



SPECIFICATION FOR APPROVAL

CUSTOMER : _____

PRODUCT NAME : 30W High-power PoE Splitter

PRODUCT MODEL : PD26 / PD26G / PD26-2.5G

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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PRODUCT: 30W High-power PoE Splitter

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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

PD26-2.5G is a 30W high-power 2.5G POE splitter, which conforms to the IEEE802.3af/at POE standard protocol, with a maximum output power of 30W. It has a transmission rate of 2.5G and is compatible with 10M/100M/1000M adaptive transmission rates.



PD26-2.5G is a POE signal receiving device, also known as PD device. It is used in the POE system, is responsible for receiving POE signals and processing POE signals, and separates DC signals and network signals for IP devices. It acts as a bridge, connecting PSE devices and IP devices, so that IP devices can work normally in the POE system and be managed by the POE system management platform.

30W High Power POE Splitter is a series of products, the series contains three models:

PD26: 30W High Power 100 Mbit POE Splitter

PD26G: 30W High Power Gigabit POE Splitter

PD26-2.5G: 30W High Power 2.5G POE Splitter

Product Description

The PD26-2.5G has a POE input port, a data output port, and a DC output port. The POE input port connects to the PSE device and receives the POE signal from the PSE device. Data output port connects to the data interface of the IP device and transmits data to the IP device. The DC Output Port can output DC12V MAX2.5A / DC24V MAX1.0A / DC9V MAX3.0A / DC5V MAX4.0A optional to supply power to IP devices. Its transmission rate can reach 2.5G, while compatible with 10M/100M/1000M adaptive transmission.

The shell of PD26-2.5G is made of high-temperature resistant and environmentally friendly ABS plastic material, with a maximum temperature resistance of 100°C. Its tail line length is 21CM, which is convenient and easy to connect with various IP equipment. The default DC connector is 5.5*2.1mm, and other specifications can also be customized, such as 5.5*2.5mm / 4.0*1.7mm / 3.5*1.35mm.

The PD26-2.5G conforms to the IEEE802.3AF/AT POE standard protocol, with a maximum output power of 30W (IEEE802.3AT CLASS4), and can also output 15.4W (IEEE802.3AF CLASS3). Its transmission rate is 2.5G, and it is compatible with 10M/100M/1000M adaptive transmission. It has an effective transmission distance of 100 meters and supports 24/7 uninterrupted work. Input wide voltage design DC38-56V, the default output voltage is DC12V, other voltages are optional.

PD26-2.5G is an isolated POE splitter, the motherboard adopts an isolated design solution, equipped with high-power isolation transformer. The main board circuit design has lightning protection, short circuit



protection, overload protection, high temperature protection and other protection functions, EMC parameter s can meet IEC 61000-4-2/3/4/5/6 standards. Products have obtained CE, FC, Rohs and other certifications, selling well in more than 100 countries and regions around the world.

Product Features

- IEEE802.3af/at POE international standard protocol and handshake recognition function
- Input: wide POE voltage DC38-56V
- Output: DC12V MAX2.5A or DC24V MAX1.0A / DC9V MAX3.0A / DC5V MAX4.0A Optional
- 10M/100M/1000M/2.5G adaptive transmission speed
- RJ12+ RJ36- / RJ45+ RJ78- Fully compatible
- Small size, less space, easy to install
- 4KV surge protection
- With overheat protection, overvoltage protection, overload protection, short circuit protection
- The conversion efficiency is over 85%
- EMC complies with IEC 61000-4-2/3/4/5/6 standards
- High temperature resistant and environmentally friendly ABS plastic shell

Specifications

Items	Specifications		
Product Name	30W High-power POE Splitter		
Product Model	PD26	PD26G	PD26-2.5G
PoE Standard	IEEE802.3af/at		
Input Voltage	POE: DC38-56V		
Output	DC12V MAX2.5A or DC24V MAX1.0A / DC9V MAX3.0A / DC 5V MAX4.0A Optional (Other Voltage can be customized)		
Conversion Efficiency	$\geq 85\%$		
PoE Pin	RJ12+ RJ36- / RJ45+ RJ78- Fully compatible		
Conversion Mode	Isolated		



