SPECIFICATION FOR APPROVAL

CUSTOMER :

PRODUCT NAME: 24-channel Ultra-high Power Gigabit PoE Switch

PRODUCT MODEL: TSD-PSE2400G2S

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: 24-channel ultra-high power Gigabit PoE switch

MODEL: TSD-PSE2400G2S

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 t he 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 th e entire PoE (Power-over-Ethernet) process. The PD device is the PSE load that receives the power suppl y, 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 P D 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 l0M BASE-T a nd 100M BASE-T. IEEE80 2.3af/at allows two uses: (1) When the idle pin is used for power supply, pin

s 4 and 5 are connected as the positive pole, and pins 7 and 8 are connected as the negative pole. (2) P in 1 and pin 2 are connected as the positive pole, and pin 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 engineerin g, PoE only needs to install a network cable to make the IP equipment work normally. In many cases, P oE is more advantageous in the places where it is difficult to deploy AC power. As the number of netw ork devices in the system increases, the use of PoE eliminates the need for local power supply for the eq uipment, 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 de vices within the system, and can coexist with existing Ethernet cables. PoE devices are compatible with t he 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 co nnected 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 li ne.

Product Introduction

TSD-PSE2400G2S is an ultra-high-power Gigabit PoE switch. The product complies with the IEEE802.3af/ at/bt PoE standard protocol. It can output a single PoE signal with a maximum power of 90W, and can also be connected to optical fiber for long-distance data transmission.

TSD-PSE2400G2S can connect 24 high-power PD devices and supports the operation of high-power devic es such as high-speed dome cameras, large speakers and WiFi.

Product Description

The TSD-PSE2400G2S switch is equipped with a power input port, which can be connected to the power cord to input 90~240V 50/60HZ AC power. Two SFP optical ports enable data transmission by connecting optical fibers. 24 Gigabit PoE ports output PoE signals to provide data transmission and power supply for terminal devices.

Dimensional structure: 440*230*44 mm (L*W*H). Body: standard IU chassis, matte black metal shell. Front panel: work indicator light (power supply, PoE port and SFP port), DIP switch (three working states: NOM/VLAN/CENK), Gigabit PoE port, SFP optical port; left and right sides: equipped with heat dissipation mesh to maintain normal body temperature, removable mounting ears, supports standard rack installation and desktop installation; back: pin-shaped AC power input interface, boat-shaped switch (control power switch), screw hole (ground protection).

TSD-PSE2400G2S input voltage AC 90~240V 50/60HZ, default output 52V PoE signal. Default working mode: NOM (Normal). Device transmission rate: 10/100/1000Mbps adaptive transmission, built-in power supply: 52V 16A 800W, backplane bandwidth: 56G. The circuit has overheating protection, overvoltage protection, overcurrent protection, short circuit protection, electric shock protection, leakage protection and other functions.

TSD-PSE2400G2S adopts the IEEE802.3af/at/bt PoE standard protocol and has obtained CE, FC, and Rohs certifications. The EMC parameters comply with the IEC 61000-4-2/3/4/5/6 standard requirements. The product supports the operation of multiple high-power equipment, and its excellent functional performance has been recognized and supported by users.

Product Features

- IEEE 802.3af/at/bt PoE international standard protocol
- Input: AC 90-240V 50/60HZ
- Output: PoE 52V
- EMC complies with IEC 61000-4-2/3/4/5/6 standard requirements
- RJ12+, RJ36-, RJ45+, RJ78- fully powered
- Adaptive transmission rate: 10/100/1000Mbps
- Three working modes (NOM, VLAN, CENK)
- Maximum output power of single port: 90W

- Backplane bandwidth: 56G
- Built-in power supply: 52V 16A 800W
- Overheating protection, short circuit protection, overvoltage protection, overload protection, electric shock protection, leakage protection
- Gigabit high-power network filter
- Desktop installation and rack installation dual modes
- High power, high conduction and low impedance transistor, excellent reliability and temperature tolerance
- Environmentally friendly and high-temperature resistant PCB material, environmentally friendly lead-free process
- Pure copper pin connector ensures stable contact
- Original electronic components from international famous brands, high precision and high performance
- Hard metal shell, both beautiful and quality

Specifications

Product parameter table	
Product Name	24-channel ultra-high power Gigabit PoE switch
Product Model	TSD-PSE2400G2S
PoE Standard	IEEE.802.3af/at/bt
Input Voltage	AC 90~240V 50/60HZ
Output	PoE 48V
Conversion Efficiency	/
PoE Pin	PoE: RJ12+，RJ36-，RJ45+，RJ78- full power supply
Conversion Mode	/
Data Rate	10/100/1000Mbps
Transmission Distance	100 meters(Category 5e Cable (Cat5e))
Surge Protection	4KV

