User Guide

用 户 手 册

千兆防水中跨

Gigabit waterproof PoE Injector

Package Contents

Check the following contents of your package:

- PoE Injector x 1
- User Guide x 1
- Power Cord x 1
- Accessories （water joint）

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

Introduction

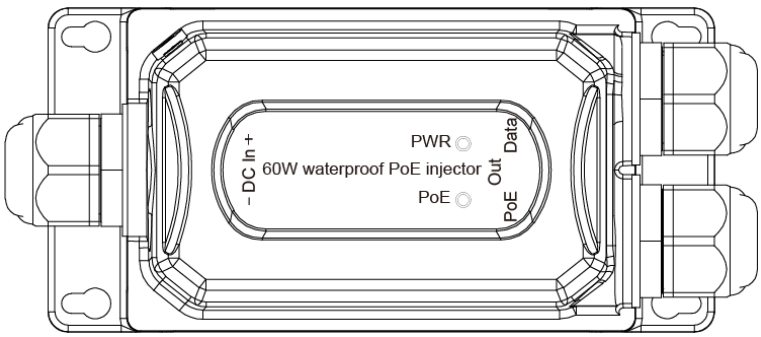
This Product is a Gigabit IP67 waterproof PoE Injector independently developed by our company. Provides fully complies with IEEE 802.3af/at/bt standard, and can work with all IEEE 802.3af /at/bt PoE compliant PDs (Powered Devices) or PoE Receiver Adapters or other equivalent product, to expand your network to where there are no power line or outlet,without configuration, plug and play.

Professional room shell design, adapted to various harsh environments, with high stability, reliability, industrial level, wide temperature. The whole machine does not need power adapter, so it is convenient for harsh outdoor environment .reliable and convenient power for outdoor work AP, cameras etc.

Hardware Description

Front Panel

The front panel composed by PSE output ports with data link port, DC Input port, the relevant indicator, as shown below:



LED indicator

LED	Color	Function
PWR	Green	Off: No Power supply. Light: Indicates the machine has power.
PoE	Green	Off: No PoE powered device (PD) connected or abnormal. Light: There is a PoE PD connected to be port, which Supply power successfully.
	orange	Off: No PoE powered device (PD) connected or abnormal. Light: There is a PoE PD connected to be port, which Supply power successfully.

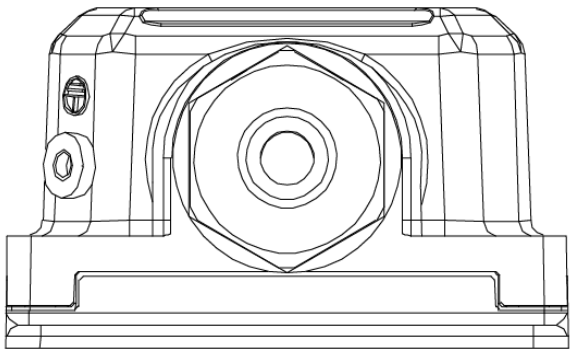
Note: There are two options for POE mode: BT and UPoE, different PoE modes are selected by the pin arrangement jumper on PCBA. Different modes result in different colors of LED lights.

Grounding column

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

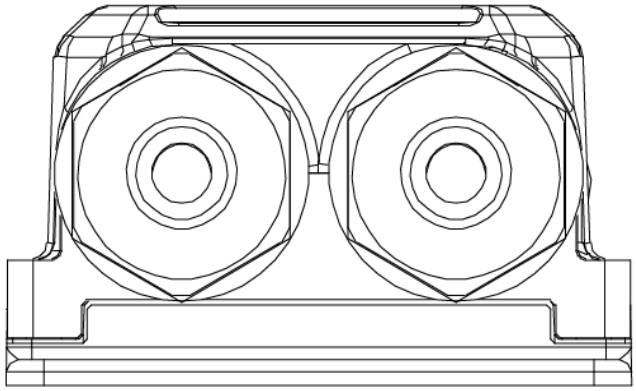
Left Panel

Schematic diagram of left panel: input port (DC In) and grounding column, Standard network Cate5 cable (line diameter 5.5mm).



