AMGPSU-I[12,24,48]-P[54,60]
INDUSTRIAL DIN-RAIL
54/60W POWER SUPPLY

Industrial Power Solutions

AMG's industrial DIN-Rail 54/60W power supplies provide reliable power for AMG standard and PoE based products and ensure stable equipment operation over a wide temperature range. They are suitable for all AMG standard as well as PoE products (depending on voltage).

PSU 54W	PSU 60W	Temp	Mounting
12V	24/48V	-40~+70°C	DIN

[AMGPSU Series]

OVERVIEW

Designed in a compact, robust DIN rail housing, the AMGPSU-I[12,24,48]-P[54,60] series industrial power supplies are ideally suited for powering AMG standard and PoE Ethernet equipment. Its wide operating temperature range ensures reliable operation in even the harshest environments.

Available in 12, 24 or 48V output versions ensure the correct power supply is available for any 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, UL62368, IEC62368 and EN62368.

A wide voltage input range that features dual-use inputs for both DC and AC voltages that support 85-264V_{AC} or 120-370V_{DC} ensures the widest possible site support.

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

FEATURES

- Compact size – ideal for confined spaces, including camera poles and roadside cabinets
- -40°C to +70°C temperature maintains performance in extreme conditions
- DIN rail mountable – quick to install and remove for maintenance
- High efficiency - up to 91% typical
- Universal 85-264V_{AC} or 120-370V_{DC} input range
- Output short circuit, over-current and over-voltage protection included as standard
- High I/O isolation test voltage up to 4000V_{AC}
- Low ripple & noise
- Withstand 300V_{AC} surge input for 5 seconds
- EN62368 & UL safety approved
- AMG 3 Year Support Warranty

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Specifications.

Input.

Characteristics	Operating Conditions	Min.	Typ.	Max.	Unit
Input Voltage Range	AC Input	85	-	264	VAC
	DC Input	120	-	370	VDC
Input Frequency		47	-	63	Hz
Input Current	115VAC	-	-	1.2	A
	230VAC	-	-	0.8	
Inrush Current	115VAC	-	30	-	
	230VAC	-	60	-	
Leakage Current	264VAC	0.25mA RMS max.			
Connector		2-Way Screw Terminal			

Output.

Characteristics	Operating Conditions		Min.	Typ.	Max.	Unit
Output Voltage Accuracy	0% - 100% Load		-	±2	-	%
Line Regulation	Rated Load		-	±0.5	-	
Load Regulation	230VAC		-	±1.5	-	
Output Ripple & Noise	20MHz Bandwidth (peak-to-peak value)	12V Output	-	-	120	mV
		24V Output	-	-	150	
		48V Output	-	-	240	
Temperature Coefficient			-	±0.02	-	%/°C
Stand-by Power Consump.	230VAC Input	12V/24V Output	-	-	0.3	W
		48V Output	-	-	0.4	
Short Circuit Protection			Hiccup, Continuous, Self-Recover			
Over-Current Protection			≥120%Io, Self-Recovery			
Over-Voltage Protection	12V Output		≤16V (Output Clamp or Hiccup)			
	24V Output		≤36V (Output Clamp or Hiccup)			
	48V Output		≤60V (Output Clamp or Hiccup)			
Minimum Load			0	-	-	%
Start-up Delay Time			-	-	3	s
Hold-up Time	115VAC		-	15	-	ms
	230VAC		-	80	-	
Connector			4-Way Screw Terminal			

Note: *Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF & 47μF parallel capacitor.

Mechanical.

Case Material	Plastic, Heat-Resistant (UL94V-0)
Dimensions	92.7 × 52 × 58 mm (3.65 × 2.05 × 2.28 in) (H x W x D)
Weight	0.175 Kg
Cooling	Free Air Convection

Specifications.

General.

Characteristics		Operating Conditions		Min.	Typ.	Max.	Unit
Isolation Test	Input-Output	Electric Strength Test for 1 min., (leakage current <5mA)		4000	-	-	VAC
Operating Temperature				-40	-	+70	°C
Storage Temperature				-40	-	+85	
Storage Humidity				-	-	95	%RH
Operating Altitude				-	-	2000	m
Switching Fequency				-	65	-	kHz
Power Derating		-40°C to -30°C	12V/48V Output	3.0	-	-	%/°C
			24V Output	7.0	-	-	
		+45°C to +70°C		2.0	-	-	
		85VAC - 100VAC		1.0	-	-	
Safety Standard				UL62368/EN62368/IEC62368			
Safety Certification				EN62368			
Safety Class				Class II			
MTBF		MIL-HDBK-217F @ 25°C		>300,000 hours			

Regulatory.

