



SPECIFICATION FOR APPROVAL

CUSTOMER : _____

PRODUCT NAME : 60W High-power Gigabit DIN Rail PoE Injector

PRODUCT MODEL : PSE60G

BRAND : TST (OEM/ODM)

DATE : 2024 / 06 / 26

DRAWING			CUSTOMER APPROVE
DESIGNED	CHECKED	APPROVED	
VANNE	YOUTRONG	Mark	
DATE	2024 / 06 / 26		Please return the visa after confirmation, thank you!

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MODEL: PSE60G



What Is PoE

POE (Power Over Ethernet) refers to the technology that can transmit data signals for some IP-based terminals (such as IP phones, wireless LAN access point APs, IP cameras, etc.) without any changes to the existing Ethernet Cat.5 cabling infrastructure, and can also provide DC power supply for such devices.

A complete POE system consists of two parts: Power Sourcing Equipment (PSE) and Powered Device (PD). The PSE device is the device that powers the Ethernet client device and is also the manager of the entire POE (Power-over-Ethernet) process. The PD device is the PSE load that receives the power supply, that is, the client device of the POE system. Based on the IEEE 802.3af/at standard, the two establish information about the connection status, device type, power consumption level and other aspects of the PD of the power receiving device, and use this as the basis for PSE to supply power to the PD through Ethernet.

The Principle of POE



The standard Category 5 cable has four twisted pairs, but only two pairs are used in 10M BASE-T and 100M BASE-T. IEEE802.3af/at allows two uses: (1) When the idle pin is used for power supply, pins 4 and 5 are connected as the positive pole, and pins 7 and 8 are connected as the negative pole. (2) Pins 1 and 2 are connected as the positive pole, and pins 3 and 6 are connected as the negative pole.

The Advantages of POE

1. Save labor and material costs. Compared with the traditional wiring method of weak current engineering, POE only needs to install a network cable to make the IP equipment work normally. In many cases, POE is more advantageous in the places where it is difficult to deploy AC power. As the number of network devices in the system increases, the use of POE eliminates the need for local power supply for the equipment, which will greatly reduce deployment costs and simplify their manageability.
2. Easy to install and manage. Customers can autonomously and securely mix PoE devices and legacy devices within the system, and can coexist with existing Ethernet cables. PoE devices are compatible with the management system of existing network devices and can share the management platform with existing network devices.
3. Good security. The Power Sourcing Equipment (PSE) in a PoE system will only supply power to the Powered Device (PD) that needs to be powered. Only when the Device that needs to be powered is connected and the protocol is successfully identified, the power supply equipment will have a voltage output and supply power to the powered device, thus eliminating the risk of leakage and short circuit on the line.

Product Introduction

PSE60G is a 60W high-power Gigabit DIN rail POE Injector, which conforms to the IEEE802.3BT protocol and is compatible with the IEEE802.3AF/AT protocol, and the maximum output power can reach 60W.

The PSE60G is a high-power active single-port POE injector with handshake recognition function. Only after the PD device is connected and the handshake is successfully recognized, the PSE60G will supply power to the back-end PD device. It can output 60W high-power POE signals to power and transmit sig



nals to PD equipment with high power consumption, such as high-speed domes, PTZ cameras, large-size displays, high-power broadcast audio equipment, etc.

Product Description

The PSE60G has a P+D/OUT port, a Data/IN port, and an AC port. P+D/OUT port is the POE output port, which can output POE signals of up to 60W to power high-power PD equipment and transmit data and instructions for it. The Data/IN port is a Gigabit uplink port, which can be connected to network management devices such as switches, routers, or network servers, and is responsible for accessing LAN and Ethernet. The AC port is directly connected to the AC power socket of AC100-240V 50/60HZ and gets AC power to start the equipment to work.

PSE60G supports three types of mounting, namely rail mounting, wall mounting, and desktop mounting. The PES60G has mounting rails on both sides, which can be installed on the rails in the distribution cabinet. It has screw holes on the bottom and can be wall-mounted through the screw holes. Desktop installation is also supported. The PSE60G's shell is designed with heat dissipation grilles on both sides to help dissipate and ventilate the motherboard, reducing the temperature of the motherboard. At the same time, the product is designed with a power indicator and a POE indicator to facilitate a more intuitive judgment of its working status. Its shell is made of environmentally friendly and high-temperature resistant ABS plastic material, and the appearance color is matte black. The overall appearance is very beautiful.

PSE60G conforms to the IEEE802.3bt international POE standard protocol and is compatible with the IEEE802.3af/at protocol. It can reach a maximum output power of 60W (IEEE802.3bt) while supporting both 30W (IEEE802.3at) and 15.4W (IEEE802.3af) outputs. It has a data transfer rate of Gigabit and supports 10M/100M/1000M adaptive transmission at the same time. It supports wide voltage input AC100-240V 50/60HZ, and is compatible with mains voltages and frequencies in all countries around the world. Its conversion efficiency is more than 85%, the POE signal transmission distance is more than 100 meters, and the POE power supply pin adopts RJ1245+ RJ3678- eight-line full power supply mode.

