的网络箱必须达到IP31等级（第一个数字"3"表示网络箱能防止2.5mm 直径和更大的外部固体颗粒进入；第二个数字"1"表示垂直落下的水滴不会对设备造成损害）。

- If the network cabinet is installed outdoors or in a corridor that is exposed to rain, the network cabinet must meet the requirements of IP55 class protection. ("IP" refers to International Protection. The first number "5" refers to the class for preventing the solid particle from entering the device. That is, the network cabinet cannot completely prevent dust from entering the device, but the amount of dust that enters the network cabinet does not damage the device. The second number "5" refers to the class for preventing water from entering the network cabinet. That is, the water sprayed from different directions to the network cabinet does not damage the device.)
  在室外或易被雨水淋到的楼道环境中安装的网络箱必须达到IP55等级（"IP"为国际防护等级；第一个数字"5"为防外部固体颗粒侵入等级，即"网络箱不可能完全阻止灰尘进入，但灰尘进入的数量不会对设备造成损害"；第二个数字"5"为防水侵入等级，即"从每个方向对准网络箱柜体的射水都不会对设备造成损害"）。
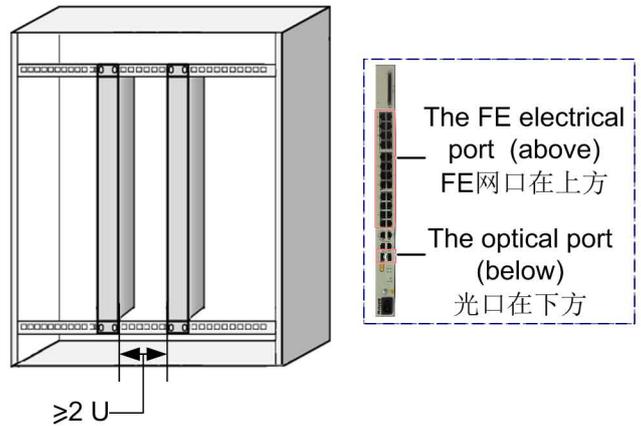
The modes of installing the MDU in the network cabinet of the customer vary with the specifications for the network cabinet of the customer. The following section describes the common modes to be taken for installing the MDU in the natural heat dissipation network cabinet (The network cabinet is without fan) of the customer. This can serve as a guide for hardware engineers to install the MDU(fix the rack-mounting ears on the front side or back).
MDU在客户自备网络箱的安装方式根据其网络箱规格的不同而有所不同。下面介绍MDU在客户自备的自然散热网络箱(该网络箱无风扇)中的几种常见安装方式，以供硬件工程师安装时参考（挂耳可以正面，侧面或者后面安装）。
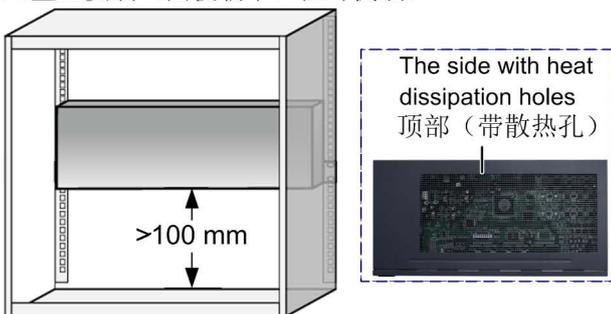
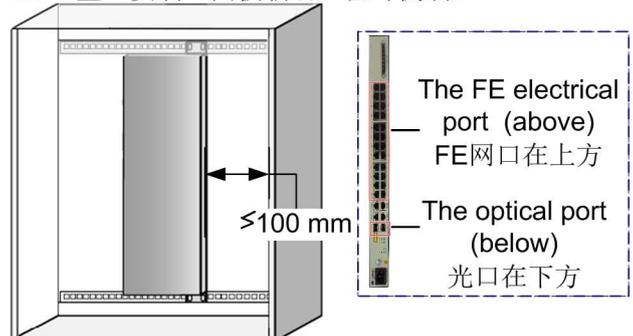**①** MDU horizontally installed (with the panel facing the front)
MDU水平安装（面板朝前）

