

# **User Guide**

## **用户手册**

**8FE ( PoE ) +2GE 远距离 PoE 交换机**

**8\*10/100Mbps+2GE long-range PoE Switch**

## Package Contents

Check the following contents of your package:

- PoE Switch x 1
- User Guide x1
- Power Cord x1
- Accessories(Feet\*4)

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

## Introduction

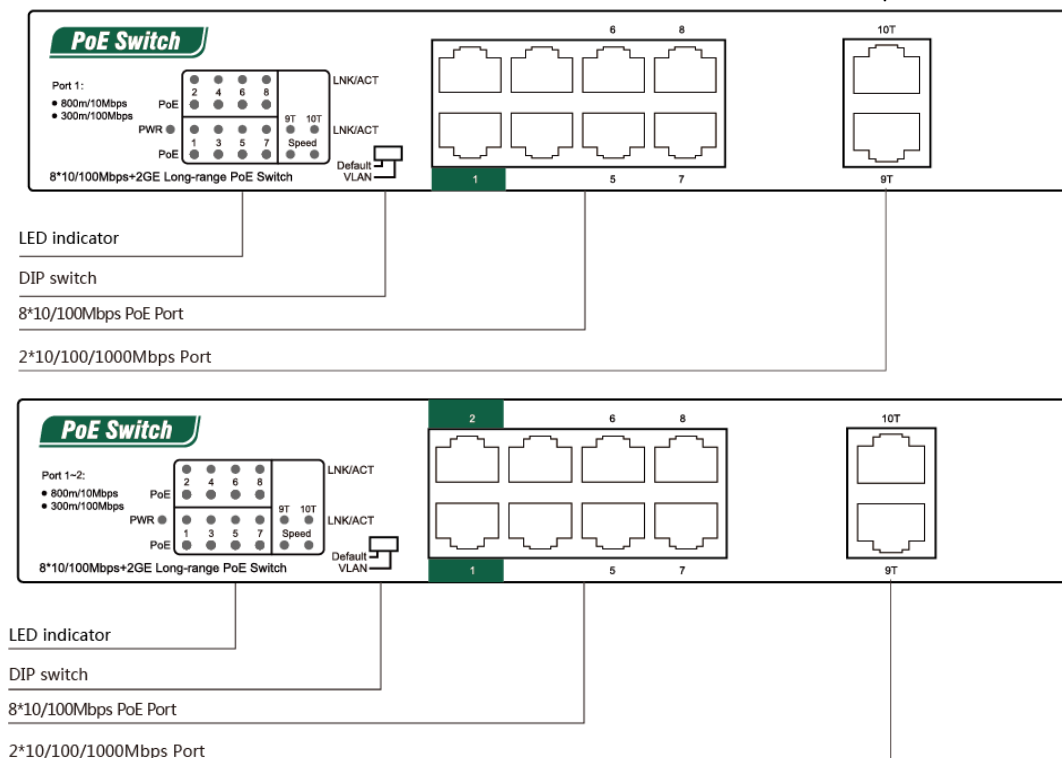
8\*10/100Mbps+2GE long-range PoE Switch provides the seamless network connection. The PoE ports (Port1~8) can automatically detect and supply power with those IEEE 802.3af/at compliant Powered Devices (PD). Among them port1-4 PoE ports support long-distance transmission of 800 meters(Used with long-range Equipment), 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.

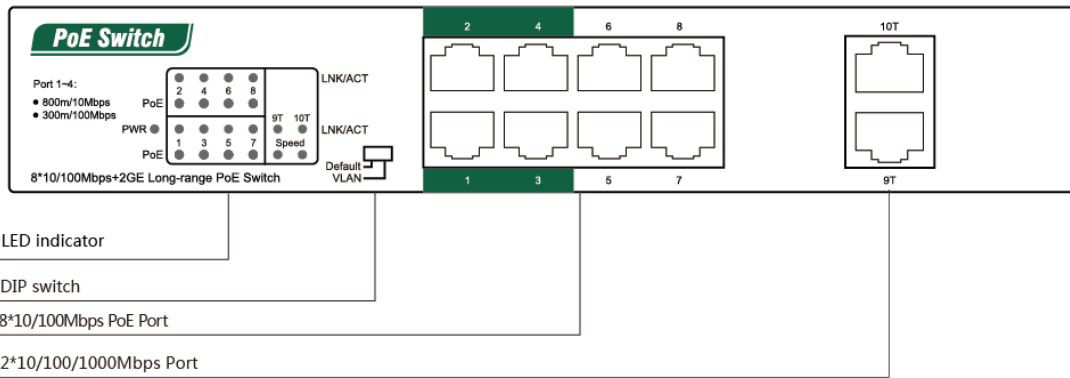
It is easy to install and don't need to configuration. With outstanding performance and quality, the 6-port 10/100Mbps desktop PoE switch is an ideal choice for expanding your home or office network.