The motherboard of PSE60G is equipped with a high-power isolation transformer, which adopts an isolated design solution and takes into account the design concept of heat dissipation and high temperature resistance. The motherboard circuit has the protection functions of anti-high-voltage lightning, anti-short cir



cuit, anti-overload, anti-high temperature, etc., and at the same time integrates anti-electric shock and anti-electric leakage design ideas to ensure the safety of product use. The EMC parameters can meet the requirements of IEC 61000-4-2/3/4/5/6 standards. The products have obtained CE, FC, Rohs and other certifications, and sell well in more than 100 countries and regions around the world.

Product Features

- IEEE802.3af/at/bt POE international standard protocol and handshake recognition function
- Wide input voltage AC100-240V 50/60HZ
- Output: 48V1.25A 60W, other voltages can be customized
- 10M/100M/1000M adaptive transmission speed
- RJ1245+ RJ3678- Power supply pin
- Rail mounting, wall mounting, desktop mounting and other installation methods
- There are heat dissipation grids on both sides for easy heat dissipation
- Small size, less space, easy to install
- 6KV surge protection
- With overheat protection, overvoltage protection, overload protection, short circuit protection
- Anti-electric shock and anti-electric leakage design, safer to use
- The conversion efficiency is over 85%
- EMC complies with IEC 61000-4-2/3/4/5/6 standards
- Environmental and high temperature resistant ABC plastic material

Specifications

Items	Specifications
Product Name	60W high-power Gigabit DIN rail POE Injector
Product Model	PSE60G
PoE Standard	IEEE802.3af/at/bt
Input Voltage	AC100-240V 50/60HZ
Output	POE 48V1.25A 60W (Other Voltage can be customized)
Conversion Efficiency	≥85%
PoE Pin	RJ1245+ RJ3678-



Conversion Mode	Isolated
Data Rate	10M/100M/1000M Adaptive
Transmission Distance	100 meters
Surge Protection	6KV
Circuit Protection	Short-circuit Protection Overcurrent Protection Overvoltage Protection Overheating Protection Anti-electric shock Protection Anti-electric leakage Protection
LED Indicator	1*Power Indicator 1*POE Indicator
Interface	1*P+D/OUT Port 1*Data/IN Port 1* AC Port
Material	ABS Plastic
Color	Black
Accessories	1*AC cable
EMC	IEC 61000-4-2/3/4/5/6
Temperature	-20~60°C For Operating -30~80°C For Storage
Humidity	RH95% MAX (Non-condensation)
Weight	N.W: 196g G.W: 392g
Dimension	Product Dimension: 147mm*65mm*43mm Packing Dimension: 210mm*128mm*56mm
Package	Kraft Carton



