

# AMGPSU-I48-P60A INDUSTRIAL DIN-RAIL 60W POWER SUPPLY



## Industrial Power Solutions

AMG's industrial DIN-Rail 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 60W 52V (43-55)	Temp -25~+70°C	Mounting DIN	NDAA Compliant

[ AMGPSU-I48-P60A ]

### / OVERVIEW

Designed in a compact, robust DIN rail housing, the AMGPSU-I48-P60A 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.

With native 52V output and a user adjustable range of 43-55V ensure the correct power output voltage is available for any PoE based 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 EN55032 Class B standards for EMC and are safety approved to UL62368-1 and BS EN / EN62368-1.

A wide voltage input range that features dual-use inputs for both DC and AC voltages that support 90-264V<sub>AC</sub> or 127-370V<sub>DC</sub> 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
- -25°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 90-264V<sub>AC</sub> or 127-370V<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 4000V<sub>AC</sub>
- Low ripple & noise
- Withstand 300V<sub>AC</sub> surge input for 5 seconds
- BS EN / EN62368 & UL safety approved
- AMG 3 Year Support Warranty

# Specifications.

## Input.

Characteristics	Operating Conditions	Min.	Typ.	Max.	Unit
Input Voltage Range	AC Input	90	-	264	VAC
	DC Input	127	-	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	-	±1	-		
Load Regulation	230VAC	-	±1	-		
Output Ripple & Noise	20MHz Bandwidth (peak-to-peak value)	-	-	240	mV	
Temperature Coefficient	0~50°C RH Non-Condensing	-	±0.03	-	%/°C	
Stand-by Power Consump.	230VAC Input	52V Output	-	-	0.4	W
Short Circuit Protection		Hiccup, Continuous, Self-Recover				
Over-Current Protection		≥105%Io, Self-Recovery				
Over-Voltage Protection	52V Output	56.5-66V (Shutdown o/p Voltage)				
Minimum Load		0	-	-	%	
Start-up Delay Time		-	-	0.5	s	
Hold-up Time	115VAC	-	12	-	ms	
	230VAC	-	30	-		
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	90 × 52 × 58 mm (3.54 × 2.05 × 2.28 in) (H x W x D)
Weight	0.19 kg (0.42 lb)
Cooling	Free Air Convection

# Specifications.

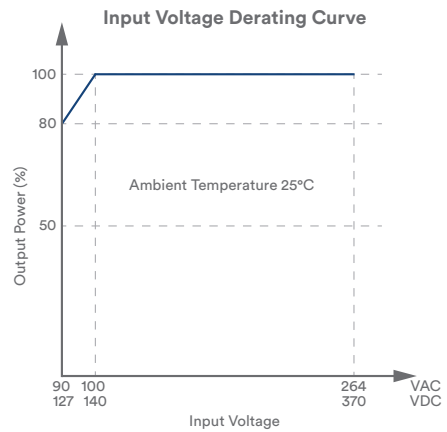
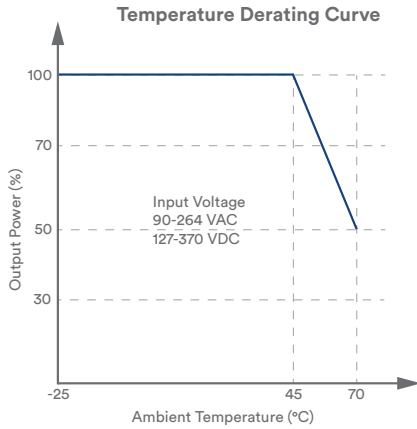
## General.

Characteristics		Operating Conditions	Min.	Typ.	Max.	Unit
Isolation Test	Input-Output	Electric Strength Test for 1 min., (leakage current <5mA)	4000	-	-	VAC
Operating Temperature			-25	-	+70	°C
Storage Temperature			-40	-	+85	
Operating Humidity		Non-Condensing	20	-	90	%RH
Storage Humidity		Non-Condensing	10	-	95	%RH
Operating Altitude			-	-	5000	m
Switching Frequency			-	65	-	kHz
Power Derating		+45°C to +70°C	2.0	-	-	%/°C
		90VAC - 100VAC	2.0	-	-	%/VAC
Safety Standard			UL62368-1 / EN62368-1			
Safety Class			Class II			
MTBF		MIL-HDBK-217F @ 25°C	>900,000 hours			

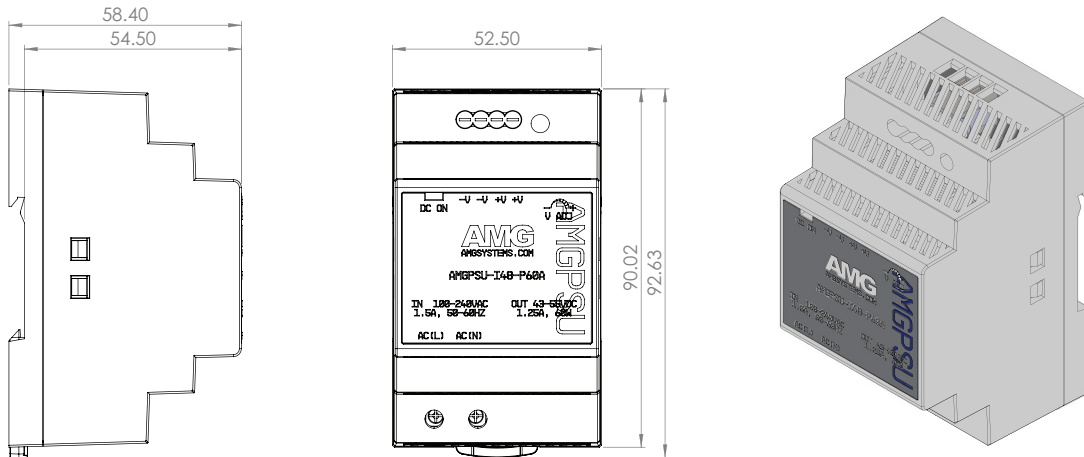
## Regulatory.

Emissions	CE	CISPR32, BS EN / EN55032 Class B BS EN / EN 61000-3-2 BS EN / EN 61000-3-3
	RE	CISPR32, BS EN / EN55032 Class B
Immunity	ESD	BS EN / EN 61000-4-2 (Contact ±6KV / Air ±8KV)
	RS	BS EN / EN 61000-4-3 (10V/m)
	EFT	BS EN / EN 61000-4-4 (±2KV)
	Surge	BS EN / EN 61000-4-5 (Line to Line ±2KV)
	CS	BS EN / EN 61000-4-6 (10V r.m.s)
	PFMF	BS EN / EN 61000-4-8
	Voltage Dips, Short Interruptions and Voltage Variations Immunity	IEC/EN 61000-4-11 (0%, 70%)
Traffic		NEMA TS2
Supply Chain		NDAA Compliant

# Product Characteristic Curve.



# Product Dimensions.



# Part Numbers.

## 60W Industrial DIN-Rail Power Supplies

AMGPSU-I48-P60A	Industrial DIN Rail Power Supply, 52V Nominal Output (43-55V Adjustable), 60W (1.15A)
AMGPSU-I48-P60A-K	Industrial DIN Rail Power Supply Kit, 52V, 60W (1.15A), DIN Rail, Mains & DC Cables Included

# Notes.

Included Accessories: Region Specific Stripped Power Cord (UK, EU, US), 125mm (5in) DIN Rail, 400mm (16in) DC Power Cable (-K Models Only)

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](http://www.amgsystems.com) for the latest product specifications.*