Right Panel

Schematic diagram of right panel: the output port (PoE out、Data) requires the use of standard network cate5 cable (Line diameter 5.5mm).



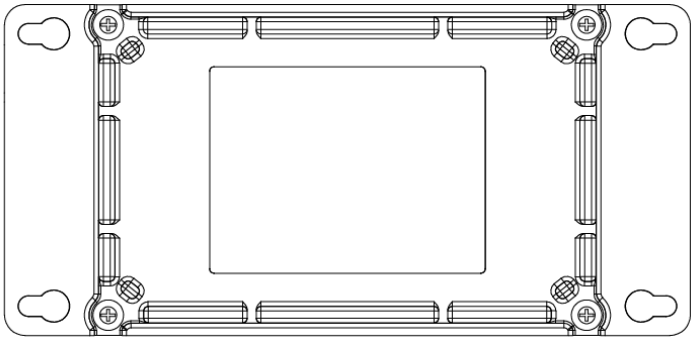
Installation

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

- The nuts of the waterproof joint should be tightened in full fit with the joint's thread and fit to the hexagon plane, otherwise it is easy to get water and damage the machine;
- Do not place the machine on an unstable case or desk. The machine might be damaged severely in case of a fall;
- Make sure that the operating voltage is the same one labeled on the machine;
- Do not open the chassis while the machine is operating or when electrical hazards are present to avoid electrical shocks.

Desktop Installation

Install the machine on a desktop, place the machine carefully on the counter, the bottom is as follows:

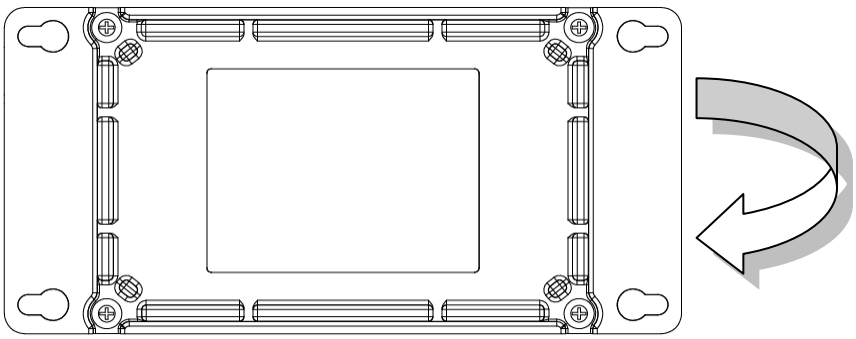


Wall-mounted installation

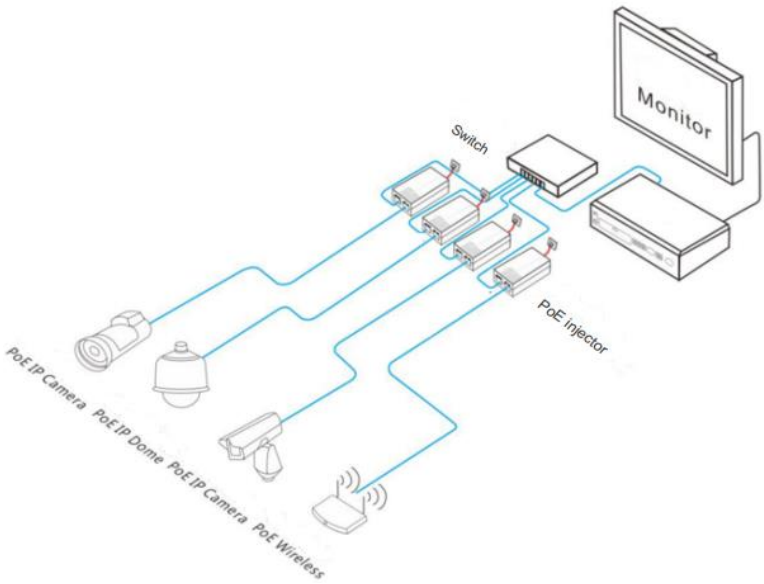
Please follow these steps to install the machine:

First fix the four screws on the wall (screw cap diameter recommended 5.5-6.5mm) and turn the machine upside down.

