AMG250 SERIES INDUSTRIAL MEDIA CONVERTERS WITH OPTIONAL 30/60/90W POE



Industrial Ethernet Solutions

AMG's media converters provide a 100Mbps or multirate Gigabit Ethernet uplink across fibre via the SFP port with optional 30W or 60/90W PoE. Available in both single and dual channel models along with a single channel model with dual RJ45 ports provides for maximum design flexibility.

















[AMG250 Series]

/ OVERVIEW

Designed in a compact DIN rail or wall mount housing, the AMG250 series media converters are ideally suited for connecting equipment to Ethernet networks over long distances using all types of fibre through the integrated SFP port(s). Fibre connectivity is determined by separate SFP device selection, providing application and site flexibility.

Available in both non-PoE models as well as PoE models for IEEE802.3at 30W or IEEE802.3bt 60/90W they are suitable for powering the latest high powered PoE devices over a wide industrial operating temperature range.

Fitted with dual redundant power inputs and power failure alarm relay ensures maximum operating reliability and the highest levels of performance.

A wide range of models are available to suit all design requirements.

SFPs and PSUs need to be ordered seperately.

/ FEATURES

- Compact size ideal for confined spaces, including camera poles and roadside cabinets
- -40°C to +75°C temperature maintains performance in extreme conditions
- Plug & Play no need for any user configuration
- DIN rail mountable quick to install and remove for maintenance
- Gigabit multirate or 100Mb SFP ports support single and multimode, single or dual fibre options up to 120Km
- Dual redundant power inputs with fault relay
- Supports optional 15W, 30W, 60W and 90W PoE
- Auto-Negotiation (802.3u) automatically determines the best connection speed
- Manufactured in the United Kingdom
- AMG Lifetime Support Warranty



Specifications.

Standards.

IEEE802.3i 10BaseT

100BaseTX & 100BaseFX IEEE802.3u

IEEE802.3ab 1000BaseT 1000BaseX IEEE802.3z IEEE802.3af 15W PoE IEEE802.3at 30W PoE+ 60 & 90W PoE IEEE802.3bt IEEE802.3x Flow Control

Jumbo Frames 9.2Kbytes

MAC Table 2K

Interface.

LED Indicators 2x Power

> SFP Link/Activity RJ45 Link/Activity

PoE

RJ45 Ports 1 or 2x 10/100TX RJ45 or

1 or 2x 10/100/1000T(X) RJ45

with Auto MDI/MDI-X

SFP Slot 1 or 2x 100FX SFP or

1 or 2x 100/1000FX SFP

Power/Relay 1x 6 pin removable terminal

block with locking screws

Power.

Power Inputs 2

Operating Voltage:

10-36V_{DC} Non-PoE Models 48-56V_{DC} PoE Models

Power Consumption:

Single Channel 2W Max (without PoE Load) Dual Channel 4W Max (without PoE Load)

PSE Modes:

30W Models Mode A

60/90W Models Mode A, Mode B Protection Reverse Polarity,

Overload Current

Fault Relay Form A

60V @ 2A Max

Packaging.

Shipping Weight

Dimensions $(W \times D \times H)$

190 × 150 × 54 mm

0.52kg / 1.15lb

 $7.48 \times 5.90 \times 2.12$ in

Mechanical.

Anodised Aluminium Housing

Dimensions: $(W \times D \times H)$ $32 \times 87 \times 108 \text{ mm}$ Excluding DIN & Wall Mounts

1.26 × 3.42 × 4.25 in

Including DIN & Wall Mounts 32 × 95 × 132 mm $1.26 \times 3.74 \times 5.20$ in

IP Rating

Installation Wall Mount or DIN-Rail

Weight 0.3kg / 0.66lb

Environmental.

-40°C to +75°C Operating Temp. Storage Temp. -40°C to +85°C

5% to 90% (non-condensing) Humidity Compliances Reach, RoHS and WEEE

MTBF (Hours)* >250,000

Regulatory.