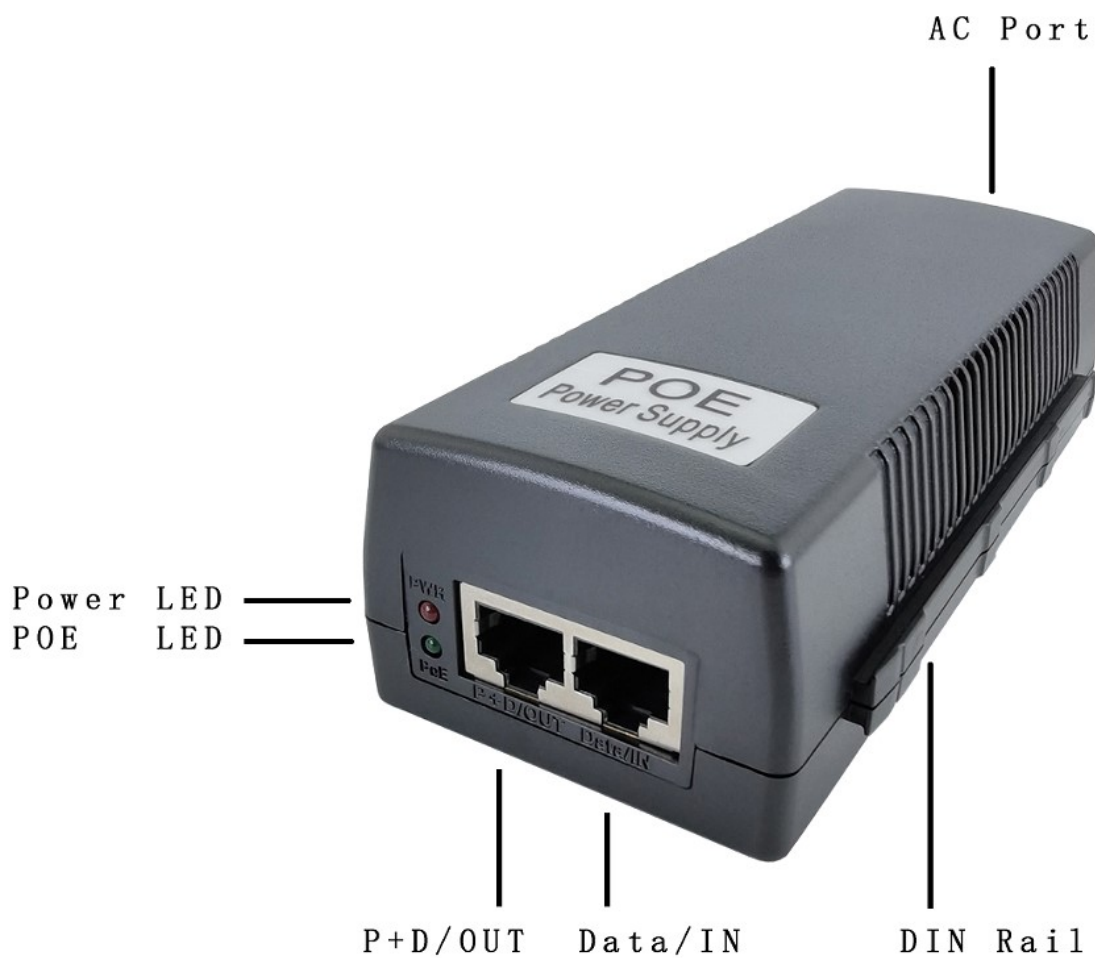
Product Applications

Dimensions

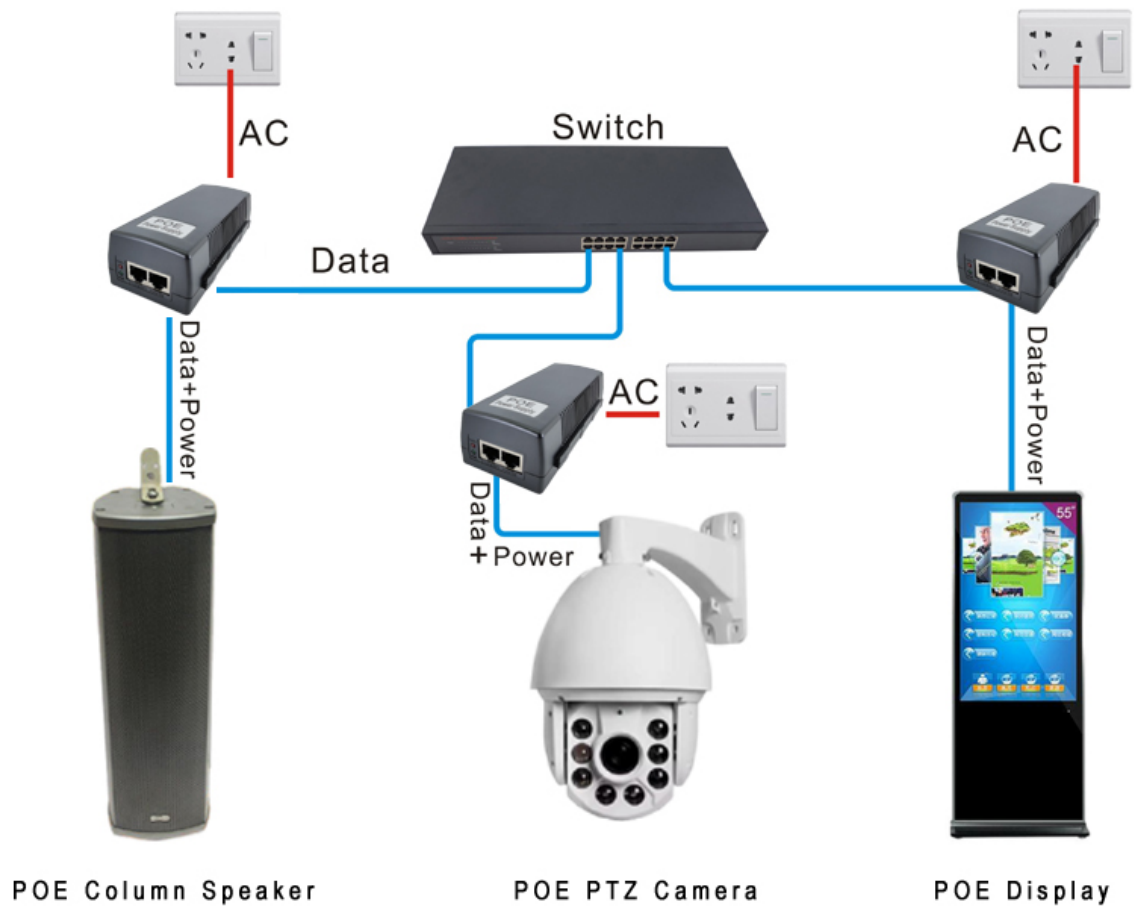




Interface Definition



Application topology





Application Scenarios



CCTV



Broadcasting Speaker



AD Display



Product Detail





Product Package



Package Size:210mm*128mm*56mm (L*W*H)

Package List	
Items	Quantity
PoE Injector	1
AC Cable	1
Operation Manual	1