## Hardware Description

### Front Panel

The Front Panel Consists of Ethernet Ports. The LED indicators are also located on the panel.





**Port1-4(can choose 1-4 port to support long-range):** 100Mbps mode supports max transmission distance up to 300-500m (According to different Long-range module) and 10Mbps mode supports max transmission distance up to 800m.

## DIP Switch

The DIP switch located on the left panel.

**Default:** the factory default mode, can normal communication between port 1~10.

**VLAN:** 1-8 port can be isolated each other but 1-8 port can connect to 9/10 port after open VLAN to stop broadcast Storm to increase forwarding rate of frame.

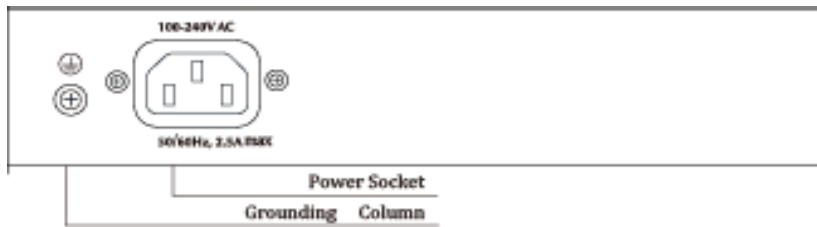
Note: After changing the mode, no manual restart is required to make the corresponding configuration take effect.

## 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 10/100Mbps. Blink: Indicates that the Switch is actively sending or Receiving data over that port.
Speed	Green	Off: No connection or 10/100Mbps Light: Indicates the link through established at 1000Mbps.
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.

## Rear Panel

The rear panel of the PoE Switch indicates an AC inlet power socket, which accepts input power from 100 to 240V AC, 50/60HZ.



## 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.

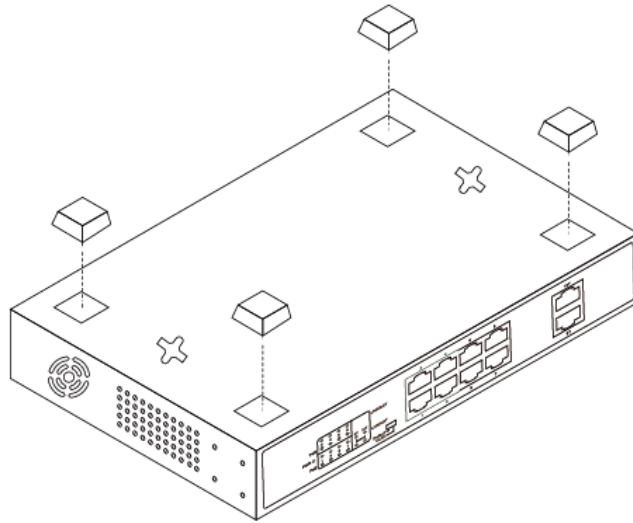
## Installation the Switch

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

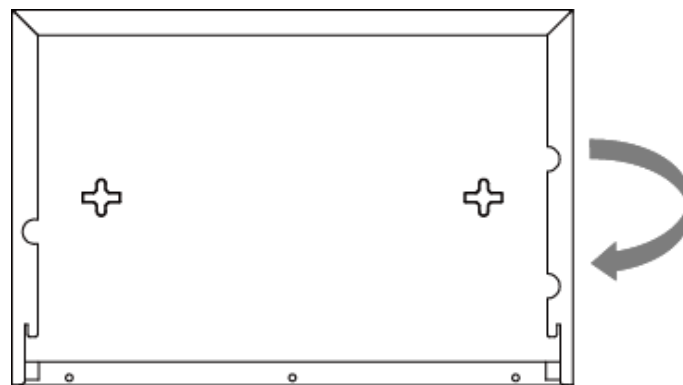
Install the Switch on a desktop, please attach these cushioning rubber feet provided on the bottom at each corner of the Switch in case of the external vibration. Allow adequate space for ventilation between the device and the objects around it.



