

PoE Power Injector



90W Series

Single Port Multi-Gigabit 90W Data Sheet

For the latest revision, please visit power.liteon.com

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



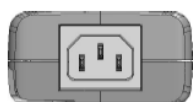
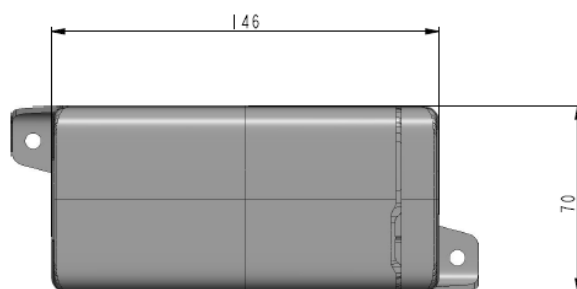
Electrical Specification

Model Name	PA-1900-86LV-TG
Output	
Rated power	90W
Rated voltage	55Vdc
Rated current	1.67A
Ripple & Noise(max.)	Ripple (scale 10ms) $\leq 500\text{mV}_{pp}$ Noise (scale 10us) $\leq 200\text{mV}_{pp}$
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.)	0.5mA _{rms} 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