Wall mount PoE Injector and Power Supply



Electrical Specification

RoHS Compliant

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
OCP (A) : 0.8A

Note: Ripple Voltage is measured with oscilloscope with bandwidth 20MHz. A 10μF E-cap and 0.1μF 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	±5%	±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≤ 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

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

Page <1> 15/12/21 V1.1

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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

 $5\%(0^{\circ}\text{C}) \sim 95\%(40^{\circ}\text{C}) \text{ RH}$, 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

 $100M\Omega$ min. @ primary to secondary add a 500V DC test voltage

Page <2> 15/12/21 V1.1

Wall mount PoE Injector and Power Supply

Mechanical Requirement

Enclosure

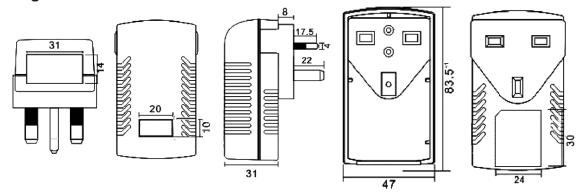
The power supply size: (L) 83.5mm × (W) 47mm × (H) 31mm

Input Connector
Three 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, UK Plug, 48V, 0.5A	28-21705

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Page <3> 15/12/21 V1.1