User Guide

用 户 手 册

7GE(PoE)+1GE 以太网 PoE 交换机

7GE(PoE)+1GE（PD） Uplink PoE Switch

Package Contents

Check the following contents of your package:

- PoE Switch （Tape terminal） x 1
- User's Guide x 1

The built-in precision device, please pay attention gently to avoid severe vibration, so as not to affect the performance of the equipment. If any part is lost and damaged, please contact your local agent immediately, we will give you a proper solution as soon as possible.
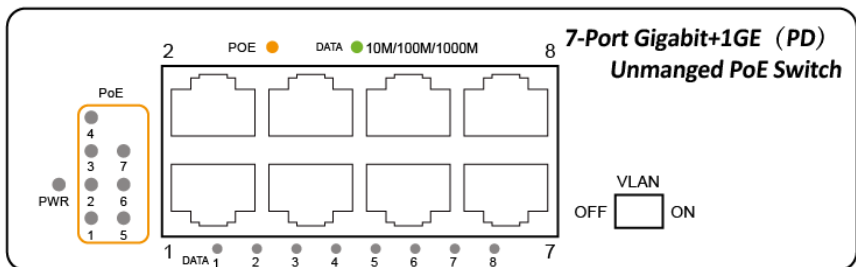
1. Introduction

Thank you for choosing this PoE Switch. It has 8-Port 10/100/1000Mbps Auto-Negotiation RJ45 Port. Among them, port1~7 is PSE port, each port support 32W (max) output. Port8 is PD port, support 95W input. This Power supply support external power supply and PoE power supply.

7GE(PoE)+1GE（PD）Uplink PoE Switch is easy to install and don't need to configuration. With outstanding performance and quality, the 8-port 10/100/1000Mbps desktop PoE switch is an ideal choice for expanding your home or office network.

2. Hardware Description

2.1 Front Panel

The Front Panel of the PoE Ethernet Switch Consists of 8-Port Ethernet Ports. The LED indicators are also located on the panel.

LED indicator

LED	Color	Function
PWR	Green	Off: No Power supply. Light: Indicates the switch has power.
10/100M/1000M	Green	Off: No device is connected to the corresponding port. Light: Indicates the link through that port is successfully established at 10/100/1000Mbps. 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 or off: Indicates port abnormal power supply.

VLAN:

OFF: the factory default mode, can each other communication between port 1~8

ON :1-7 port isolated each other ,1-7 port can connect to 8 port after open VLAN to stop broadcast storm to increase forwarding rate of frame.

2.2. Side Panel

The Side panel have an connection terminal and accepts input DC power，standard double redundant power backup 5 pinhole terminals.
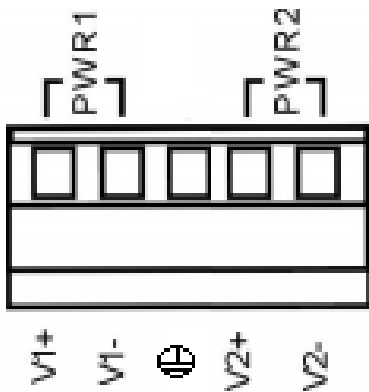
Figure:

2.3.Power input

The Side panel provides 5 power input terminal, the DC 48-57V , where in the terminal labeled V1-, V1+, V2-, V2+; 2 DC power input, V- V, the input voltage is 48-57V DC, the switch power supply DC input with redundant functions, and provide PWR1、PWR2 two power input，can be used alone, can also be connected to two independent DC power supply system, the use of a pair of terminal at the same time into the device. a power system failure, equipment can uninterrupted normal operation, and improves the network's reliability.

Figure:

3. 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.

3.1 Notice the matters

- 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.

3.2. Installation environment

- Before the installation, should first confirm that there is a suitable working environment.
- Installation requirements
- Avoid direct sunlight, away from the heat source or strong electromagnetic interference
- Check cable and connector according to reasonable configuration requirements, the cable (<100m)
- The product does not provide installation component: screws, nuts and other installation tools
- Power requirements: DC power supply 48-57V
- Working temperature of -20°C ~ 70 °C；relative humidity is 5% ~ 95%

3.3. Installation

This section describes how to install the Gigabit PoE switch and make connections to it ,please read the following topics and perform the procedures in the order being presented

3.3.1 DIN-rail mounting

Adopt the 45mm standard DIN card rail type installation, Check whether the DIN-rail rail mounting tool accessories (this product has supplied installation fittings) check whether the DIN rail is firm .

