

PoE Power Injector



90W Series

Single Port Multi-Gigabit 90W Data Sheet

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Description

This product is an indoor AC to DC power over ethernet (PoE) injector. It can provide 90W output power with a constant 55Vdc main voltage source. It is built-in a LED to identify injectors that is in normal state.

Features

- * Full AC input voltage design with C14 socket
- * IEEE 802.3bt standard
- * IEEE 802.3at backward compatible
- * 10Gbps Data Rates with Cat6a shielded Cable.
- * Automatic detection and protection of non-standard Ethernet terminals
- * IEC/EN 62368-1 design compliance
- * Energy efficiency level VII compliance
- * Harmonic Current Emission: EN6100-3-2 Class A
- * High reliability and high lightning surge ability



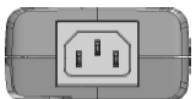
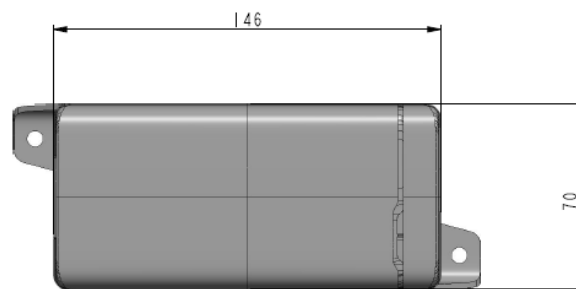
Electrical Specification

Model Name	PA-1900-86LV-TG
Output	
Rated power	90W
Rated voltage	55Vdc
Rated current	1.67A
Ripple & Noise(max.)	Ripple (scale 10ms) $\leq 500\text{mV}_{\text{PP}}$ Noise (scale 10us) $\leq 200\text{mV}_{\text{PP}}$
Line & load regulation	52V~57V
LED Behavior	Solid Green – Power good and output “ON” ; One for PoE connection (green)
Input Specification	
Input voltage range	90Vac~264Vac,
Current range (max.)	2.5A @ 90Vac, 1.2A@ 240Vac
Inrush current (typ.)	120A, at 230VAC, cold start@25°C and full load
Frequency range	47-63Hz

Leakage current (max.)	0.5mArms at 264Vac
Efficiency	DOE VII
Power Factor	0.9
Protection Function	
Over voltage (max.)	60V, Auto recover
Over current (max.)	One port <1A, Two Port <2A Auto recover
Short circuit at O/P	Auto recover
Over temperature	Auto recover
Others	
Cooling fan	Natural cooling, no fan design
MTBF (min.)	> 200,000 hours at 25°C typical load
Environment	
Temperature	(Operating) -10~40°C / (Storage) -20~70°C
Humidity	(Operating and Storage) 5~90% RH non-condensing
Altitude (max.)	5000 meters
Mechanical	
Dimension	146(L)*70(W)*35(H)
Package Vibration Test	Follow ISTA-2A Standard
Weight (typ.)	327+/-10 g
Safety	
Standard	CB/IEC62368-1,UL62368-1,EN62368-1,PSE J62368-1
Dielectric Strength	Primary to Secondary: 4242VDC/3000VAC for 1 minute Primary to Field Ground: 2121VDC/1500VAC for 1 minute
Insulation resistance(min.)	Primary to Secondary: >10M ohm 500VDC Primary to Field Ground: >10M ohm 500VDC
EMC	
EMI	EN55032, EN55035 Class B, FCC Part 15 Class B, VCCI Class B
ESD	EN55035 ; IEC 61000-4-2 Level 4, criteria A Air: +/-15KV Contact: +/-8KV

Radiated (RS)	EN55035 ; IEC 61000-4-3 Level 2, criteria A (3V/m: 80MHz-1000MHz, 1800MHz, 2600MHz, 3500MHz, 5000MHz)
EFT	EN55035 ; IEC 61000-4-4 Level 2 +/-1kV(5kHz or 100kHz) for AC mains, criteria A +/-0.5kV(5kHz) for PoE output and Data input ports, criteria B
Surge	EN55035; IEC 61000-4-5 For AC mains, criteria A: +/-4KV, line to line (differential mode) +/-4KV, line to earth GND (common mode) For PoE output, criteria B: +/-6KV, line to earth GND
Conducted (CS)	EN 55035 ; IEC 61000-4-6 Level 2, criteria A (3Vrms AM 80% 0.15MHz - 10MHz ; 3Vrms to 1Vrms 10MHz-30MHz ; 1Vrms 30MHz-80MHz)
Power Frequency Magnetic Field	EN 55035 ; IEC 61000-4-8 Level 1 (1A/m), criteria A
Voltage dips/interruptions	EN 55035 ; IEC 61000-4-11 Class 3
Harmonic Current Emission (for power rating >75w PSU)	EN 61000-3-2 Class D
Voltage Fluctuation and Flicker	EN 61000-3-3

Mechanical Specification



Dimensions (L x W x H)
Weight
Input Connector
Data In/Output Connector

146mm x 70.0mm x 35.0mm
 200~300g
 IEC320 C14
 Shielded RJ45