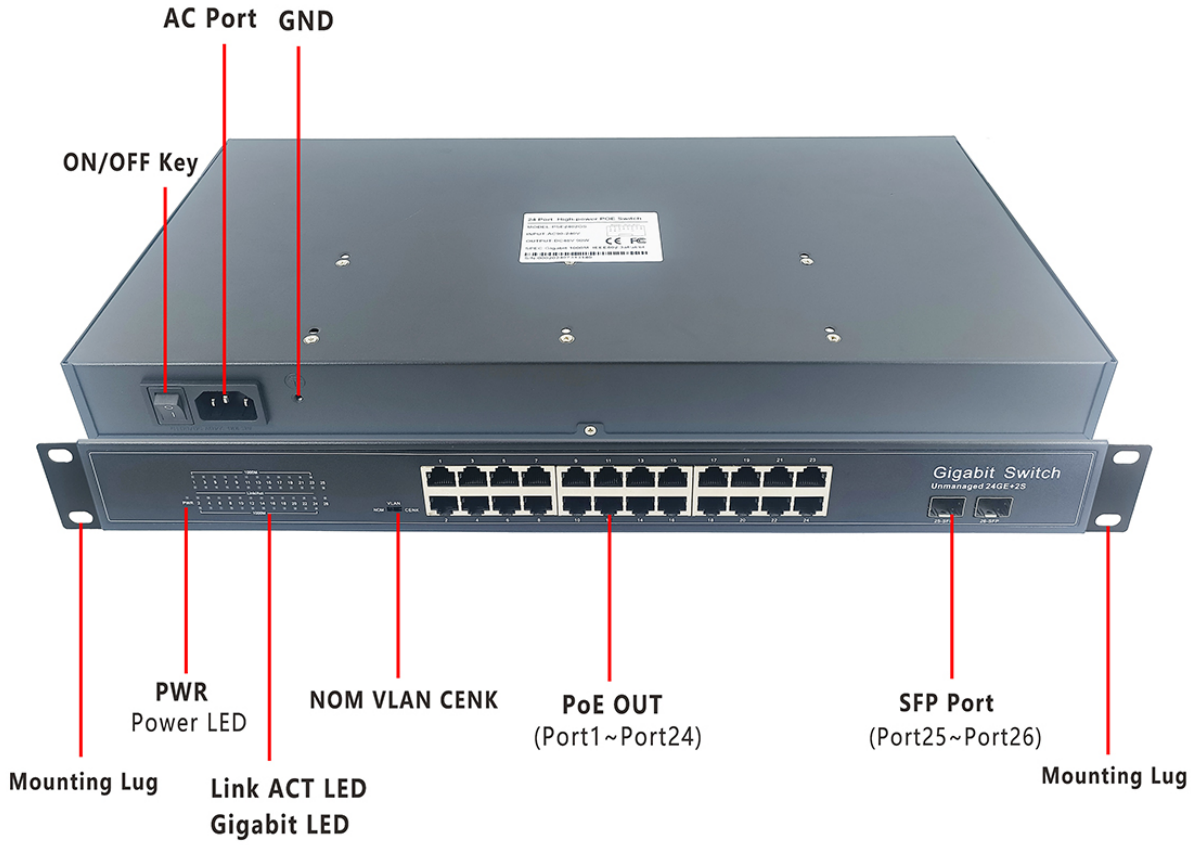
Circuit Protection	Overheat protection, overvoltage protection Overcurrent protection, short circuit protection Electric shock protection, leakage protection
LED Indicator	1 power indicator, 24 Gigabit indicator lights 24 Link/Act indicator lights, 2 SFP port indicators
Interface	AC input port (Triangular Connector) : AC 90~240V 50/60HZ SFP port (Gigabit SFP Port): Data RJ45 port (Gigabit PoE port) : PoE OUT
Function	/
Material	Hard metal materials
Color	Matte black
Accessories	1 m (10A 250V) power cord, user manual Mounting lug *2, screw *6
EMC	IEC 61000-4-2/3/4/5/6
Temperature	-20～60℃ For Operating -30～80℃ For Storage
Humidity	RH95% MAX (Non-condensation)
Weight	N.W：3.1Kg
Dimension	440*230*44mm (L*W*H)
Package	Anti-static pearl cotton + Kraft cartons (465*320*80mm(L*W*H))

