# AMG2013 $47-56V_{DC}$ , 480W Power Supply



# **Industrial Power Supplies**

The AMG2013 Power Supply is a 47-56V<sub>DC</sub>, 480W PoE/PoE+ Power Supply which is suitable for all AMG Industrial Ethernet Switches with up to 16x PoE+ ports.









[ AMG2013 ]

#### / OVERVIEW

AC - DC DIN Rail mountable 480W Class 2 Output.

#### / FEATURES

- AC/DC Power Module
- Universal Input 90~264V<sub>AC</sub>
- High Efficiency up to 90%
- Short Circuit Protection
- Internal Input Filter
- DIN Rail Mountable



## Specifications.

#### General.

Isolation Voltage 3000V<sub>AC</sub> Input to ground

1500V<sub>AC</sub> Input to ground 500V<sub>AC</sub> Output to ground

80kHz

Switching Frequency **Operating Temperature** -40 to +71°C

Derating Linearly from +55°C at 2.5%/°C, start up at -35°C

Free air convection cooled with 25mm free space on all sides Cooling

Operating Humidity 20 to 90% RH, non-condensing

Storage Temperature -40 to +85°C Dimension (W x D x H) 175 × 116 × 125 mm Free air convection Cooling

Case Material Metal

#### Input Specifications.

Input Voltage 90-264V<sub>AC</sub>, auto select,

120-375V<sub>DC</sub>

47-63Hz Input Frequency

Input Current

115V<sub>AC</sub> 4.9A 230V<sub>AC</sub> 2.5A

25/50A at 115/230V<sub>AC</sub> Inrush Current

**Power Factor** 0.9 typical Earth Leakage Current 0.8mA max Input Protection T10A, 250V<sub>AC</sub>

#### Output Specifications.

**Output Voltage** 48V 47-56V<sub>DC</sub> Output Voltage Trim Initial Set Accuracy ±1%

No minimum load required Minimum Load

Start Up Delay <1s (may increase in low temperature extremes)

<150ms Start Up Rise Time

25/30ms at 115/230V<sub>AC</sub> Hold Up Time

Line Regulation ±0.5% max

**Load Regulation** ±1% (±5% for units in parallel)

Parallel Operation A maximum of 3 units can be paralleled (not with standby system). Total power

available is 90% of the rated current of each unit. Minimum load per unit is 10%.

**Transient Response** 4% max deviation recovering to within 1% in 2ms for a 50% load change

Ripple and Noise 100mVpk-pk

20MHz bandwidth (may increase at low temperature extremes)

Overvoltage Protection Output Clamps at 125%-140% Vnom, auto recovery

Overload Protection 105%-145% constant current, auto recovery

±0.03%/°C Temperature Coefficient Efficiency 90% typical



# Specifications.

#### Approvals and Standards.

UL / cUL UL508 Listed

UL1310 Class 2 Power Supply (5V, 12V w/o class 2), UL60950-1 Recognised

TUV EN60950-1 CE EN55022 Class B

EN61000-3-2, EN61000-3-3

EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6,

EN61000-4-8, EN61000-4-11

# Part Numbers.

AMG2013

47V-56V<sub>DC</sub>, 480W, DIN-Rail mounting, -40°C to +55°C, power derated between 55°C & 71°C

### Notes.