Electrical Safety CE/EN60950-1 Immunity EN55022

Emissions EN61000-3-2 FCC Part 15

Environmental

Cold: EN 60068-2-1

Test Ab/Ad to -40°C

Hot: EN 60068-2-2

Test Bb/Bd to +75°C

Change in temp: EN 60068-2-14 Test Nb

Humidity: EN 60068-2-56

Test Cb +55°C/95%RH Condensation: EN 60068-2-30 Test Db

RH30°C, 90-100% RH

Shock and Vibration

Vibration

(swept sinewave): EN 60068-2-6 - Test Fc Vibration (random): EN 60068-2-64 - Test Fh Shock: EN 60068-2-27 - Test Ea

Altitude test: to 5.000m Free Fall: IEC 60068-2-32

*Calculation model based on PoE model at 30 °C



Part Numbers.

Single Channel Media Converters

AMG250-1F-1S	1 × 10/100BaseT(x) RJ45, 1 × 100BaseFx SFP
AMG250-1FAT-1S-P30	1 × 10/100BaseT(x) RJ45 with 30W PoE+, 1 × 100BaseFx SFP
AMG250-1FBT-1S-P90	1 × 10/100BaseT(x) RJ45 with 60/90W PoE+, 1 × 100BaseFx SFP
AMG250-1G-1S	1 × 10/100/1000BaseT(x) RJ45, 1 × 100/1000BaseFx SFP
AMG250-1GAT-1S-P30	1 × 10/100/1000BaseT(x) RJ45 with 30W PoE+, 1 × 100/1000BaseFx SFP
AMG250-1GBT-1S-P90	1 × 10/100/1000BaseT(x) RJ45 with 60/90W PoE+, 1 × 100/1000BaseFx SFP

Single Channel Dual Port Media Converters

AMG250-2F-1S	2 × 10/100BaseT(x) RJ45, 1 × 100BaseFx SFP
AMG250-2FAT-1S-P60	2 × 10/100BaseT(x) RJ45 with 30W PoE+, 1 × 100BaseFx SFP
AMG250-2FBT-1S-P180	2 × 10/100BaseT(x) RJ45 with 60/90W PoE+, 1 × 100BaseFx SFP
AMG250-2G-1S	2 × 10/100/1000BaseT(x) RJ45, 1 × 100/1000BaseFx SFP
AMG250-2GAT-1S-P60	2 × 10/100/1000BaseT(x) RJ45 with 30W PoE+, 1 × 100/1000BaseFx SFP
AMG250-2GBT-1S-P180	2 × 10/100/1000BaseT(x) RJ45 with 60/90W PoE+, 1 × 100/1000BaseFx SFP

Dual Channel Media Converters

AMG250-2F-2S	2 × 10/100BaseT(x) RJ45, 2 × 100BaseFx SFP
AMG250-2FAT-2S-P60	2 × 10/100BaseT(x) RJ45 with 30W PoE+, 2 × 100BaseFx SFP
AMG250-2FBT-2S-P180	2 × 10/100BaseT(x) RJ45 with 60/90W PoE+, 2 × 100BaseFx SFP
AMG250-2G-2S	2 × 10/100/1000BaseT(x) RJ45, 2 × 100/1000BaseFx SFP
AMG250-2GAT-2S-P60	2 × 10/100/1000BaseT(x) RJ45 with 30W PoE+, 2 × 100/1000BaseFx SFP
AMG250-2GBT-2S-P180	2 × 10/100/1000BaseT(x) RJ45 with 60/90W PoE+, 2 × 100/1000BaseFx SFP

Recommended PSUs.

Non-PoE Models

AMG2004A DIN-Rail Mounting Industrial Grade PSU, 15VDC, 48W

PoE Models

AMG2023 DIN-Rail Mounting Industrial Grade PSU, 48-55VDC, 30W
AMG2016 DIN-Rail Mounting Industrial Grade PSU, 48-55VDC, 60W
AMG2019 DIN-Rail Mounting Industrial Grade PSU, 48-56VDC, 120W
AMG2012 DIN-Rail Mounting Industrial Grade PSU, 48-56VDC, 240W

Notes.

Optional Accessories: SFP modules - Optical/Copper see separate list, need to be ordered separately