Product Applications

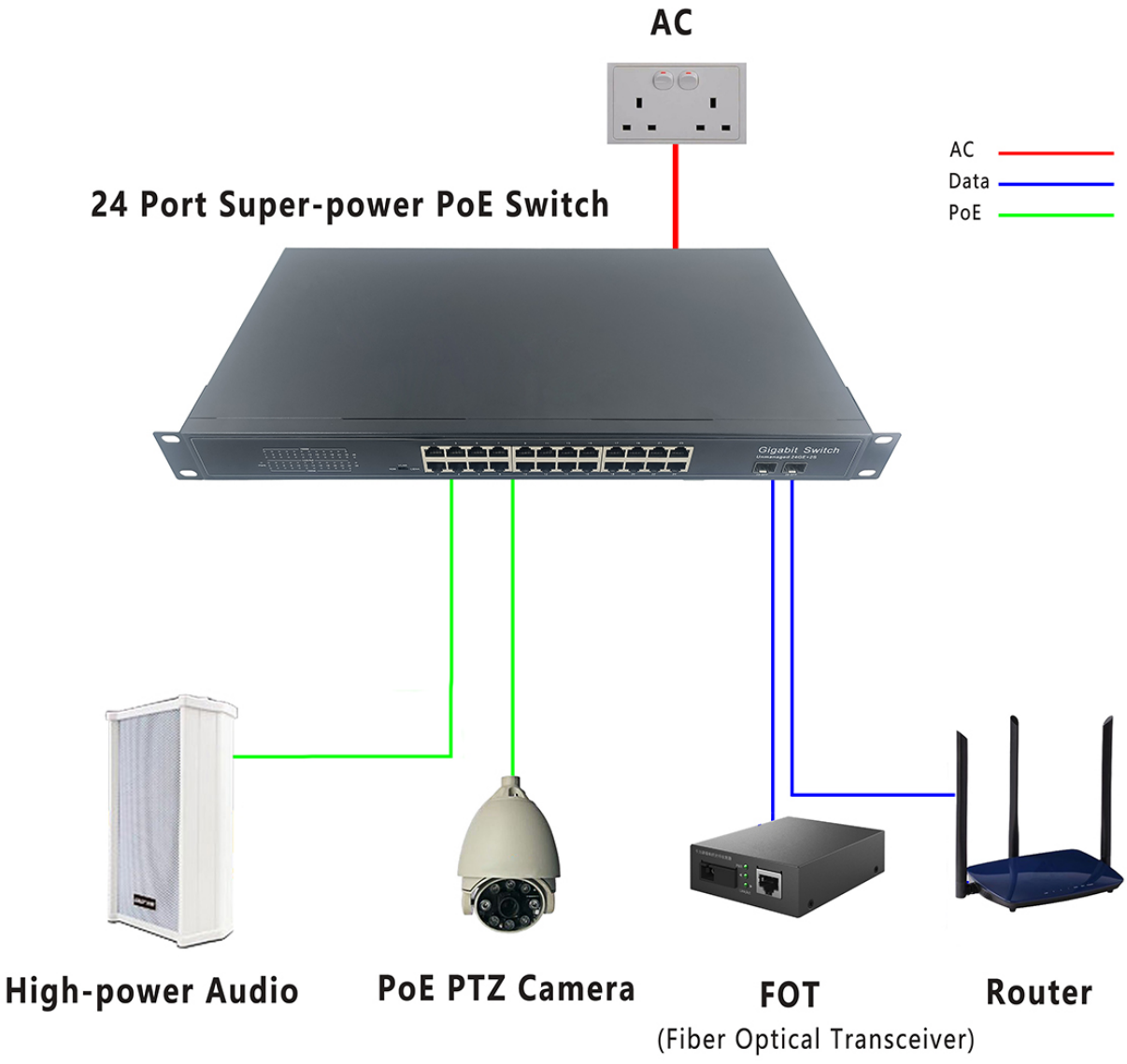
TSD-PSE2400G2S is an ultra-high-power Gigabit PoE switch with 24 PoE signal output ports and a maximum output power of 90W per port. It can provide PoE power supply for high-power equipment and also has good compatibility with low-power equipment. TSD-PSE2400G2S also has two SFP optical ports, which can support high-speed and stable data transmission over long distances. The products are aimed at the high-power equipment market and are mainly used in IPC, Wifi, high-power network bridges and large audio equipment.

Dimensions

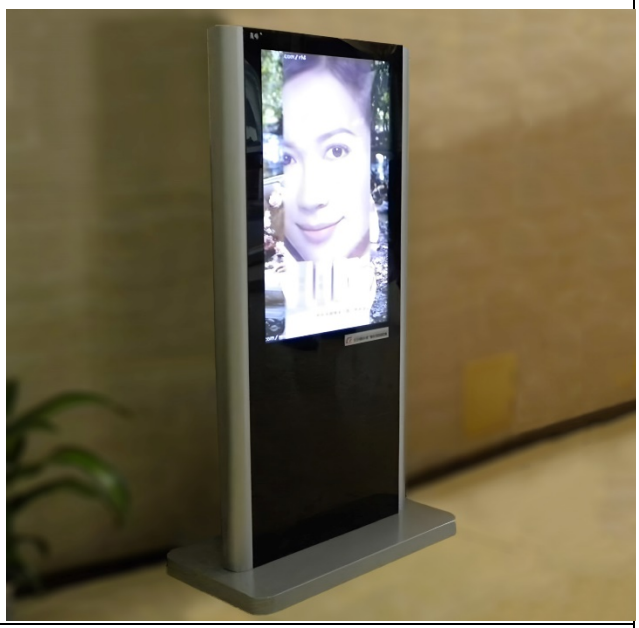
Interface Definition



Topology Diagram for Product Installation and Application



Application Scenarios

	
wall-mounted speaker	high-speed PTZ dome
	
net bridge	advertising screen

Product Detail






Product Package

Package Size: 465*320*80mm (L*W*H)

Packing List	
Item	**Number**
TSD-PSE2400G2S	1
AC power cord	1
Mounting lug	2
Screw	6
Operation manual	1