# AMGPSU-W12-P25 LIGHT INDUSTRIAL PLUG-TOP 25W POWER SUPPLY



## **Light Industrial Power Solutions**

AMG's light industrial plug-top / wall-wart 25W power supplies provide reliable power for AMG non-PoE based products and ensure stable equipment operation over a wide positive temperature range. They are suitable for all AMG non-PoE products (depending on voltage).













[ AMGPSU-W12-P25 ]

#### / OVERVIEW

Designed in a plug-top / wall-wart style housing, the AMGPSU-W12-P25 series of light industrial power supplies are ideally suited for powering AMG non-PoE equipment. Its wide positive operating temperature range ensures reliable operation in challenging environments.

Available in a 12V output version ensures the power supply is suitable for any low voltage non-PoE requirement.

The power supply offers a high level of stability and immunity to noise and a low ripple for best in class performance.

Compliant to the international standards for EMC and are safety approved to IEC 62368-1 Edition 2.0, UL 62368-1, CAN/CSA-C22.2 No. 62368-1-14 & EN 62368-1.

A wide voltage input range that supports  $90-264V_{AC}$  ensures global support for all regions.

The power supply inclues use changeable heads for UK, EU & USA type plugs for maximum flexibility.

#### / FEATURES

- Compact size ideal for confined spaces, including camera poles and roadside cabinets
- O°C to +70°C temperature maintains performance in challenging environmental conditions
- Plug-Top mountable quick to install in standard mains sockets
- High efficiency up to 86% typical
- Universal 90-264V<sub>△C</sub> input range
- Output short circuit protection included as standard
- High I/O isolation test voltage up to 4200V<sub>DC</sub>
- Built-in active Power Factor Correction (PFC) function
- UK, EU & US user changeable plug heads included
- EN62368 & UL safety approved
- AMG 3 Year Support Warranty



# Specifications.

### Input.

Characteristics	Operating Conditions	Min.	Тур.	Max.	Unit
Input Voltage Range	AC Input	90	-	264	VAC
Input Frequency		47	-	63	Hz
Input Current	115VAC	-	0.7	-	A
	230VAC	-	0.29	-	
Inrush Current	115VAC Cold Start	40	-	50	
	230VAC Cold Start	80	-	120	
Power Factor	115VAC	-	0.3	-	-
	230VAC	-	0.3	-	
Leakage Current	264VAC		<0.25mA		
Connector		UK	UK / EU/ USA Plug Types		

## Output.

Characteristics	Operating Conditions	Min.	Тур.	Max.	Unit	
Output Voltage Accuracy	Full Load Range	-	±1	-		
Line Regulation	Rated Load	±0.5	-	±1	±1 %	
Load Regulation	10% - 90% Load	±4	-	±5		
Output Ripple & Noise*	20MHz Bandwidth (peak-to-peak value)	-	-	220	mV	
Stand-by Power Consump.		-	<0.1	-	W	
Short Circuit Protection	Recovery time <10s after the short circuit disappears	Hiccup, Self-Recovery				
Over-Voltage Protection		Not Present				
Over-Temperature Protect		Not Present				
Minimum Load		0	-	-	%	
Start-up Delay Time	230VAC	-	3	-	s	
Hold-up Time	115VAC	-	12	-	ms	
Connector		None - Stripped & Tinned Cable				
Note: *The "tip and barrel method" is used for i	ipple and noise test, output parallel 47μF electrolytic capacitor and 0.1μF	ceramic capac	itor.			



# Specifications.

#### General.

Characteristics	Operating Conditions	Min.	Тур.	Max.	Unit	
Dielectric Withstanding Voltage (P-S)	Primary to Secondary	-	- 4242 VD0		VDC	
Electro Static Discharge	Air Discharge - IEC61000-4-2	-	-	8	kV	
	Contact Discharge - IEC61000-4-2	-	-	4		
Surge Voltage	Line-Neutral	-	-	1	kV	
	Line-PE & Neutral-PE	-	-	2		
Operating Temperature	See De-Rating Chart	0	-	+70		
Storage Temperature		-40	-	+85	°C	
Operating Humidity	Non-Condensing	0	-	95	0/ DL I	
Storage Humidity	Non-Condensing	10	-	95	%RH	
Operating Altitude	All Conditions	-	-	2000	m	
Vibration	10~500Hz, 10min/1cycle, 60min X/Y/Z	-	5	-	G	
Operating Temperature Power Derating	+40°C to +70°C	1.66	-	-	%/°C	
Input Voltage Derating		N/A				
Safety Standard		IEC/EN/UL62368 C.S.A C22.2				
Safety Class		Class II				
MTBF	MIL-HDBK-217F @ 25°C	>100,000 hours				
Heat Dissipation		-	-	14	BTU/h	

### Mechanical.

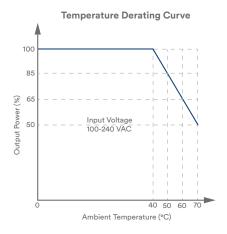
Case Material	Plastic	
Dimensions	85 × 43 × 48 mm (3.35 × 1.69 × 1.89 in) (H x W x D)	
Weight	0.16 kg (0.35 lb)	
Cooling	Free Air Convection	

## Regulatory.

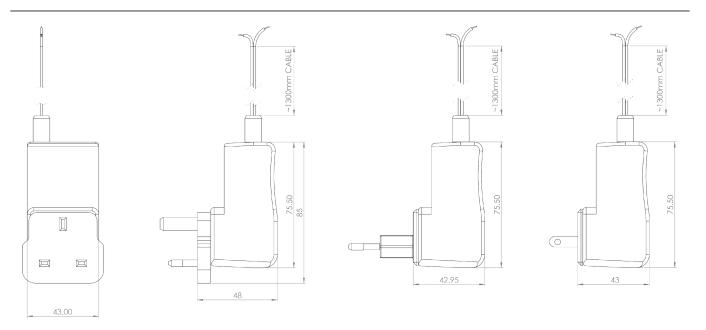
	CE	CISPR32/EN55032 Class B
Emissions	RE	CISPR32/EN55032 Class B
	FCC	Part 15 Class B
	Harmonic Current	EN61000-3-2 / EN61000-3-3
	ESD	IEC/EN 61000-4-2 (Contact ±4KV / Air ±8KV)
Immunity	Surge	IEC/EN 61000-4-5 (Line - Line ±1KV, Line - GND ±2KV)
	PFMF	IEC/EN 61000-4-8
	Voltage Dips, Short Interruptions and Voltage Variations Immunity	IEC/EN 61000-4-11
Supply Chain		NDAA & TAA Compliant



# Product Characteristic Curve.



## **Product Dimensions.**



## Part Numbers.

#### 25W Light Industrial Plug-Top / Wall-Wart Power Supplies

AMGPSU-W12-P25

Light Industrial Plug-Top Power Supply, 12V Nominal Output, 25W (2.08A), UK/EU/US Heads

## Notes.

Included Accessories:

 $\ensuremath{\mathsf{UK}}\xspace / \ensuremath{\mathsf{EU}}\xspace / \ensuremath{\mathsf{US}}\xspace$  user changeable plug heads included

Unless otherwise specified, parameters in this datasheet were measured under the conditions of Ta=25°C. humidity <75% with nominal input voltage and rated output load. In a continuing effort to improve and advance technology, product specifications are subject to change without notice. Please visit www.amgsystems.com for the latest product specifications.