Align the four fixing holes of the machine as shown below and hang the machine smoothly on the screws.



Application diagram of PoE injector：



Power on

The machine can be used with AC power supply. Powering on the machine, it will automatically initialize and its LED indicators will respond as follows:

Firstly, the Power LED indicator will light up.

Then, the data LED indicators will flash momentarily for one second, which represents a resetting of the system.

Specifications

Model	60W waterproof PoE injector	
Port	out port : 2*10/100/1000Mbps RJ45 port（PoE、Data） 1*DC In port	
Standard	IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3af, IEEE802.3at, IEEE802.3bt	
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)	
Dimensions (L*W*H)	150*73*44MM	
Input Voltage	DC 24-57V	
PoE port output	48-55V DC Max.60W	
PSE Power on RJ-45	Data Pairs 1/2(-),3/6(+) Spare Pairs 4/5(+),7/8(-)	
Operating Temperature	-40℃~75℃	-20℃~60℃(Optional)
Storage Temperature	-40 °C ~ 80 °C	
Operating Humidity	10% ~ 90% non-condensing	
Storage Humidity	5% ~ 90% non-condensing	
waterproofing grade	IP67	
anti-hazard classification	IK10	

包装清单

小心打开包装盒，包装盒内应有以下物件：

千兆防水供电器. . . . . 一台

用户手册. . . . . .一本

防水接头. . . . . 3 个

DC 线材. . . . . .1 条

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。

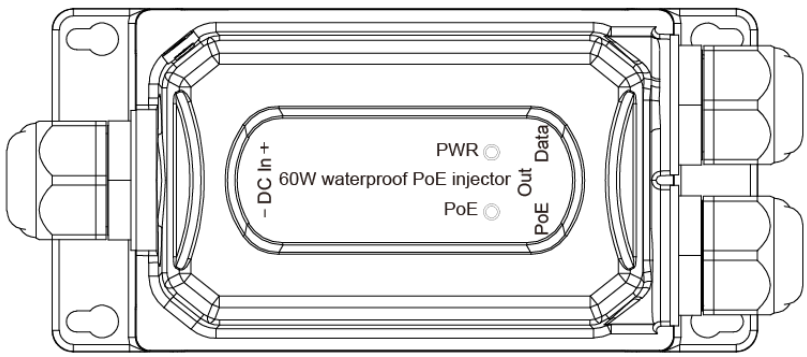
产品简介

此产品是我司自主研发千兆防水供电设备，完全符合 IEEE 802.3af/at/bt 标准，可将电能加载在网线上进行传输，最大传输距离为 100m。自动检测识别符合 IEEE 802.3af/at/bt 标准的受电设备，并自动匹配输出功率为其供电。对于不支持 PoE 功能的终端设备，可以通过 PoE 分离器配套使用，可拓展传统电力线网络，减少电力线使用。

外观描述

正面

正面由 PSE 输出端口跟电源输入端口及相关的指示灯组成，如下图所示：



LED 指示灯

指示灯	颜色	描述
PWR	绿色	灭：机器未通电。 常亮: 机器已通电。
PoE	bt 模式亮：绿色	灭： PoE端口没有供电或异常 常亮：PoE端口正在供电
	UPoE 模式亮 :橙色	灭： PoE端口没有供电或异常 常亮：PoE端口正在供电

