

User Guide

用户手册

16GE(PoE)+2G Combo+2GE PoE Switch

16GE(PoE)+2G Combo+2GE 非管理 PoE 交换机

Package Contents

Check the following contents of your package:

- PoE Switch x 1
- User Guide x 1
- Power Cord x 1
- Accessories(hanging ears*2,Rubber Feet*4,screw*8)

If any part is lost and damaged, please contact your local agent immediately.

Introduction

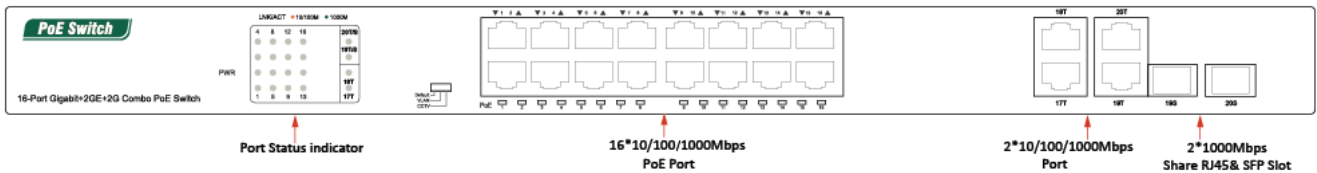
The 16GE(PoE)+2G Combo+2GE PoE Switch are Gigabit Uplink Unmanaged Switch which provides you with a high-performance, low-cost, easy-to-use, seamless and standard upgrade to boost your old network to 10/100/1000Mbps. Increase the speed of your network server and backbone connections, making Gigabit connection to a server or uplinking a network necessarily.

Its PoE ports can automatically detect and supply power with those IEEE 802.3af/at compliant Powered Devices (PD). The electrical power is transmitted along with data in one single cable allowing you to expand your network where there are no power lines or outlets, where you wish to fix devices such as AP, IP Cameras or IP Phones, etc.

Hardware Description

Front Panel

The Front Panel Consists of 16-Port 10/100/1000M Auto-Negotiation RJ45 PoE Ports, 2-Port Gigabit Combo Port and 2-Port 10/100/1000M RJ45 port. The LED indicators also on located on the panel.



LED indicator

| LED | Color | Function |
|---------|--------|---|
| PWR | Green | Off: No Power supply Light: Indicates the switch has power |
| LNK/ACT | Green | Off: No device is connected to the corresponding port Light: Indicates the link through that port is successfully established at 1000Mbps. Blink: Indicates that the Switch is actively sending or receiving data over that port. |
| | Orange | Off: No device is connected to the corresponding port Light: Indicates the link through that port is successfully established at 10/100Mbps. Blink: Indicates that the Switch is actively sending or receiving data over that port. |
| PoE | Orange | Off: No PoE powered device (PD) connected Light: There is a PoE PD connected to be port, which supply power successfully. Blink: Indicates port abnormal power supply |

DIP Switch

The DIP switch located on the left panel.

Default: the factory default mode, can normal communication between port 1~20.

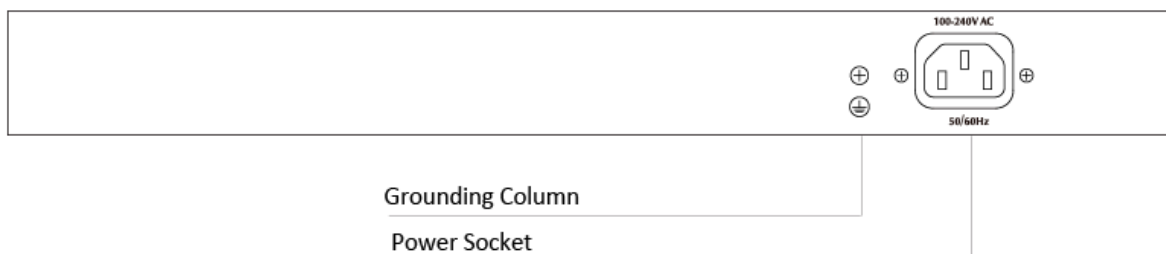
VLAN: 1-16 port can be isolated each other but 1-16 port can connect to 17 ~20 port after open VLAN to stop broadcast storm to increase forwarding rate of frame.

CCTV: Up to 250m PoE distance allows you to expand you network via Ethernet cable but where you want to fix device such as IP Cameras.

