

AMGPSU-I48-P145

INDUSTRIAL DIN-RAIL

145W POWER SUPPLY



Industrial Power Solutions

AMG's industrial DIN-Rail 145W 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).



[AMGPSU-I48-P145]

				
PSU 145W 48V (48-55)	Contacts 1x DC OK	Temp -25~+70°C	Mounting DIN	NDAA/TAA Compliant

/ OVERVIEW

Designed in a compact, robust DIN rail housing, the AMGPSU-I48-P145 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 48-55V 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.

AMG's unique low temperature boost mode allows the power supply to deliver continuous 180W power output up to +40°C and high temperature boost mode provides 180W output power for up to 3 minutes at +60°C

A wide voltage input range that features dual-use inputs for both DC and AC voltages that support 90-135V_{AC} and 180-264V_{AC} 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 harsh conditions
- DIN rail mountable – quick to install and remove for maintenance
- High efficiency - up to 91% typical
- Low temperature boost mode provides continuous 180W power output up to +40°C
- Output short circuit, over-current and over-voltage protection included as standard
- High I/O isolation test voltage up to 3000V_{AC}
- Supports parallel connection mode for 1+1 redundancy
- EN, IEC & UL508 safety approved
- Designed and manufactured in EU (TAA Compliant)
- AMG 3 Year Support Warranty

Specifications.

Input.

Characteristics	Operating Conditions	Min.	Typ.	Max.	Unit
Input Voltage Range (Manual Input Select Switch)	AC Input (115V)	90	-	135	VAC
	AC Input (230V)	180	-	264	VAC
Input Frequency		47	-	63	Hz
Input Current	115VAC	-	-	2.8	A
	230VAC	-	-	1.3	
Inrush Current	≤5 msec	-	≤11	-	
Internal Fuse		4A			
External Fuse (Recommended)		10A (Curve B)			
Connector		3-Way Screw Terminal			

Output.

Characteristics	Operating Conditions	Min.	Typ.	Max.	Unit
Rated Current	48VDC @ 40°C	-	-	3.75	A
	48VDC @ 50°C	-	-	3	
	48VDC @ 60°C	-	-	2.5	
Output Ripple & Noise*	20MHz Bandwidth (peak-to-peak value)	-	80	-	mV
Short Circuit Protection	3 User Configurable Modes With Jumper Selection	Hiccup Mode			
		Continuous Out Mode			
		Manual Reset			
Over-Current Protection		Yes			
Over-Voltage Protection		≤72V (Output Voltage Turn Off, Re-Power Unit For Recovery)			
Over-Temperature Protect	230VAC Rated Load	-	80	-	°C
Minimum Load		0	-	-	%
Start-up Delay Time		-	-	1	s
Hold-up Time		-	20	-	ms
DC OK Relay Output	Normally Closed (Open With DC Fault)	30VDC @ 1A Max 60VAC @ 1A Max			
Connector		6-Way Screw Terminal			

Note: *The "tip and barrel method" is used for ripple and noise test, output parallel 47µF electrolytic capacitor and 0.1µF ceramic capacitor.

Mechanical.

Case Material	Aluminium
Protection Class	IP20
Dimensions	110 × 55 × 105 mm (4.33 × 2.16 × 4.13 in) (H x W x D)
Weight	0.60 kg (1.32 lb)
Cooling	Free Air Convection

Specifications.

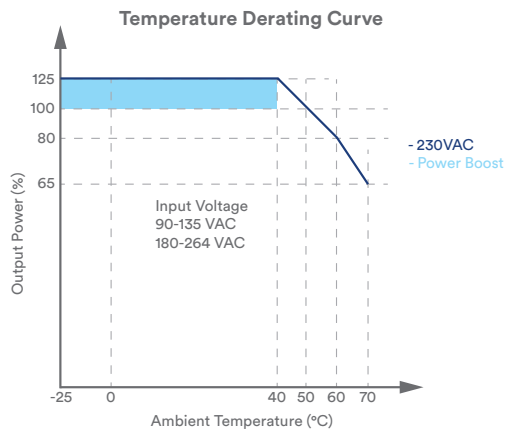
General.

Characteristics		Operating Conditions	Min.	Typ.	Max.	Unit
Isolation Test	Input-Earth	Electric Strength Test for 1 min., (leakage current <15mA)	1605	-	-	VAC
	Input-Output		3000	-	-	
	Output-Earth		500	-	-	
Operating Temperature			-25	-	+70	°C
Storage Temperature			-40	-	+85	
Operating Humidity		@ 25 °C	-	-	95	%RH
Operating Temperature Power Derating		+50°C to +60°C	1	-	-	% / °C
		+60°C to +70°C	2.5	-	-	
Safety Standard			IEC/EN 60950 (VDE 0805) EN 50178 (VDE 0160) EN/IEC 61010-2-201:2018 UL 508			
Safety Class		With PE Connected	Class I			
MTBF		IEC61709 @ 25°C	>500,000 hours			

Regulatory.

Emissions	CE	EN 61000-6-4 EN 61000-3-2
Immunity	ESD	EN 61000-4-2
	RS	EN 61000-4-3
	EFT	EN 61000-4-4
	Surge	EN 61000-4-5
	Industrial Environments	EN 61000-6-2
Standards	Safety of Electrical Equipment Machines	EN 60204-1
Traffic		Designed To Meet NEMA TS2
Supply Chain		NDAA & TAA Compliant

Product Characteristic Curve.



Part Numbers.

145W Industrial DIN-Rail Power Supplies

AMGPSU-I48-P145	Industrial DIN Rail Power Supply, 48V Nominal Output (48-55V Adjustable), 145W (3A)
AMGPSU-I48-P145-K	Industrial DIN Rail Power Supply Kit, 48V, 145W (3A), DIN Rail, Mains & DC Cables Included*

* 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 for the latest product specifications.