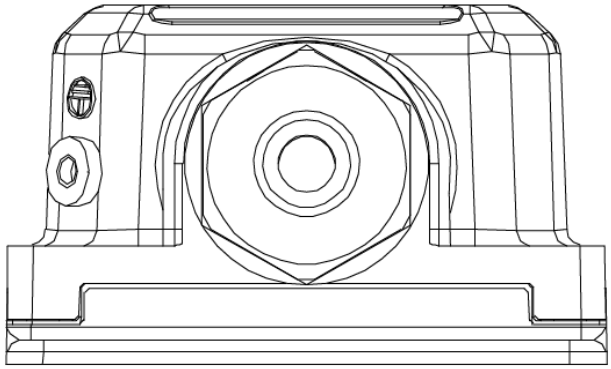
注： PoE 模式有 Bt 跟 UPoE 两种可选，由 PCBA 上的排针跳线来选择不同的 PoE 模式，模式不同，LED 灯显示的颜色不同.

防雷接地柱

位于左面板左侧，请使用导线接地，以防雷击。

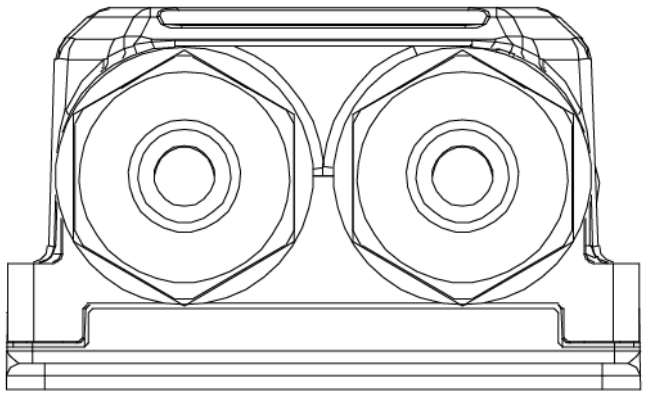
左侧面

左面板示意图: 输入端口（DC In）及防雷接地柱。



右面

右面板示意图: 输出端口（PoE、Data out）



安装设备

注意事项

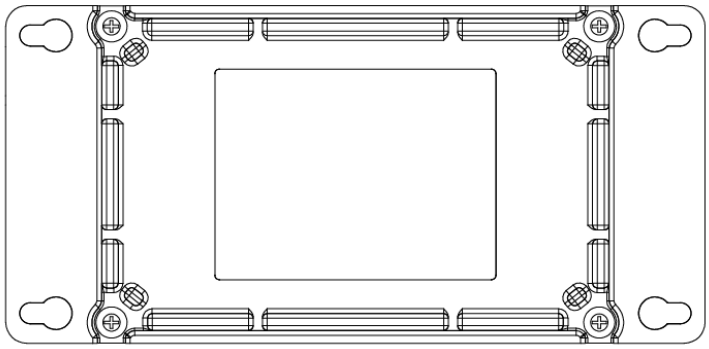
为避免使用不当造成设备损坏及对人身的伤害，请遵从以下的注意事项：

- 在清洁机器前，应先将机器电源插头拔出。不要用湿润的布料擦拭机器，不可用液体清洗机器；
- 请不要将机器放在水边或潮湿的地方，并防止水或湿气进入机壳；
- 请不要将机器放在不稳定的箱子或桌子上，万一跌落，会对机器造成严重损害；
- 应保持室内通风良好并保持机器通气孔畅通；
- 机器要在正确的电压下才能正常工作，请确认工作电压同机器所标示的电压相符；
- 为减少受电击的危险，在机器工作时不要打开外壳，即使在不带电的情况下，也不要随意打开机壳。

- 防水接头螺帽需跟接头螺纹完全配合拧紧，贴合六角平面，否则易导致进水，损坏机器；
- 请不要将机器放在不稳定的箱子或桌子上，万一跌落，会对机器造成严重损害；
- 机器要在正确的电压下才能正常工作，请确认工作电压同机器所标示的电压相符；
- 为减少受电击的危险，在机器工作时不要打开外壳，即使在不带电的情况下，也不要随意打开机壳；

