

User Manual for PoE Injector

PT-PSE104GB-VI/PT-PSE104GB-10-VI
PT-PSE104GBN-VI/PT-PSE104GBN-10-VI

Product Positioning

This series is a single-port centralized remote high-power PoE injector, compliant with ERP Energy Efficiency Class VI, for indoor use.

Featuring wide-temperature design (-40°C to 40°C), it stably delivers 55Vdc (1.1A) to remote devices. Supporting 10/100/1000Mbps/2.5G/5G/10G rates, it achieves 100m max transmission distance with Cat5e/Cat6 cables via 4,5(+)/7,8(-) and 3,6(+)/1,2(-) wiring for stable power supply.

Ideal for 60W devices (wireless APs, IP cameras, IP phones, etc.), it fully meets IEEE802.3af/at/bt. With intelligent power management, it auto-detects PDs, matches output power, and enables plug-and-play operation.

Operating on 100-240Vac, its built-in chip identifies 802.3af/at/bt-compliant devices, supplying power only to standard ones for safety. It simplifies wiring, eliminating power socket constraints for flexible installation.

Product Features

Energy Efficiency Class VI: Compliant with ERP energy efficiency standards, featuring low no-load power consumption ($\leq 0.21\text{W}$) and high efficiency (over 88%).

Wide input voltage: Supports input within the full voltage range of 100-240Vac.

Detection Resistor: 15-33K Ω .

High Power Supply: PoE output supports IEEE 802.3af/at/bt standards, with a maximum output power of 60W, capable of driving high-power devices.

User-Friendly: Automatically detects and identifies powered devices, matches the required output power, plug-and-play with no configuration needed.

Wide Temperature Design: Supports full-load operation at temperatures ranging from -40°C to 40°C .

Wall-Mount Installation: Equipped with two mounting holes for easy installation during project deployment.

Compact Size: The compact design allows for easy installation on WLAN access points and IP cameras.

Protection Features: Over-current, over-voltage, over-temperature, and short-circuit protection.

Safety: Low-power devices receive only the power they require. Automatically detects and protects non-standard Ethernet terminals.

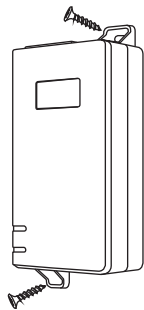
Limited Power Source: LPS.

Certifications: Complies with CE, FCC, and ERP certifications.

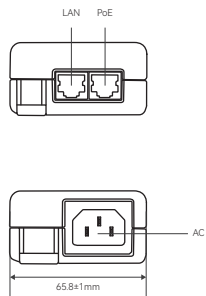
Appearance

- Main Product:

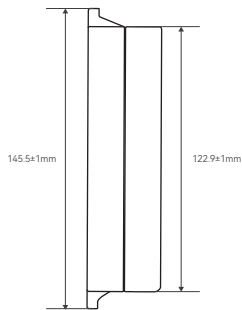
Perspective View(Installed)