### Wall-mounted installation

In the first two fixed screw on the wall as shown in the figure below

Aim at the two fixed hole switches, and the machine smoothly on the screw



### Turn on the switch

Please connect the AC power cord into the rear of the switch and to an electrical outlet (preferably one that is grounded ). When the switch is power on, the LED indicators flash momentarily for one second, which represents a resetting of the system.The Power LED indicator turns on green.

Note: Please confirm the voltage is correct before power on, otherwise the switch will be damaged.

(The power input is:100V-240Vac, 50/60Hz.)

## Specifications

Model	8FE (PoE) +2GE	
Standard	IEEE802.3, IEEE802.3u ,IEEE802.3az, IEEE802.3ab , IEEE802.3x, IEEE802.3af, IEEE802.3at	
Network Media	10BASE-T: UTP category 3,4,5 cable (≤100m) 100BASE-TX: UTP category 5 cable (≤100m) 100BASE-TX: UTP category 5 cable (≤100m)	
MAC Address Table	16K, 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	5.6Gbps	
Dimensions (L*W*H)	220 *150*44mm	
Fan	1*Fan	Fanless (Optional)
Power Input	AC: 100~240V, 50/60Hz	
PoE Port	Port1~8( port1-4 support 800 meters of long-distance transmission) Used with long-range Equipment	
PoE Power on RJ45	Mode A 1/2(+),3/6(-)	
PoE Power Output	Voltage: 55V DC Power: 32W(Max)	
PoE Power Budget	120W	
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	

## With long-range Equipment Test data :

Cable Length (m)	Negotiating speed (Mbps)	PoE Max Load Capacity (W)(PD)	Hi-PoE Max Load Capacity (W)(PD)
50	100Mbps	30	45
100	100Mbps	29	43
150	100Mbps	28	41
200	100Mbps	28	40
250	100Mbps	27	38
300	100Mbps	26	35
350	100Mbps	25	33
400	100Mbps	24	31
450	100Mbps	23	29
500	100Mbps	23	28
550	10Mbps	22	25
600	10Mbps	21	23
650	10Mbps	20	21
700	10Mbps	19	20
750	10Mbps	19	19
800	10Mbps	17	17

UnipoE Power Supply Voltage is 56V.  
Adopt PM104MM V1.0 version of the Module.  
The cable is CAT.5e,100m DC impedance is no more than 10.5 Ω .

# 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（脚垫\*4）

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

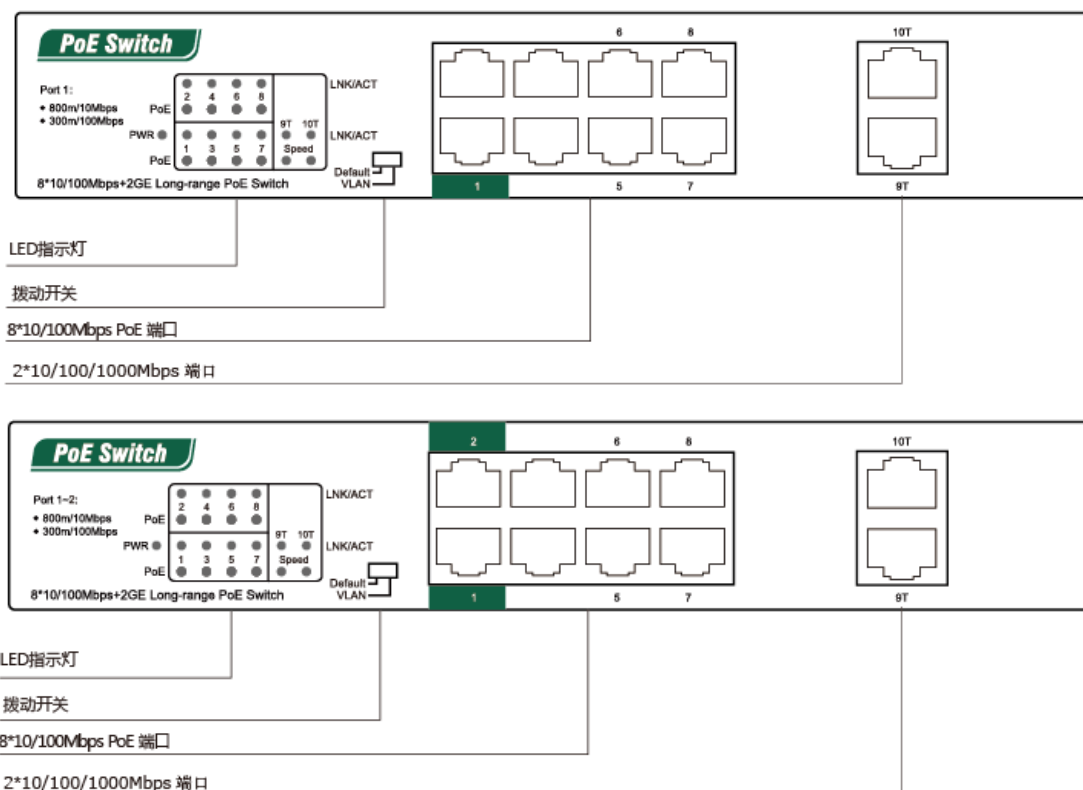
8FE ( PoE ) +2GE 远距离 PoE 交换机提供 8 个 10/100Mbps 自适应 RJ45 端口，2 个 10/100/1000Mbps 上联端口，所有 RJ45 端口均支持线速转发与自动翻转功能，无需配置，即插即用。可 1~8 端口支持 PoE 功能，其中 1-4 PoE 端口支持 800 米远距离传输(搭配远距离设备使用)，PoE 端口能自动检测符合 IEEE 802.3at/af 标准的 PD 设备，不需去担心会损坏非标 POE 设备或普通设备，每个 PoE 端口提供最大 32W 的电力。