Data Rate	10M/100M Adaptive	10M/100M/1000M Adaptive	10M/100M/1000M/2.5G Adaptive
Transmission Distance	100 meters		
Surge Protection	4KV		
Circuit Protection	Short-circuit Protection Overcurrent Protection Overvoltage Protection Overheating Protection		
LED Indicator	1* Output Power Indicator 1* POE Indicators		
Interface	1* POE Input Port (RJ45 femal) 1* Data Output Interface (RJ45 male) 1* DC Interface (5.5*2.1mm male)		
Material	ABS plastic material		
Color	Matte black		
Accessories	/		
EMC	IEC 61000-4-2/3/4/5/6		
Temperature	-20~60°C For Operating -30~100°C For Storage		
Humidity	RH95% MAX (Non-condensation)		
Weight	N.W: 64g G.W: 74g		
Dimension	Product Dimension: 89mm*31mm*26mm + 210mm (tail cable) Packing Dimension: 185mm*46mm*31mm		
Package	White Carton or Plastic Bag		

Product Applications



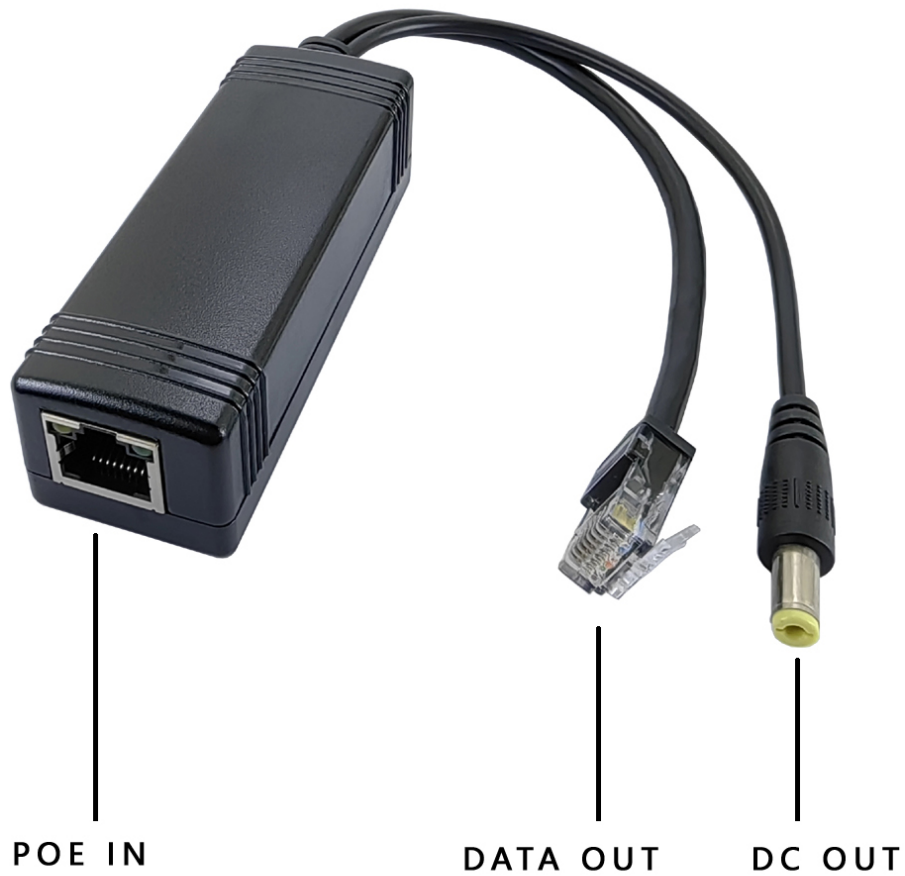
PD26-2.5G is a High-power POE Splitter, specially designed for a variety of non-POE function IP devices, so that IP devices can work normally in POE system and compatible with the original management platform and management software. It is widely used in CCTV, audio broadcasting system, display, lighting, wireless coverage and other industries. The product has been introduced to the market for many years, and has performed well in the field of POE applications, and has been widely favored and praised by global customers.

Dimensions





Interface Definition



Application topology





Application Scenarios



Lamp



CCTV



IP Speaker



Product Detail





Product Package



Package 1
White Carton
Package Size: 185*46*31mm (L*W*H)



Package 2
Plastic Bag
Package Size: 25*7*31mm (L*W*H)



Package List	
Items	Quantity
POE Splitter	1
Operation Manual	1