Note: After change the mode, in order to the corresponding configuration take effect. The switch needs to restart manually.

Rear Panel

The rear panel of 16GE(PoE)+2G Combo+2GE PoE Switch indicates an AC inlet power socket, Grounding Column.



Power socket

Connect the female connector of the power cord here, and the male connector to the AC(Alternating Current) power outlet. Please make sure the voltage of the power supply meets the requirement of the input voltage

Grounding column

The switch already comes with lightning protection mechanism. You can also ground the switch through the PE (Protecting Earth) cable of AC cord or with Ground Cable.

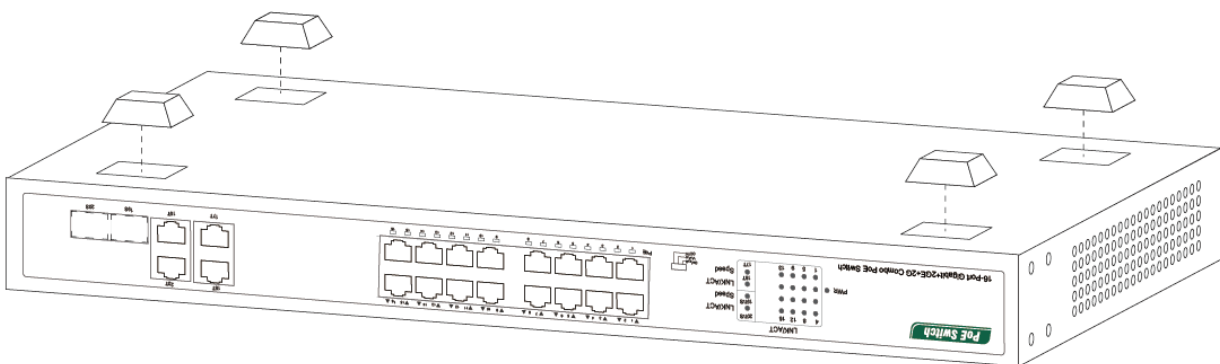
Installation the Switch

This part describes how to install your Ethernet Switch and make connections to it. Please follow the following instructions in avoid of incorrect installation causing device damage and security threat.

- Before cleaning the switch, unplug the power plug of the switch first. Do not clean the switch with wet cloth or liquid;
- Do not place the switch near water or any damp area. Prevent water or moisture from entering the switch chassis;
- Do not place the switch on an unstable case or desk. The switch might be damaged severely in case of a fall;
- Ensure proper ventilation of the equipment room and keep the ventilation vents of the switch free of obstruction;
- Make sure that the operating voltage is the same one labeled on the switch;
- Do not open the chassis while the switch is operating or when electrical hazards are present to avoid electrical shocks.

