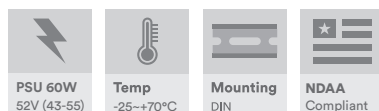


AMG's industrial DIN-Rail 60W power supplies provide reliable power for AMG standard and PoE based products and ensure stable equipment operation over a wide temperature range. They are suitable for all AMG standard as well as PoE products (depending on voltage).



/ 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 120-370V<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 120-370V<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             | 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                           |            | -                                | ±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. |                                      |            |                                  |       |      |      |

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.

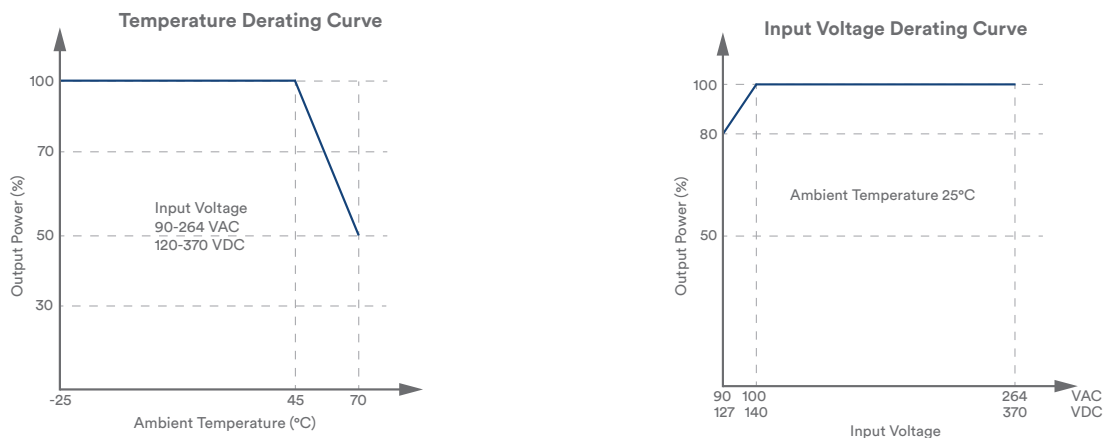
## General.

| Characteristics       |                | Operating Conditions                                         | Min.           | Typ. | Max. | Unit  |
|-----------------------|----------------|--------------------------------------------------------------|----------------|------|------|-------|
| Isolation Test        | Input-Output   | Electric Strength Test for 1 min.,<br>(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 Fequency    |                |                                                              | -              | 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 |      |      |       |
| Heat Dissipation      |                |                                                              | -              | -    | 20   | BTU/h |

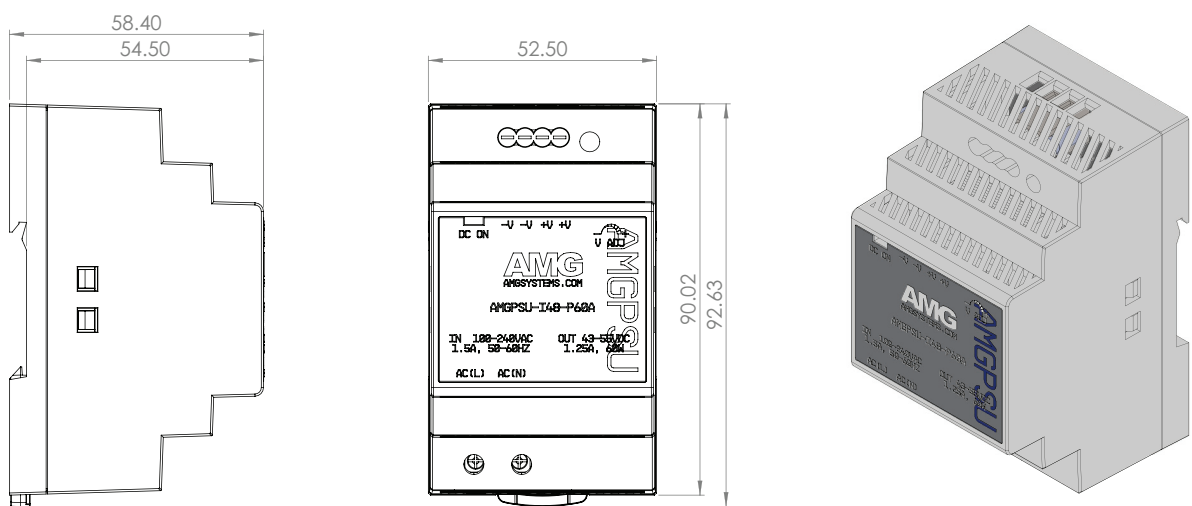
## Regulatory.

|              |                                                                      |                                                                                  |
|--------------|----------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Emissions    | CE                                                                   | CISPR32, BS EN / EN55032 Class B<br>BS EN / EN 61000-3-2<br>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<br>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* |

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