桌面安装

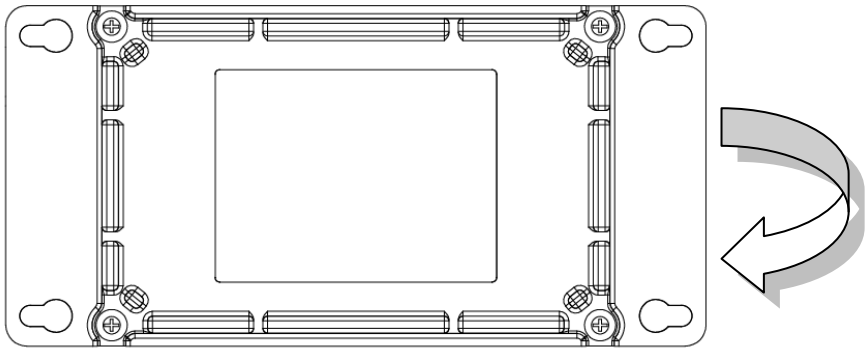
小心将机器正置，放在工作台上。底部如下：



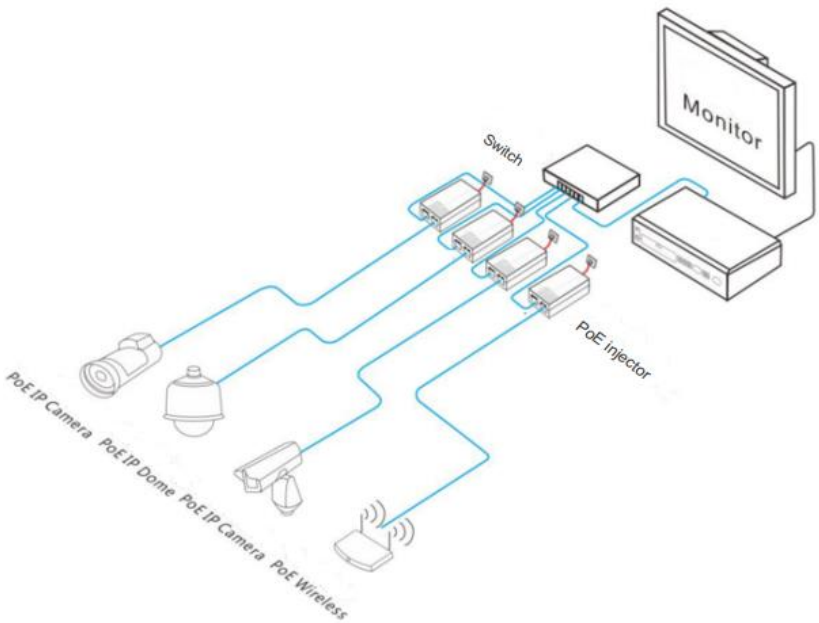
壁挂式安装

请按照以下步骤安装机器：

在墙壁上先固定四颗螺钉（螺丝帽直径建议 5.5-6.5MM） 把机器反过来，如下图所示对准机器的四个固定孔，把机器平稳的挂在螺钉上



应用拓扑示意图：



技术规格

产品名	60W 千兆防水中跨	
端口	Out 口：2x10/100/1000Mbps 自协商 RJ45 端口（PoE、Data） DC In 电源端口	
标准	IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3af, IEEE802.3at, IEEE802.3x，IEEE802.3bt	
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 5 及以上非屏蔽类双绞线(≤100m)	
尺寸(长*宽*高)	150*73*44MM	
输入电压	DC 24-57V	
PoE 端口输出	每个 PoE 端口输出 48-55V DC　Max.60W	
PoE 供电线对	四对线供电： 数据线对 1/2 (-)和 3/6 (+)　闲线对 4/5 (+)和 7/8 (–)	
工作温度	-20°C ~ 60 °C	-40℃~75℃
存储温度	-40 °C ~ 80 °C	
工作湿度	10% ~ 90% 无凝结	
存储湿度	5% ~ 90% 无凝结	
防水等级	IP67	
防爆等级	IK10	