







AMGUPS-I48-P240 INDUSTRIAL DIN-RAIL 240W UPS



Industrial Power Solutions

AMG's industrial DIN-Rail all in one uninterruptible power supplies provide reliable power for AMG PoE based products and ensure stable equipment operation over a wide temperature range with external battery backup & charging capability



 PSU 240W 48V	 UPS Backup	 Contacts 2x Fault	 Temp -25~+70°C	 Mounting DIN	 NDAA/TAA Compliant
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[AMGUPS-I48-P240]

/ OVERVIEW

Designed in a robust DIN rail housing, the AMGUPS-I48-P240 series industrial all in one uninterruptible power supplies are ideally suited for powering AMG PoE Ethernet equipment. Its wide operating temperature range ensures reliable operation in harsh environments.

The UPS automatically manages the distribution of power between the load and battery, supplying power to the load as the first priority.

Connected batteries are monitored and charged using intelligent algorithms to ensure correct charging and conditioning ensuring the maximum possible lifespan is achieved. Real-time LED diagnostic blink codes aid in the installation and trouble shooting of any issues.

A wide variety of battery types are supported with user configurable jumpers setting predefined intelligent charging curves for Open Lead Acid, Sealed Lead Acid, Gel and Li-Ion battery types.

The AMGUPS is manufactured in the EU.

/ FEATURES

- -25°C to +70°C temperature maintains performance in harsh conditions
- DIN rail mountable – quick to install and remove for maintenance
- High efficiency - >83% typical
- Universal 90-135V_{AC} or 180-305V_{AC} input ranges
- Supports open lead acid, sealed lead acid, lead gel and Li-Ion battery types
- Charging 48V_{DC} up to 5A
- 3 Charging levels - Boost, Float & Recovery
- Automatic diagnostic of battery status
- High I/O isolation test voltage up to 3000V_{AC}
- Contact closure outputs for mains failure & discharged or damaged battery
- AMG 3 Year Support Warranty

Specifications.

Input.

Characteristics	Operating Conditions	Min.	Typ.	Max.	Unit
Input Voltage Range	AC Input	90	-	135	VAC
		180	-	305	VAC
Input Frequency		47	-	63	Hz
Input Current	115VAC	-	-	5	A
	230VAC	-	-	2.5	
Inrush Current	≤5 msec	-	-	≤16	
Fuse	Internal (not replaceable)	6.3A			
	External (recommended)	16A MCB Curve B			
Connector		5-Way Screw Terminal			

Output (Internal Power Supply).

Characteristics	Operating Conditions	Min.	Typ.	Max.	Unit
Output Voltage	(V_n)	-	48	-	VDC
Output Current	($I_n - I_{load}$)	-	-	5	A
Efficiency	50% of rated current	83	-	-	%
Output Ripple		-	-	80	mV
Dissipation Power Load		-	-	28	W
Short Circuit Protection		Yes			
Over-Load Protection		Yes			
Over-Voltage Protection		-	90	-	VDC
Over-Temperature Protect		Yes			
Start-up Delay Time		-	-	1.5	s

Output (Battery).

Characteristics	Operating Conditions	Min.	Typ.	Max.	Unit
Output Battery Voltage		Follows Load Output			
Maximum Time Boost-Bulk Charge (Typical at I_n)		-	-	15	Hour
Minimum Time Boost-Bulk Charge (Typical at I_n)		1	-	-	Min
Recovery Charge		2	-	42	VDC
Charging Current	($I_{batt} \pm 5\%$)	-	-	5	A
Charging Current Limiting	(I_{adj})	20 ÷ 100% / I_{batt}			
Reverse Battery Protection		Yes			
Sulfated Battery Check	(by jumper)	Yes			
Short Circuit Element Detection		Yes			
Detection of Element In Short Circuit		Yes			
Quiescent Current		-	-	≤100	mA
Charging Curve	Automatic	4 Stage			

Specifications.

Output (Load).

Characteristics	Operating Conditions	Min.	Typ.	Max.	Unit
Output Load Voltage	(at I_n)	44	-	57.6	VDC
Nominal Current	(I_{load})	1.1 x I_n A $\pm 5\%$			
Continuous Current (Without Battery) $I_{load} = I_n$		-	-	5	A
Continuous Current (With Battery) $I_{load} = I_n + I_{batt}$		-	-	10	A
Maximum Current Output Load (Mains & Full Battery) I_{load} (4 seconds)		-	-	15	A
Maximum Current Output Load (No Mains, Full Battery) I_{load} (4 seconds)		-	-	10	A
Start From Battery Without Mains Input		Yes (2-Pin Remote Input)			
Threshold Alarm Battery Almost Flat		44	-	46	VDC
LVD (Protection Against Total Battery Discharge)		40	-	42	VDC

Fault Relay Outputs.

Characteristics	Min.	Typ.	Max.	Unit
Mains or Backup Input Power Relay	Yes (Form C)			
Low Battery Relay	Yes (Form C)			
Battery or System Fault Relay	Yes (Form C)			
Relay Specification	30 VDC @ 1A / 60 VAC @ 1A			

General.

Characteristics	Operating Conditions	Min.	Typ.	Max.	Unit
Isolation Test	Input-Earth	2000	-	-	VAC
	Input-Output	3000	-	-	
	Output-Earth	500	-	-	
Operating Temperature		-25	-	+70	°C
Storage Temperature		-40	-	+85	
Operating Humidity	Non-Condensing	-	-	95	%RH
Altitude	2,000 - 6,000m (6,560 - 20,000ft)	De-rating 5 °C / 1,000m			
Operating Temp Derating	+50°C to +70°C	2.5	-	-	%/°C
Safety Class		Class I			
Protection Class	EN/IEC 60529	IP20			
MTBF	IEC 61709	>300,000 hours			

Mechanical.

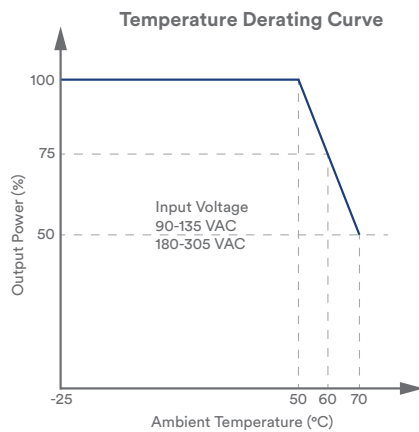
Case Material	Aluminium
Dimensions	115 x 100 x 135 mm (4.53 x 3.94 x 5.31 in) (H x W x D)
Weight	0.85 Kg (1.87 lb)
Cooling	Free Air Convection

Specifications.

Regulatory.

Safety		EN/IEC 62368-1 EN/UL 60950-1 CSA C22.2 No. 60950-1-07 EN54-4 Fire Detection & Alarm Systems
Emissions	CE	IEC 61000-6-4
Immunity	CE	IEC 61000-6-2
Environmental		Reach, RoHS, WEEE
Supply Chain		NDAA & TAA Compliant
NEMA		Designed To Meet NEMA TS2

Product Characteristic Curve.



Part Numbers.

240W Industrial DIN-Rail Uninterruptable Power Supplies

AMGUPS-I48-P240

Industrial DIN Rail Uninterruptable Power Supply, 48V Nominal Output, 240W (5A)

AMGUPS-BTEMP-1M

Industrial DIN Rail Uninterruptable Power Supply Battery Temperature Sensor Cable, 1M

Notes.

Unless otherwise specified, parameters in this datasheet were measured under the conditions of $T_a=25^\circ\text{C}$. 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.

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