

# AMGPSU-I48-P240

## INDUSTRIAL DIN-RAIL

### 240W POWER SUPPLY

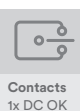


## Industrial Power Solutions

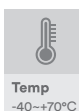
AMG's industrial DIN-Rail 240W power supplies provide reliable power for AMG PoE based products and ensure stable equipment operation over a wide temperature range. They are suitable for all AMG PoE products (depending on voltage).



PSU 240W  
48V



Contacts  
1x DC OK



Temp  
-40~+70°C



Mounting  
DIN

[ AMGPSU-I48-P240 ]

### / OVERVIEW

Designed in an ultra slim, robust DIN rail housing, the AMGPSU-I48-P240 series industrial power supplies are ideally suited for powering AMG PoE Ethernet equipment. Its wide operating temperature range ensures reliable operation in harsh environments.

Available in a 48-53V output version ensures the power supply is suitable for any 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 IEC62368 standards for EMC and are safety approved to IEC/EN61000-4, CISPR32, EN55032, UL61010, IEC62368 and EN62368.

A wide voltage input range that features dual-use inputs for both DC and AC voltages that support 85-264V<sub>AC</sub> or 120-373V<sub>DC</sub> ensures the widest possible site support.

A range of other output power levels are available within the AMGPSU product range.

### / FEATURES

- Ultra slim size – ideal for confined spaces, including camera poles and roadside cabinets
- -40°C to +70°C temperature maintains performance in harsh conditions
- DIN rail mountable – quick to install and remove for maintenance
- High efficiency - up to 94% typical
- Universal 85-264V<sub>AC</sub> or 120-373V<sub>DC</sub> input range
- Output short circuit, over-current and over-voltage protection included as standard
- High I/O isolation test voltage up to 3000V<sub>AC</sub>
- Built-in active Power Factor Correction (PFC) function
- 150% peak load output for 3 seconds
- EN62368 & UL safety approved
- AMG 3 Year Support Warranty

# Specifications.

## Input.

Characteristics	Operating Conditions	Min.	Typ.	Max.	Unit
Input Voltage Range	AC Input	85	-	264	VAC
	DC Input	120	-	373	VDC
Input Frequency		47	-	63	Hz
Input Current	115VAC	-	-	3	A
	230VAC	-	-	1.5	
Inrush Current	115VAC Cold Start	-	15	-	
	230VAC Cold Start	-	30	-	
Power Factor	115VAC	-	0.98	-	-
	230VAC	-	0.94	-	
Leakage Current	264VAC	<0.5mA			

## Output.

Characteristics	Operating Conditions	Min.	Typ.	Max.	Unit
Output Voltage Accuracy	Full Load Range	-	±1	-	%
Line Regulation	Rated Load	-	±0.5	-	
Load Regulation	0% - 100% Load	-	±1	-	
Output Ripple & Noise*	20MHz Bandwidth (peak-to-peak value)	-	75	150	mV
Stand-by Power Consump.		-	4	-	W
Short Circuit Protection	Recovery time <10s after the short circuit disappears	Constant Current, Continuous, Self-Recovery			
Over-Current Protection	230VAC Rated Load, Normal/High Temp	110%-200% I <sub>o</sub> , Self-Recovery			
	230VAC Rated Load, Low Temp	≥105% I <sub>o</sub> , Self-Recovery			
Over-Voltage Protection		≤60V (Output Voltage Turn Off, Re-Power Unit For Recovery)			
Over-Temperature Protect	230VAC Rated Load	-	80	-	°C
Minimum Load		0	-	-	%
Start-up Delay Time		-	-	3	s
Hold-up Time		-	20	-	ms
DC OK Relay Output	Normally Closed (Open With DC Fault)	30VDC @ 1A Max			

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.	Typ.	Max.	Unit
Isolation Test	Input-Earth	Electric Strength Test for 1 min., (leakage current <15mA)	2000	-	-	VAC
	Input-Output		3000	-	-	
	Output-Earth		500	-	-	
Insulation Resistance	Input-Earth	At 500 VDC	50	-	-	M $\Omega$
	Input-Output		50	-	-	
	Output-Earth		50	-	-	
Operating Temperature			-40	-	+70	°C
Storage Temperature			-40	-	+85	
Operating Humidity		Non-Condensing	-	-	90	%RH
Storage Humidity		Non-Condensing	-	-	95	
Switching Frequency			-	100	-	kHz
Operating Temperature Power Derating	-40°C to -25°C		3.34	-	-	% / °C
	+45°C to +70°C (115VAC)		2	-	-	
	+60°C to +70°C (230VAC)		2.5	-	-	
Input Voltage Derating		85VAC to 100VAC	0.67	-	-	%/VAC
Safety Standard			IEC/EN/UL62368 UL61010			
Safety Class			Class I			
MTBF		MIL-HDBK-217F @ 25°C	>300,000 hours			