Desktop Installation

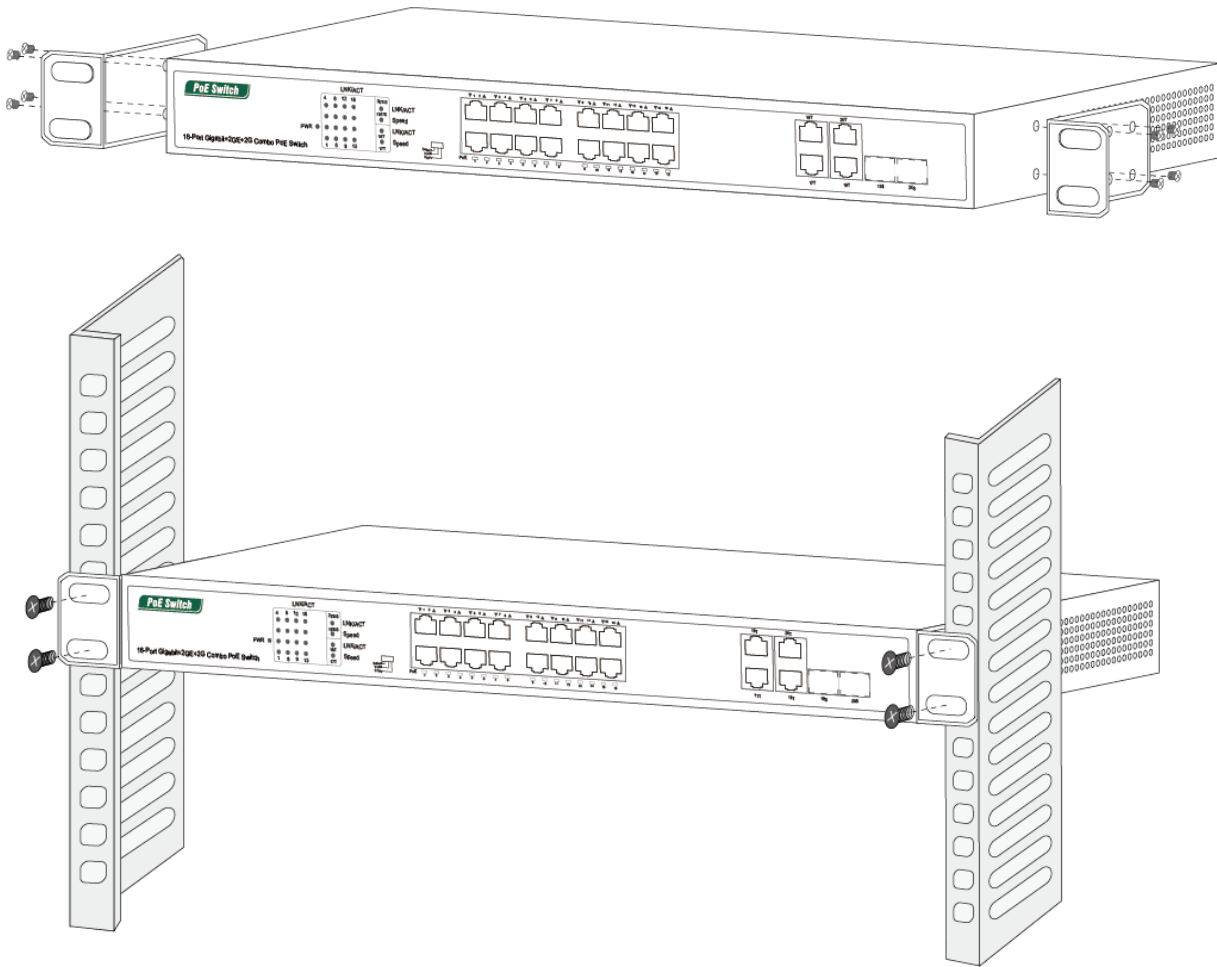
Install the Switch on a desktop, please attach these cushioning rubber feet provided on the bottom at each corner of the Switch in case of the external vibration. Allow adequate space for ventilation between the device and the objects around it. The installation diagram is as follows:



Rack-mountable Installation

The switch is rack-mountable and can be installed on an EIA-19 inch equipment rack. To do this, first, please install the mounting brackets on the switch's side panels (one on each side), secure them with the included screws, and then use the

screws provided with the equipment rack to mount the switch on the 19 inch rack.



Turn on the switch

Plug in the negative connector of the provided power cord into the power socket of the device, and the positive connector into a power outlet. After the device is powered on, it begins the Power-On Self-Test. The PWR LED indicator will light on all the time.

Specifications

| | | |
|----------------------|--|-------------------|
| Model | 16GE(PoE)+2G Combo+2GE | |
| Standard | IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE802.3x, IEEE802.3af, IEEE802.3at | |
| Network Media(Cable) | 10BASE-T: UTP category 3,4,5 cable (≤100m) 100BASE-TX: UTP category 5 cable (≤100m) 1000BASE-T: UTP category 5e cable (≤100m) 1000BASE-X: MMF or SMF SFP module | |
| MAC Address Table | 8K, Auto-learning, Auto-aging | |
| Transfer mode | Store-and-Forward | |
| Frame Forward Rate | 10Base-T: 14881pps/Port 100Base-TX: 148810pps/Port 1000Base-T/X: 1488095pps/Port | |
| Switching Capacity | 40Gbps | |
| Dimensions (L*W*H) | 440*207*44 mm | |
| Fan | 2 | Fanless(Optional) |
| Power Input | AC: 100~240V, 50/60Hz | |
| PoE Port | Port1~16 | |
| PoE Power on RJ45 | Mode A 1/2(+),3/6(-) | |
| PoE Power Output | 32W(Max) | |
| PoE Power budget | 160W/250W | 160W(Fanless) |
| Temperature | Operating Temperature: 0°C ~ 40 °C (32 °F ~104°F) Storage Temperature: -40 °C ~ 70 °C (-40 °F ~158°F) | |
| Humidity | Operating Humidity: 10% ~ 90% non-condensing Storage Humidity: 5% ~ 90% non-condensing | |