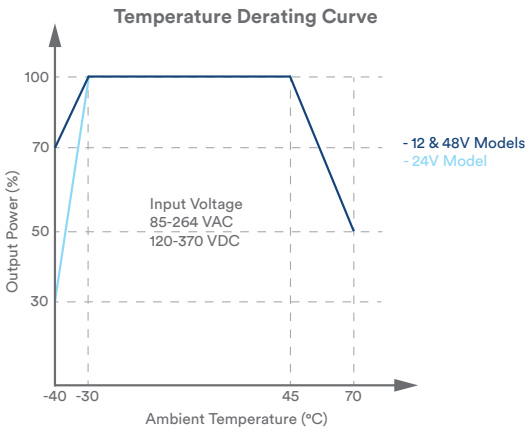
Emissions	CE	CISPR32/EN55032 Class B
	RE	CISPR32/EN55032 Class B
Immunity	ESD	IEC/EN 61000-4-2 (Contact ±6KV / Air ±8KV)
	RS	IEC/EN 61000-4-3 (10V/m)
	EFT	IEC/EN 61000-4-4 (±2KV)
	Surge	IEC/EN 61000-4-5 (Line to Line ±2KV)
	CS	IEC/EN 61000-4-6 (10V r.m.s)
	Voltage Dips, Short Interruptions and Voltage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

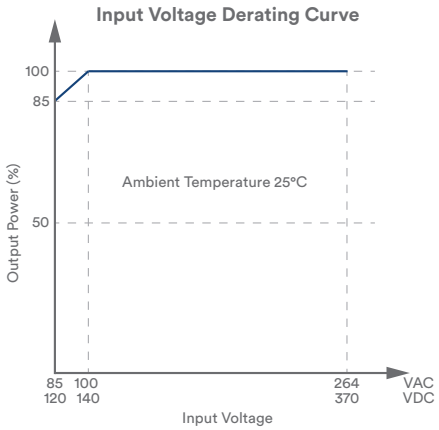
Part Numbers.

54/60W Industrial DIN-Rail Power Supplies

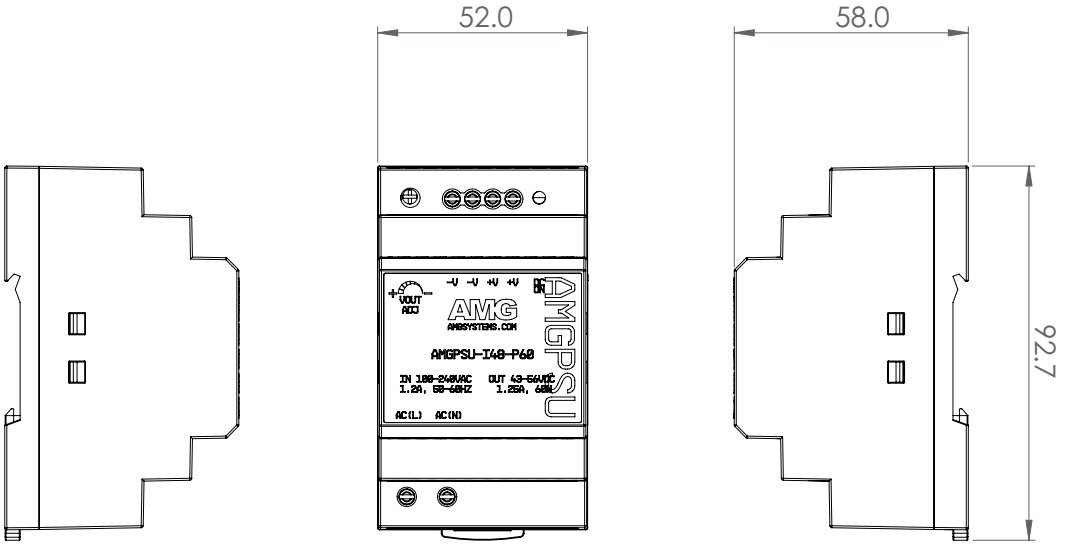
AMGPSU-I12-P54	Industrial DIN Rail Power Supply, 12V Nominal Output (10.8-13.8V Adjustable), 54W (4.5A)
AMGPSU-I24-P60	Industrial DIN Rail Power Supply, 24V Nominal Output (21.6-29.0V Adjustable), 60W (2.5A)
AMGPSU-I48-P60	Industrial DIN Rail Power Supply, 48V Nominal Output (43.2-56.0V Adjustable), 60W (1.25A)

Product Characteristic Curve.





Product Dimensions.



Notes.

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.

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