② MDU vertically installed (with the panel facing the front)
MDU竖直安装（面板朝前）

≥2 U

The side with heat dissipation holes 顶部（带散热孔）

The FE electrical port (above)
FE网口在上方

The optical port (below)
光口在下方

≥2 U

③ MDU vertically installed (with the panel facing downwards, fix the rack-mouting ears on the side)
MDU竖直安装（面板朝下，挂耳侧装）

④ MDU vertically installed (with the panel facing the right,fix the rack-mounting ears on the side)
MDU竖直安装（面板朝右，挂耳侧装）

>100 mm

The side with heat dissipation holes
顶部（带散热孔）

≤100 mm

The FE electrical port (above)
FE网口在上方

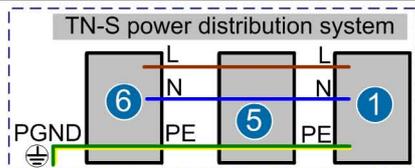The optical port (below)
光口在下方

⚠️ **CAUTION**

For better heat dissipation, avoid using the installation mode of placing the MDU vertically (with the panel facing upwards) in the network cabinet.
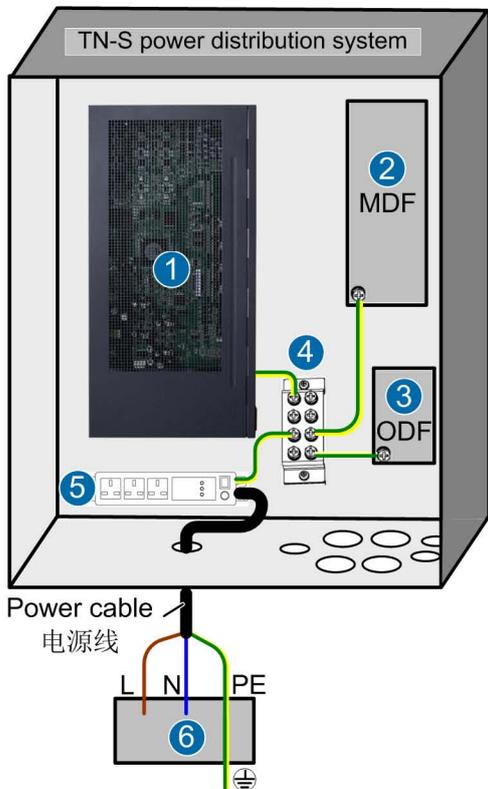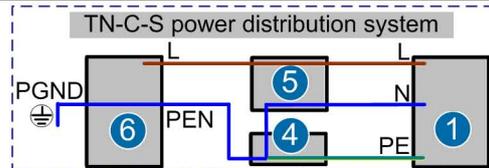从散热角度考虑，在网络箱中安装MDU时，禁止采用竖直安装（面板朝上）这种安装方式。

2 Guide for Grounding the Network Cabinet
网络箱接地指导

TN-S power distribution system

① MDU　②MDF　③ODF

④ Grounding bar　接地排

⑤ AC lightning protection bar
交流防雷插排

⑥ AC power distribution cabinet　交流电源配电柜

TN-C-S power distribution system

In the case of the TN-C-S and TN-S AC power distribution systems, it is recommended that you use the PE wire of the AC power cable for the MDU grounding connection. The prerequisite is that the PE wire of the AC power cable for the corridor of the building is already grounded properly.
对于TN-C-S和TN-S交流配电系统，推荐采用交流电源线的PE线实现MDU的接地。前提是楼道建筑物自身交流电源线的PE线已可靠接地。