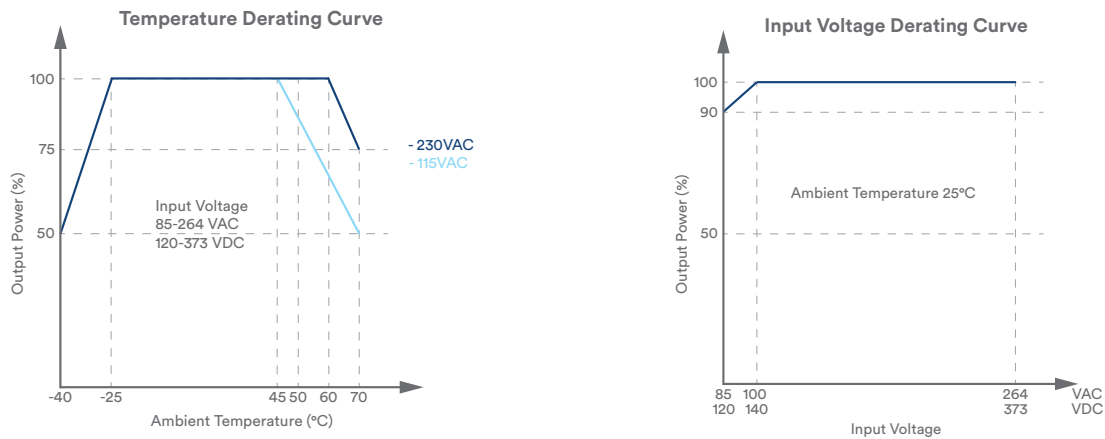
## Mechanical.

Case Material	Aluminium
Dimensions	124 × 41 × 110 mm (4.88 × 1.61 × 4.33 in) (H x W x D)
Weight	0.65 Kg
Cooling	Free Air Convection

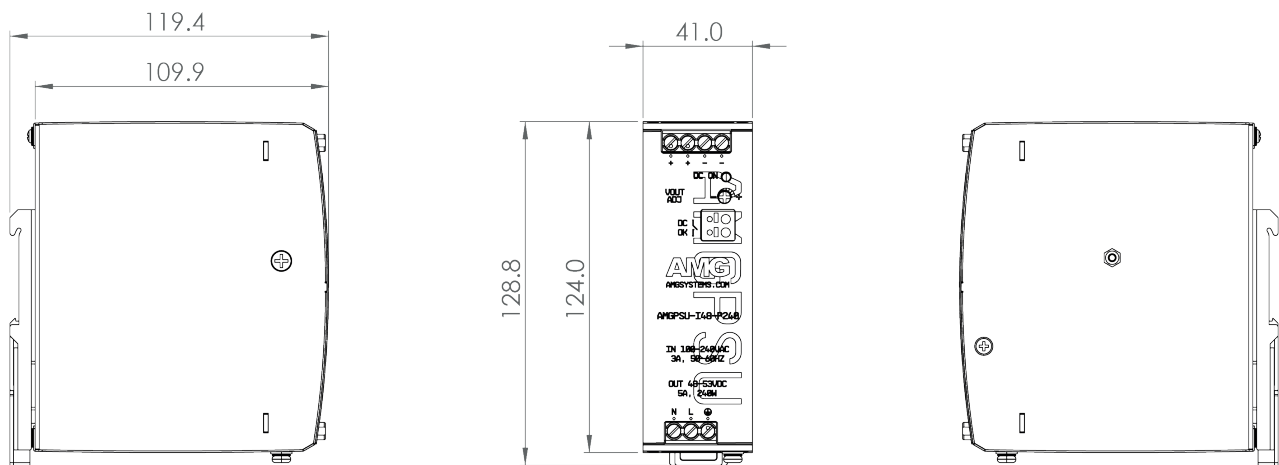
## Regulatory.

Emissions	CE	CISPR32/EN55032 Class B
	RE	CISPR32/EN55032 Class B
	Harmonic Current	IEC/EN61000-3-2 Class A
Immunity	ESD	IEC/EN 61000-4-2 (Contact ±6KV / Air ±8KV)
	RS	IEC/EN 61000-4-3 (10V/m)
	EFT	IEC/EN 61000-4-4 (±4KV)
	Surge	IEC/EN 61000-4-5 (Line - Line ±2KV, Line - GND ±4KV)
	CS	IEC/EN 61000-4-6 (10V r.m.s)
	Voltage Dips, Short Interruptions and Voltage Variations Immunity	IEC/EN 61000-4-11 (0%, 70%)

# Product Characteristic Curve.



# Product Dimensions.



# Part Numbers.

## 240W Industrial DIN-Rail Power Supplies

AMGPSU-I48-P240	Industrial DIN Rail Power Supply, 48V Nominal Output (48-53V Adjustable), 240W (5A)
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# Notes.

Unless otherwise specified, parameters in this datasheet were measured under the conditions of Ta=25°C. humidity <75% RH 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](http://www.amgsystems.com) for the latest product specifications.

