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_{△C} input range
- Output short circuit protection included as standard
- High I/O isolation test voltage up to 4200V_{DC}
- 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		Тур.	Max.	Unit	
Output Voltage Accuracy	Full Load Range	-	±1	-		
Line Regulation	Rated Load	±0.5	-	±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 ripple and noise test, output parallel 47µF electrolytic capacitor and 0.1µF ceramic capacitor.						



Specifications.

General.

Characteristics	Operating Conditions	Min.	Тур.	Max.	Unit	
Dielectric Withstanding Voltage (P-S)	Primary to Secondary	-	-	- 4242 VDC		
Electro Static Discharge	Air Discharge - IEC61000-4-2	-	-	8	137	
	Contact Discharge - IEC61000-4-2	-	-	4	kV	
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	a/DII	
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				

Mechanical.

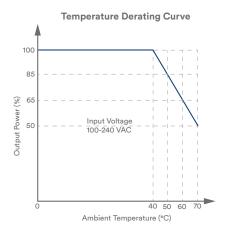
Case Material	Plastic	
Dimensions	85 × 43 × 48 mm (3.35 × 1.69 × 1.89 in) (H x W x D)	
Weight	0.16 kg (0.35 lb)	
Cooling	Free Air Convection	

Regulatory.

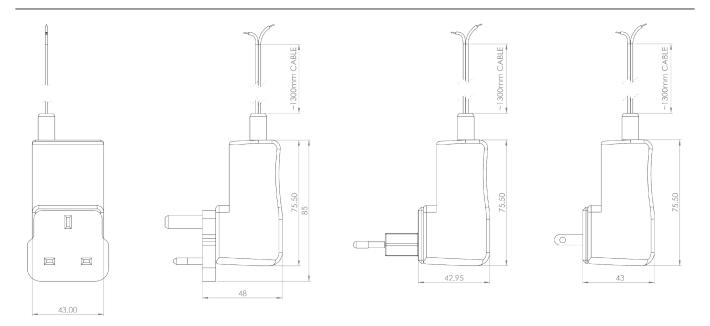
Emissions	CE	CISPR32/EN55032 Class B
	RE	CISPR32/EN55032 Class B
	FCC	Part 15 Class B
	Harmonic Current	EN61000-3-2 / EN61000-3-3
Immunity	ESD	IEC/EN 61000-4-2 (Contact ±4KV / Air ±8KV)
	Surge	IEC/EN 61000-4-5 (Line - Line ±1KV, Line - GND ±2KV)
	PFMF	IEC/EN 61000-4-8
	Voltage Dips, Short Interruptions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

UK / EU / US 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.