Figure:

The DIN card into the DIN rail rail connector, check and confirm the product reliable installation to DIN rail

3.4.Turn on the switch

Note:

- Power on operation: power supply terminal of the power line into the power supply interface device, plug the power plug, the switch will automatically be initialized at this time in addition, system reset successfully.

- power off operation: first unplug the power plug, and then remove the terminal wiring section, please note that the above order of operation.

Specifications

Model	7GE（PoE）+1GE（PD）
Standard	IEEE802.3, IEEE802.3u,IEEE802.3ab, IEEE802.3az, 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,6 cable (≤100m)
MAC Address Table	4K, Auto-learning, Auto-aging
Transfer mode	Store-and-Forward
Frame Forward Rate	10Base-T: 14881pps/Port 100Base-TX: 148810pps/Port 1000Base-T: 1488095pps/Port
Switching Capacity	16G
Dimensions (L*W*H)	138*108*50mm
Fan	Fanless
Power supply	DC power or PoE
PSE Port	Port1~7
PSE Power on RJ45	Mode A 1/2(+),3/6(-)
PSE each port Power Output	Voltage: 55V DC Power: 32W(Max)
PSE Power total Budget	120W
PD Port	Port8
PD Power on RJ45	Mode A: 1/2(+),3/6(-) or Mode B: 4/5(+),7/8(-)
PD Port input	95W
Temperature	Operating Temperature: -20°C ~ 70 °C (-4 °F ~158°F) Storage Temperature: -40 °C ~ 75 °C (-40 °F ~167°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（带接线端子）........... 一台
> 用户手册 .... 一本

设备内置精密器件，请注意轻拿轻放，避免剧烈振动，以免影响设备性能。如果您发现设备在运输过程中被损坏或丢失了任何部件，请通知本公司或本公司的经销商，我们会尽快给您妥善解决。
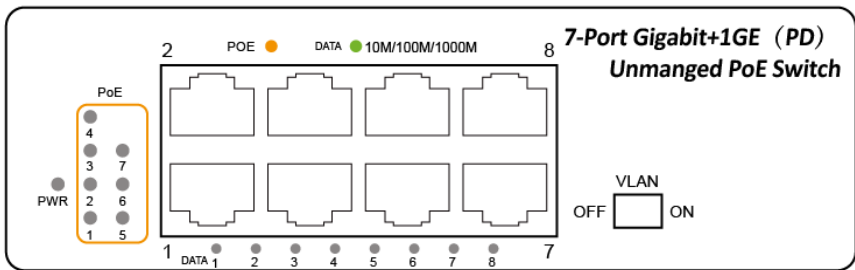
一、产品简介

感谢您购买此交换机。7GE(PoE)+1GE(PD)提供 8 个 10/100/1000Mbps 自适应 RJ45 端口， 其 1-7 端口具有供电功能，每个端口最大支持 32W 输出，端口 8 具有受电功能，支持 PoE 95W 输入。此交换机支持外置电源和 PoE 两种供电方式。
7GE(PoE)+1GE(PD) PoE 交换机使用简单方便，无需配置，即插即用，可灵活扩展家庭、办公室网络而不受电力线布局限制。

二、外观描述

2.1 前面板

下列为 7GE(PoE)+1GE（PD） 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
10/100/1000Mbps	绿色	灭：　没有连接网络设备 常亮：连接到10/100/1000Mbps设备 闪烁：与相连的设备有数据传输
PoE	橙色	灭：　端口未给对端设备供电 常亮：有受电设备与之连通，并正常供电 闪烁或灭：端口供电异常