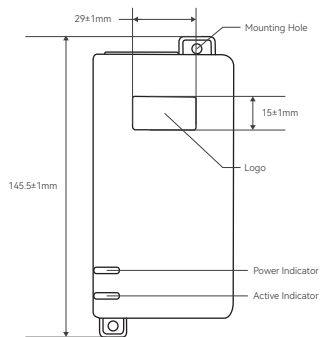
Top View



Side View



Front View



Electrical Parameters

Item	PT-PSE104GB-VI	PT-PSE104GBN-VI	PT-PSE104GB-10-VI	PT-PSE104GBN-10-VI
Ports	AC Input*1 (C14) PoE*1 LAN*1			
Input Voltage	100-240Vac 47-63Hz			
Input Current	115VAC: 1.5A Max 230VAC: 0.75A MAX			
Surge Current	115VAC: 30A Max 230VAC: 60A Max			
115 & 230VAC NLPC	≤0.21W			
Energy Efficiency	≥88%			
230VAC 10% Load	≥79%			
OVP	< 60V			
OCP	≤1.3A			
SCP	Automatic recovery after output shutdown			
Surge Protection	AC Port, common mode: 2KV differential mode: 1KV			
PoE Output	55VDC 1.1A 60W Max			
Ripple (Max)	200mV			
Line Regulation	≤2%			
Load Regulation	≤2%			
Certifications	CE/FCC/ERP			
Reliability	MTBF: 200,000hrs.@25°C			
Energy Efficiency Std.	ErP/Ecodesign Directive 2009/125/EC –Regulation EU 2019/1782 Compliant			
Insulation Withstand Voltage	L to N:AC 1500V 1MIN, <10mA L&N to Output:AC 3000V 1MIN, <10mA L&N to enclosure:AC 3000V 1MIN, <10mA			
Insulation Resistance	DC 500V≥100M			
Safty Standard	GB 4943.1-2022, UL/CUL/EN/IEC62368-1, FCC, CE			
EMI Standard	GB9254 CLASS B/GB 17625.1-2022 A, FCC CFR47 PART15 CLASS B, EN55024/EN55032 CLASS B, CISPR 22 CLASS B			
EMS Standard	IEC61000-4-2: (Contact:±6kV, Air:±8kV), IEC61000-4-3, IEC61000-4-4, IEC61000-4-5 (2KV/L-PE N-PE, 1KV/L-L), IEC61000-4-6,IEC61000-4-11			

PoE Characteristics

Item	PT-PSE104GB-VI	PT-PSE104GBN-VI	PT-PSE104GB-10-VI	PT-PSE104GBN-10-VI
PoE Standard	IEEE802.3af IEEE802.3at IEEE802.3bt	Passive	IEEE802.3af IEEE802.3at IEEE802.3bt	Passive
Data Rate	100/1000Mbps		1G/2.5G/5G/10Gbps	
Network Protocol	IEEE802.3 IEEE802.3u IEEE802.3ab		IEEE802.3 IEEE802.3u IEEE802.3ab IEEE802.3bz	
Power Pins	4/5(+),7/8(-) and 3/6(+),1/2(-)			
PoE Output	55Vdc 1.1A 60W Max			

Physical Characteristics

Item	PT-PSE104GB-VI	PT-PSE104GBN-VI	PT-PSE104GB-10-VI	PT-PSE104GBN-10-VI
Housing Material	Plastic			
Installation	Wall-Mounted Installation			
IP Rate	IP40			
Dimensions	145.5mm X 65.8mmX 33.5mm			
Weight	262.1g	256.9g	262.1g	256.9g

Environmental Parameters

Item	PT-PSE104GB-VI	PT-PSE104GBN-VI	PT-PSE104GB-10-VI	PT-PSE104GBN-10-VI
Op Temp	-40°C — 40°C			
Op Humid	20%-80%, non-condensing			
Op Alt	Up to 5000m			
Stor Temp	-40°C — 70°C			
Stor Humid	10%-90%, non-condensing			

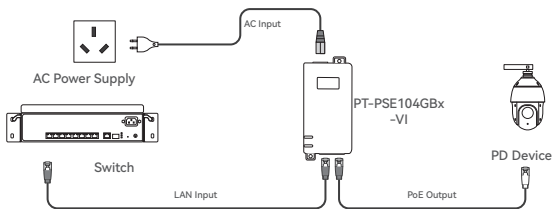
Compliance Certifications

Safety Standard: IEC 60950-22 (Information Technology Equipment Safety)

Environmental Standard: RoHS (Restriction of Hazardous Substances)

Connection and Installation

• Connection



• Installation

Wall Mounting:

1. Drill holes at the selected installation location;
2. Use the provided mounting screws (M3 self-tapping screws) to secure the device (can be fixed to a metal plate or wall using expansion bolts and matching rubber plugs), as shown below:

