

**RoHS  
Compliant**



## Electrical Specification

### Input

Input Voltage Range	: 90V AC to 264V AC
Rated Voltage Range	: 100V AC to 240V AC
Input Frequency Range	: 47Hz to 63Hz
Rated Input Frequency	: 50Hz/60Hz
Input Current	: 0.3A max. at full load
Inrush Current (Cold Start)	: 50A typ. peak, 220V AC Input

### Output

Output Voltage	: 48V DC
Output Volt Limit	: 45.6V DC to 50.6V DC
Ripple & Noise	: 240mV
Output Current	: 0.5A
Output power	: 24W
OCV (A)	: 0.8A

**Note:** Ripple Voltage is measured with oscilloscope with bandwidth 20MHz.  
A 10 $\mu$ F E-cap and 0.1 $\mu$ F ceramic-cap shall be connected to the connector in parallel

### DC Output Overshoot At Turn On & Turn Off

Output Voltage	Proportion of the output voltage overshoot	
	Turn on	Turn off
48V	5%	5%

**Note:** All of DC output current from Min. to Max.

### Combined Load/Line Regulation

Voltage	Min. Load	Rated Load	Line Regulation	Load Regulation
48V DC	0A	0.5A	$\pm$ 5%	$\pm$ 5%

### Turn on Delay Time

3 Second Max. at 115V AC input and output Max. load.

### Rise Time

40ms Max. at 115V AC input and output Max load.

### Hold Up Time

5ms Min. at 115V AC input and output Max. Load.

### Efficiency COC Tier 2/DOE/ERP/MEPS Level VI

Average efficiency reach 86.2% minimum at 25%,50%,75%&100% of full-loading and 230V AC input (After warm up 30 minutes). Efficiency of 10% of full load Limit>76.2%  
No-load input power $\leq$  0.1W(DOE) / 0.075W(ERP).

## Protection

### Short circuit protection

The power supply will be auto recovered after short circuit faults remove.

### Over current Protection

OCV limits to 120%~150% auto start, The power supply will be auto recovered after over current faults remove.

## Reliability Requirements

### Burn-in

The power supply shall be burn-in for 2 - 4 Hours under normal input and 80% rated load at 40°C ±5°C

### MTBF Qualification

The MTBF shall be at least 50,000 hours at 25°C. (Full load and nominal input condition)

## Environment Requirement

### Operating Temperature

0°C to 40°C (Full load and normal operation)

### Storage Temperature

-40°C to +85°C (With package)

### Relative Humidity

5%(0°C) ~ 95%(40°C) RH, 72Hrs (Full load and normal operating)

### Storage Humidity

10%(0°C) ~ 90%(40°C) RH, 72Hrs (Full load and normal operating)

### Vibration

Operating: IEC 721-3-3 3M3

5~9Hz,A=1.5mm

9 ~ 200Hz, Acceleration 5m / S2

### Transportation

IEC 721-3-2 2M2

5-9Hz,A=3.5mm

200 ~ 500Hz, Acceleration=15m/S2

### Axes,10 cycles per axis

No permanent damage may occur during testing.

The product can restore to its original situation after power off / on.

### Dielectric Strength Testing

Hi-pot test shall be met the table 1 requirements, an item listing this test as a 100% production test must be performed and be maintained at that level for a minimum of 1 min. without failure.

Item	Specification	Distance	Remark
Primary to Secondary	3000V AC/4242V DC /10mA/1min	7mm	No arcing
Primary to P.G			No broken
Secondary to P.G			

### Leakage Current

0.25mA max. at 240V AC / 50Hz input

### Insulation Resistance

100MΩ min. @ primary to secondary add a 500V DC test voltage

## Mechanical Requirement

### Enclosure

The power supply size: (L) 83.5mm × (W) 47mm × (H) 31mm

### Input Connector

Two pin input plug

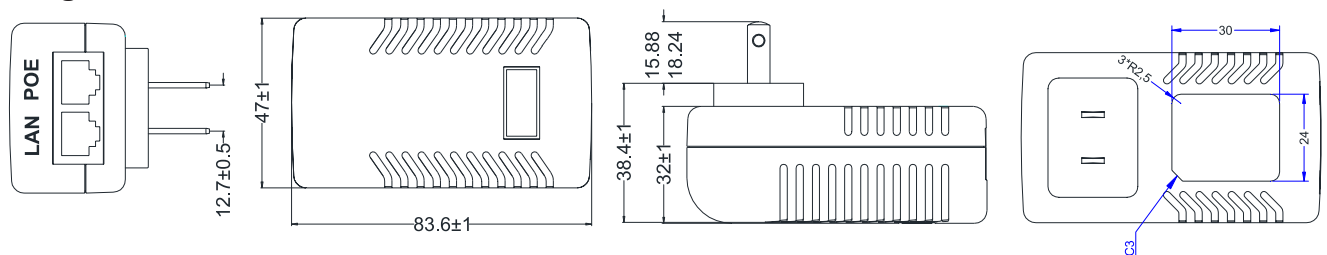
## Mechanical Specifications

Plastic material : ABS + PC

Colour : Black

Weight : 120g

## Diagram



Dimensions : Millimetres

## Part Number Table

Description	Part Number
Wall Mount PoE Injector and Power Supply, US Plug, 48V, 0.5A	28-21705

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