包装清单

小心打开包装盒，包装盒内应有以下物件：

- PoE 交换机一台
- 用户手册一本
- 电源线 一根
- 安装附件（挂钩*2、脚垫*4、螺丝*8）

如果发现有物件损坏或者短缺的情况，请及时和当地经销商联系。

产品简介

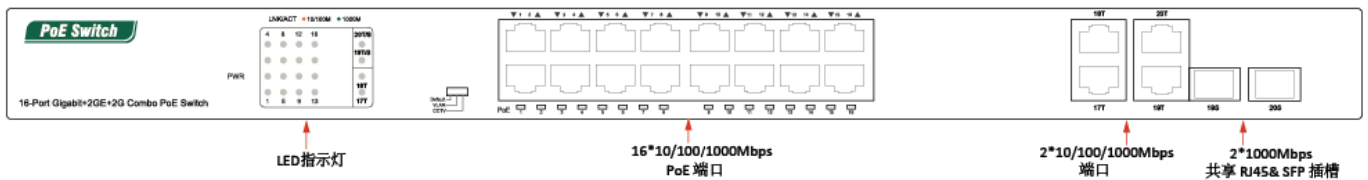
16GE(PoE)+2G Combo+2GE 提供 16 个 10/100/1000Mbps 自适应 RJ45 端口，2 个 10/100/1000Mbps RJ45 端口和 2 个共享 1000Mbps SFP 光纤插槽外加 2 个独立的 10/100/1000Mbps RJ45 端口。所有 RJ45 端口均支持线速转发与自动翻转功能，无需配置，即插即用。1~16 端口支持 PoE 功能，能自动检测符合 IEEE 802.3at/af 标准的 PD 设备，不需去担心会损坏非标 PoE 设备或普通设备，每个 PoE 端口提供最大 32W 的电力。

PoE 交换机是在传输数据信号的同时，还能对一些基于 IP 的终端（无线接入点 AP、VoIP 电话及基于 IP 的监控摄像机）提供直流供电。使用一根标准的 CAT5 网线，就能为无线 AP 和 IP 摄像机提供电力。以太网供电（PoE）优化了的受电端设备（PD）的安装和电源管理，为许多带 PoE 功能的网络设备缩减了安装的时间和成本。

外观描述

前面板

下列为 PoE 交换机前面板示意图：



LED 指示灯

| 指示灯 | 颜色 | 描述 |
|---------|----|--|
| PWR | 绿色 | 灭： 交换机未通电 常亮：交换机已通电 |
| LNK/ACT | 绿色 | 灭： 没有连接网络设备 常亮：连接到 1000Mbps 设备 闪烁：正在传输数据 |
| | 橙色 | 灭： 没有连接网络设备 常亮：连接到 10/100Mbps 设备 闪烁：正在传输数据 |
| PoE | 橙色 | 灭： PoE 端口没有供电 常亮：PoE 端口正在供电 闪烁：PoE 端口供电异常 |

波动开关

Default：出厂默认模式，此模式下相当于一台普通的千兆 PoE 交换机，端口 1~20 之间能正常通信。

VLAN：VLAN 隔离模式将交换机的端口 1~16 与端口 17-20 分别划分为一个单独的 VLAN。端口 1~16 只能与 17-20 进行通信。端口 1~16 之间不能之间通信，保障网络的安全。此模式下请将 17-20 接到中心交换设备。