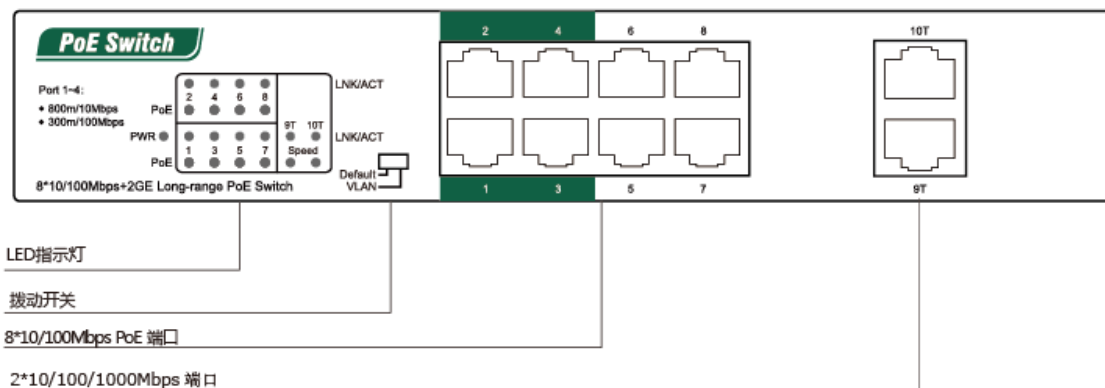
POE 交换机是在传输数据信号的同时，还能对一些基于 IP 的终端（无线接入点 AP、VoIP 电话及基于 IP 的监控摄像机）提供直流供电。使用一根标准的 CAT5 网线，就能为无线 AP 和 IP 摄像机提供电力。以太网供电 ( PoE ) 优化了的受电端设备 ( PD ) 的安装和电源管理，为许多带 PoE 功能的网络设备缩减了安装的时间和成本。

# 外观描述

## 前面板

下列 PoE 交换机前面板示意图：





**Port1-4(1-4 端口可选择支持远距离):** 满足 100Mbps 模式支持最大传输距离高达 300-500 米( 根据搭配不同的远距离模块决定 ) 和 10Mbps 模式均支持最大传输距离高达 800 米。

### 拨动开关

Default : 出厂默认模式, 此模式下相当于一台普通的百兆PoE 交换机, 端口 1~10 之间能正常通信。

VLAN : VLAN 隔离模式将交换机的端口 1~8 与端口 9/10 分别划分为一个单独的VLAN。端口 1~8 只能与9和10进行通信。端口 1~8 之间不能之间通信, 保障网络的安全。此模式下请将 9/10 接到中心交换设备。

注意 : 更改设置后, 不需手动重启 PoE 交换机以使相应配置生效。

### LED 指示灯

指示灯	颜色	描述
PRW	绿色	灭 : 没有连接设备 亮 : 设备正常连接
LNK/ACT	绿色	灭 : 没有连接 常亮 : 连接到10/100Mbps设备 闪烁 : 正在传输数据
Speed	绿色	灭 : 没有连接或 10/100Mbps 常亮 : 连接到1000Mbps设备
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

