AMGPSU-I48-P480-IEC INDUSTRIAL DIN-RAIL **480W POWER SUPPLY**



Industrial Power Solutions

AMG's industrial DIN-Rail 480W 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-P480-IEC]











OVERVIEW

Designed in an ultra slim, robust DIN rail housing, the AMGPSU-I48-P480 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.

Compliant to the international UL 61010, EN and BS 62368 standards for safety and are EMC approved to IEC/EN61000-4, CISPR32, EN55032 and EN61000-3-2.

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.

Featuring a unique IEC C14 input connector provides a quick and easy installation method without the need for special certifications or qualifications to install.

/ 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 94.5% typical
- Universal 85-264 V_{AC} or 120-370 V_{DC} input range with IEC C14 connector for quick and easy installation
- Output short circuit, over-current and over-voltage protection included as standard
- High I/O isolation test voltage up to 3000V_{AC}
- Built-in active Power Factor Correction (PFC) function
- 125% peak load output for 3 seconds
- EN62368-01 & UL61010 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	-	370	VDC
Input Frequency		47	-	63	Hz
Input Current	115VAC	-	-	5	A
	230VAC	-	-	2.5	
Inrush Current	115VAC Cold Start	-	-	35	
	230VAC Cold Start	-	-	35	
Power Factor	115VAC	-	0.99	-	-
	230VAC	-	0.99	-	
Leakage Current	264VAC		<0.8mA		
Connector			IEC C14 Type		

Output.

Characteristics	Operating Conditions	Min.	Тур.	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)	-	-	70	mV
Stand-by Power Consump.		-	2	-	W
Short Circuit Protection	Recovery time <10s after the short circuit disappears	Hiccup, Continuous, Self-Recovery			5,
Over-Current Protection	230VAC Rated Load	150% Io, Continuous, Self-Recovery			
Over-Voltage Protection		56-60V (Output Voltage Hiccup)			
Over-Temperature Protect	230VAC, 70% Load	60	-	90	°C
Minimum Load		0	-	-	%
Start-up Delay Time	230VAC	-	300	1000	ms
Hold-up Time		16	22	-	ms
DC OK Relay Output	Normally Closed (Open With DC Fault)	30VDC @ 1A Max			
Connector		5-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 capac	citor.		

Mechanical.

Case Material	Aluminium	
Dimensions	155 × 50 × 150 mm (6.10 × 1.97 × 5.91 in) (H x W x D)	
Weight	1.03 kg (2.27 lb)	
Cooling	Free Air Convection	



Specifications.

General.

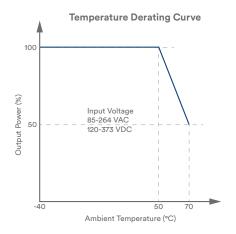
Characteristics		Operating Conditions	Min.	Тур.	Max.	Unit
Isolation Test	Input-Earth	Electric Strength Test for 1 min., (leakage current <15mA)	2000	-	-	VAC
	Input-Output		3000	-	-	
	Output-Earth		500	-	-	
Insulation Resistance	Input-Earth	At 500 VDC	100	-	-	
	Input-Output		100	-	-	ΜΩ
	Output-Earth		100	-	-	
Operating Ten	nperature		-40	-	+70	°C
Storage Temperature			-40	-	+85	
Operating Humidity		Non-Condensing	20	-	90	%RH
Storage Humidity			10	-	95	
Switching Fequency			-	100	-	kHz
Operating Ter Power Deratin	•	+50°C to +70°C	2.5 %/°C		%/°C	
Input Voltage Derating		85VAC to 100VAC	1	-	-	%/VAC
Safety Standa	Safety Standard EN/BS/62368-1, IS132 UL61010-1, UL61010		*	,		
Safety Class			Class I			
MTBF		MIL-HDBK-217F @ 25°C	>300,000 hours			

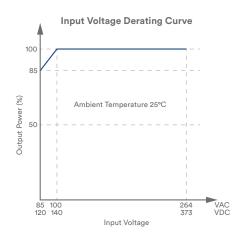
Regulatory.

Emissions	CE	CISPR32/EN55032 Class B
	RE	CISPR32/EN55032 Class B
	Harmonic Current	IEC/EN61000-3-2 Class A & Class D
Immunity	ESD	IEC/EN 61000-4-2 (Contact ±8KV / Air ±15KV)
	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%)
Traffic		NEMA TS2
Supply Chain		NDAA Compliant

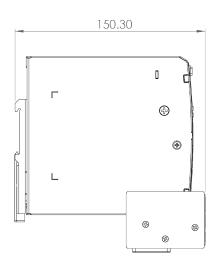


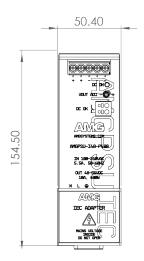
Product Characteristic Curve.

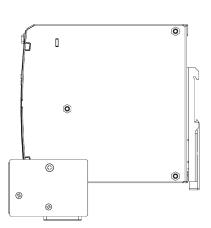




Product Dimensions.







Part Numbers.

480W Industrial DIN-Rail Power Supplies With IEC Input

AMGPSU-I48-P480-IEC Industrial DIN Rail Power Supply Kit, 48V Nominal Output (48-55V Adjustable), 480W (10A)

Notes.

Included Accessories:

Region Specific Left Angle IEC Line Cord (UK, EU, US), 125mm (5in) DIN Rail, 400mm (16in) DC Power Cable

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 for the latest product specifications.