CCTV：250 米超长距离传输，可解决网络监控工程中需要远距离传输的问题，可替代光纤和网络延长器，解决超远端取电难的问题，降低工程布线成本。

注:改变模式后，交换机需要手动重启使相应配置生效。

后面板

PoE 交换机的后面板示意图: 交流电源接口, 电源输入范围为 100-240V AC, 50/60HZ。防雷接地柱和风扇。



AC 电源接口

这是一个三相电源插座, 把电源线阴性插头接到这个接口上, 阳性插头接到交流电源上。

防雷接地柱

位于电源接口左侧, 请使用导线接地, 以防雷击。

安装设备

注意事项

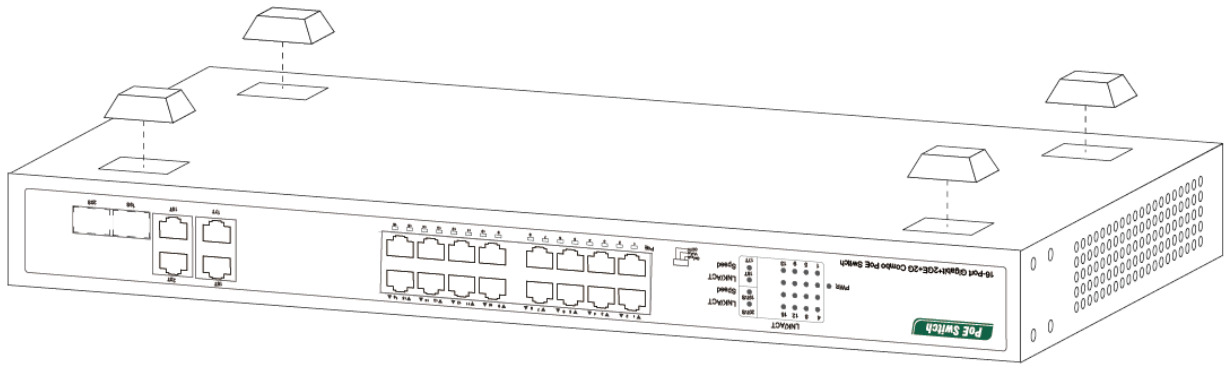
为避免使用不当造成设备损坏及对人身伤害, 请遵从以下的注意事项:

- 在清洁交换机前, 应先将交换机电源插头拔出。不要用湿润的布料擦拭交换机, 不可用液体清洗交换机;
- 请不要将交换机放在水边或潮湿的地方, 并防止水或湿气进入交换机机壳;
- 请不要将交换机放在不稳定的箱子或桌子上, 万一跌落, 会对交换机造成严重损害;
- 应保持室内通风良好并保持交换机通气孔畅通;
- 交换机要在正确的电压下才能正常工作, 请确认工作电压同交换机所标示的电压相符;
- 为减少受电击的危险, 在交换机工作时不要打开外壳, 即使在不带电的情况下, 也不要随意打开交换机机壳;

桌面安装

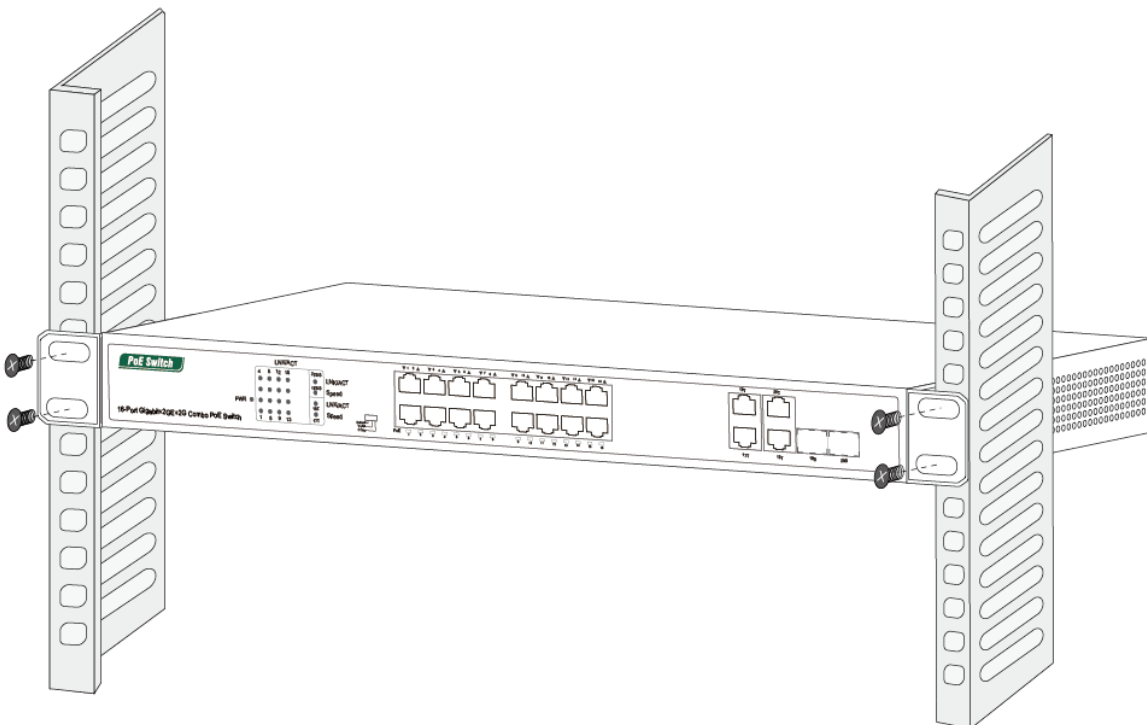
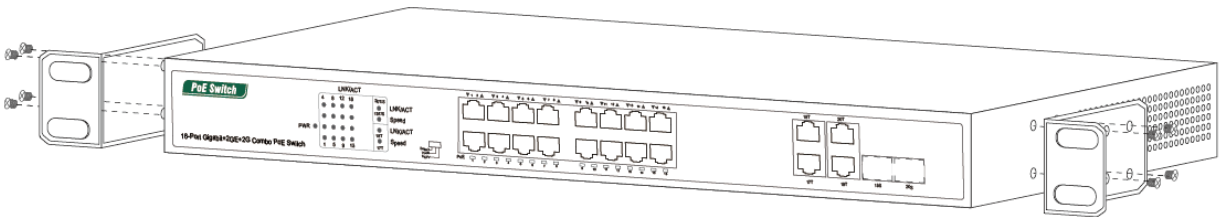
将交换机的底部朝上放置于足够大且稳定的桌面上;