VLAN

OFF：此模式关闭情况下相当于一台普通的交换机，端口1~8之间能相互正常通信。

ON ：打开VLAN隔离模式，交换机的端口1~7与端口8分别划分为一个单独的VLAN。端口1~7只

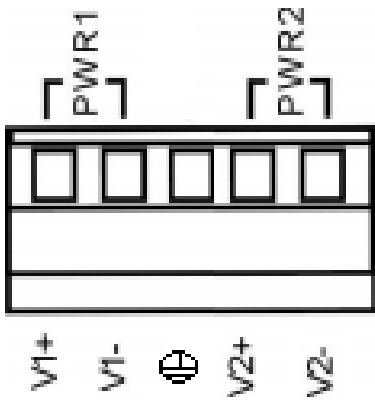能与端口8进行通信。端口1~7之间不能相互通信，保障网络的安全。此模式下请将端口8接到

中心交换设备。

2.2. 侧面板

侧面板示意图：DC 电源插孔，标配双冗余电源备份 5 针孔接线端子。

2.3 电源输入

交换机上面板提供 5 位接线端子，电源输入 DC： 标准电压 48V~57V，其中端子标示 V1-、V1+、V2-、V2+为 2 路直流电源输入，2 路 V-、V+输入 电压均为 48V~57V，交换机电源直流输入具有冗余功能，提供 PWR1 和 PWR2 两路电源输入可以单个使用，也可以外接两套独立的直流电源供电系统，使用一对端子同时引入设备，在任何一套电源系统出现故障时，设备可以不间断正常运行，提高了网络运行的可靠性。如下图：

三. 安装

3.1 安装设备

3.1.1 注意事项

为避免使用不当造成设备损坏及对人身的伤害，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。

3.2 安装环境

- 安装之前，要首先确认有合适的工作环境，包括电源要求、 充分的空间、是否接近其它要连接的设备及其它设备是否到位。请确认如下安装要求：
- 避免阳光直射，远离发热源或有强烈电磁干扰区域
- 检查是否有安装所需的电缆和接头 根据合理配置要求，检查线缆是否到位（不大于 100m）
- 产品不提供安装组件，用户需准备所选安装类型的组件：螺丝、螺母和工具等，确保可靠安装
- 电源要求：直流电源供电标准电压 48-57V
- 环境要求：工作温度为-20°C～70 °C 相对湿度为 5%～95%

3.3 安装方式

3.3.1 DIN 导轨式安装

采用 45mm 标准 DIN 卡轨式安装，在大多数工业应用上非常方便

其安装步骤如下： 检查是否具备 DIN-rail 导轨安装工具配件（本产品已提 供安装配件） 检查 DIN 导轨是否固定结实，是否有安装本产品的合适位置。

将产品配件的 DIN 卡轨连接座下部卡入 DIN 轨内（下部带弹簧支撑），然后将连接座的上部卡入 DIN 卡轨 （下部卡入少许，稍微用力保持设备平衡卡入上部）。

将 DIN 轨卡入 DIN 轨连接座后，检查并确认产品可靠地安装到 DIN 导轨上

3.4 通电

▲重要提示： 1、上电操作：先将电源线的电源端子插入到设备的电源接口， 再插上电源插头上电 ，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。

2、断电操作：先拔掉电源插头，再拆下端子接线部分，请注意 以上操作顺序。

技术规格

产品名	7GE（PoE）+1GE（PD）
标准	IEEE802.3, IEEE802.3u,IEEE802.3ab, IEEE802.3az, IEEE802.3x, IEEE802.3af, IEEE802.3at
网络介质（线缆）	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	4K，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：1488095pps/端口
背板带宽	16G
尺寸（长 x 宽 x 高）	138*108*50mm
风扇	无风扇
供电方式	55VDC 电源或者 PoE 供电
供电端口	Port1～7
PoE 供电线对	Mode A　1/2（+），3/6（-）
PoE 端口单口输出	电压：55V DC　功率：32W（Max）
PoE 总输出功率	120W
受电端口	Port8
受电线对	Mode A　1/2（+），3/6（-）或 Mode B　4/5（+），7/8（-）
受电端口输入	95W
工作温度	-20°C ~ 70 °C (-4 °F ~158°F)
存储温度	-40 °C ~ 75 °C (-40 °F ~167°F)
工作湿度	10% ~ 90% 无凝结
存储湿度	5% ~ 90% 无凝结