### 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：

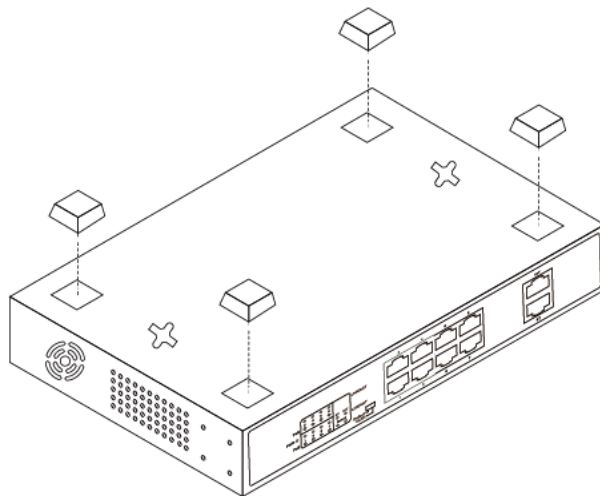
- 在清洁交换机前，应先将交换机电源插头拔出。不要用湿润的布料擦拭交换机，不可用液体清洗交换机；
- 请不要将交换机放在水边或潮湿的地方，并防止水或湿气进入交换机机壳；
- 请不要将交换机放在不稳定的箱子或桌子上，万一跌落，会对交换机造成严重损害；
- 应保持室内通风良好并保持交换机通气孔畅通；
- 交换机要在正确的电压下才能正常工作，请确认工作电压同交换机所标示的电压相符；
- 为减少受电击的危险，在交换机工作时不要打开外壳，即使在不带电的情况下，也不要随意打开交换机机壳。

## 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；

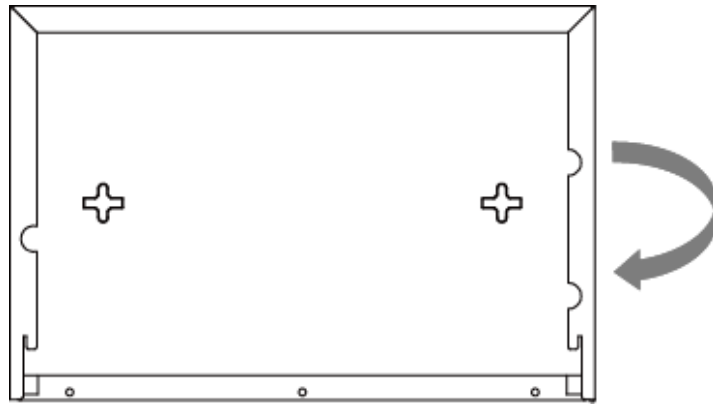
小心将交换机正置，放在工作台上。



## 壁挂式安装

请按照以下步骤安装 PoE 交换机：

在墙壁上先固定两颗螺钉 如下图所示对准交换机的两个固定孔，把机器平稳的挂在螺钉上。



## 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

产品名	8FE ( PoE ) +2GE
标准 标准	IEEE802.3, IEEE802.3u ,IEEE802.3az, IEEE802.3ab , 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)
MAC 地址表	16K, 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	5.6Gbps
尺寸 (长*宽*高)	220*150*44mm
风扇	无
电源输入	AC: 100-240V , 50/60Hz
PoE 端口	Port1 ~ 8(其中 1-4 端口支持 800 米远距离传输)搭配远距离设备使用
PoE 供电线对	Mode A 1/2 ( + ) , 3/6 ( - )
PoE 端口输出	电压 : 55V DC 功率 : 32W ( 最大 )
PoE 总功率	120W
工作温度	0°C ~ 40 °C
存储温度	-40 °C ~ 70 °C
工作湿度	10% ~ 90% 无凝结
存储湿度	5% ~ 90% 无凝结

**搭配远距离设备的测试数据如下：**

线长度(m)	速率 (Mbps)	PD 端 PoE 满载 (W)	PD 端 PoE 满载 (W) ( 远距离口 )
50	100Mbps	30	45
100	100Mbps	29	43
150	100Mbps	28	41
200	100Mbps	28	40
250	100Mbps	27	38
300	100Mbps	26	35
350	100Mbps	25	33
400	100Mbps	24	31
450	100Mbps	23	29
500	100Mbps	23	28
550	10Mbps	22	25
600	10Mbps	21	23
650	10Mbps	20	21
700	10Mbps	19	20
750	10Mbps	19	19
800	10Mbps	17	17

电源电压为 56V.  
搭配的远距离模块是 PM104MM V1.  
100 米超 5 类直流阻抗不超过 10.5 欧姆.