撕掉随机附带的脚垫表面的粘贴纸, 将脚垫粘贴到交换机机壳底部的凹槽内以防外部振动; 小心将交换机正置, 放在工作台上。



机架式安装

检查 EIA-19inch 机柜的接地与稳定性，首先，用螺钉将安装挂耳固定在交换机前面板两侧将交换机放置在机柜的一个托架上，沿机柜导槽移动交换机至合适位置，然后，用螺钉将安装挂耳固定在机柜两端的固定导槽上，确保交换机稳定地安装在机柜槽位的托架上。设备的挂耳并不用来承重，它只起固定作用。安装设备于机柜时，设备机箱的下边要有托架（固定在机柜上）来支撑设备。



开启交换机

接上电源线，插上插头，接通电源。开机以后，交换机将自动进行初始化，所有的端口指示灯全亮后熄灭，表示系统复位成功。电源 LED 指示灯一直常亮。

注意：上电前请确认电压是否正确，否则将损坏设备。（电源输入范围 100-240V AC 50/60Hz）。

技术规格

| | | |
|------------|---|---------------|
| 产品型号 | 16GE(PoE)+2G Combo+2GE | |
| 标准 | IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE802.3x, IEEE802.3af, IEEE802.3at | |
| 网络介质 | 10BASE-T : Cat 3、4、5 非屏蔽类双绞线 (≤100m) 100BASE-TX : Cat 5 及以上非屏蔽类双绞线 (≤100m) 1000BASE-T : Cat 5e 及以上非屏蔽类双绞线 (≤100m) 1000BASE-X: MMF, SMF | |
| MAC 地址表 | 8K,自动学习, 自动更新 | |
| 传输模式 | 存储转发 | |
| 包转发速率 | 10Base-T: 14881pps/端口 100Base-TX: 148810pps/端口 1000Base-T/X: 1488095pps/端口 | |
| 背板带宽 | 40Gbps | |
| 尺寸 (L*W*H) | 440*207*44 mm | |
| 风扇 | 2 个 | 无风扇版本 (可选) |
| 电源输入 | AC: 100~240V, 50/60Hz | |
| PoE 端口 | Port1~16 | |
| PoE 供电线对 | Mode A 1/2(+),3/6(-) | |
| PoE 端口输出 | 32W(最大) | |
| PoE 总功率 | 160W/250W | 160W(无风扇版本可选) |
| 温度 | 工作温度: 0°C ~ 40 °C (32 °F ~104°F) 存储温度: -40 °C ~ 70 °C (-40 °F ~158°F) | |
| 湿度 | 工作湿度: 10% ~ 90% 无凝结 存储湿度: 5% ~ 90% 无凝结 | |