Use the ground cable (the cross-sectional area of the ground cable must be equal to or greater than 6 mm²) to connect the grounding bar and all the internal devices, and the grounding bar to the network cabinet in an equipotential manner through a metallic structure.
网络箱内部所有设备连接通过地线（线径应不小于6mm²）到接地排，接地排通过金属结构与网络箱实现等电位连接。

Connect the grounding point of the reinforcing rib of the optical fiber to the ground bar through a ground cable, or connect this grounding point to the network cabinet in an equipotential manner through a metallic structure.
光纤加强筋接地点，需要通过地线与接地排连接；接地点也可以通过金属结构与网络箱等电位连接。

⚠ **CAUTION**

When the PE line of the AC power cable in the building of the corridor does not meet the grounding requirement, the network cabinet must be grounded through an external ground cable (PGND cable).

当楼道建筑物自身的交流电源线的PE线不具备接地条件时，网络箱必须通过外部地线（保护地线）接地且要保证光纤加强筋和设备地断开。

A power cable with 3-5 m must be used for decoupling between the surge protector and the ONU power supply.

防雷器到ONU设备电源之间要求采用3m~5m长的电源线做退耦。

① MDU　②MDF　③ODF　④ Grounding bar　接地排

⑤ AC PDU　交流配电盒　⑥AC power distribution cabinet　交流电源配电柜
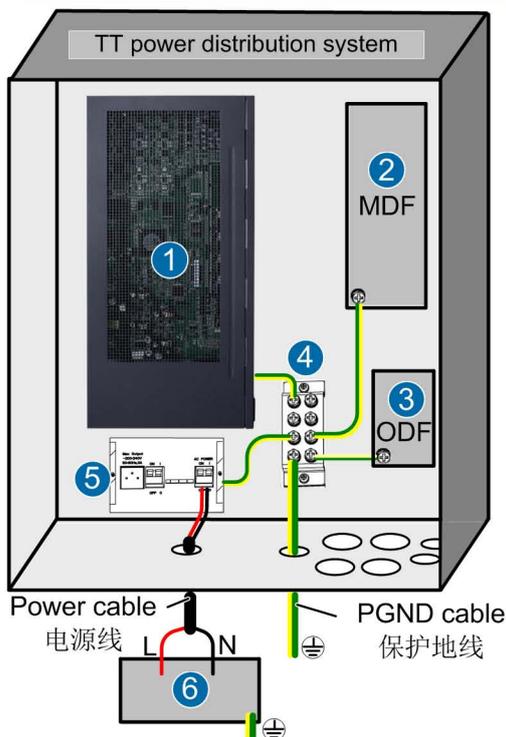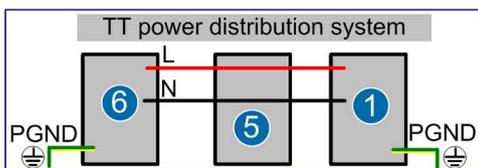
In the case of the TT power distribution system, it is recommended that an external grounding device be adopted. For example, use the dedicated grounding device of the building (such as the grounding flat steel sheet, grounding stud, and grounding bar) or the base steel bar of the reinforcement concrete of the building, or deploy a new earth screen.

对于TT配电系统，推荐采用外部接地装置进行接地，比如采用建筑物专用接地装置（接地扁钢、地桩、接地排）、建筑物混凝土基础钢筋、新建接地网等。

Use the ground cable (the cross-sectional area of the ground cable must be equal to or greater than 6 mm²) to connect the grounding bar and all the internal devices, and the grounding bar to the network cabinet in an equipotential manner through a metallic structure.

网络箱内部所有设备连接通过地线（线径应不小于6mm²）到接地排，接地排通过金属结构与网络箱实现等电位连接。

Connect the external ground cable (PGND cable) of the network cabinet to the external grounding device. As specified by the national grounding standard, the cross-sectional area of the external ground cable must be equal to or greater than 16 mm².

网络箱外部接地线（保护地线），要连接到外部接地装置，按照国家的接地标准，此线径应不小于16 mm²。

TT power distribution system