# AMG INDUSTRIAL HARDENED RACK MOUNTED MEDIA CONVERTERS



# Ruggedised Industrial Ethernet Solutions

AMG's rack mounted media converters provide a 100Mbps or multirate Gigabit Ethernet uplink across fibre via the SFP port. Available in both single, dual and quad channel models along with a single channel model with dual RJ45 ports provides for maximum design flexibility.





[ AMG250R Series ]

#### / OVERVIEW

Designed to be installed into the AMG2009, AMG2015 3U or AMG2031 1U card cages, the AMG250R 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 single, dual or quad channel formats the AMG250R series provide high density rack mounted media converter solutions.

When installed within the AMG2015-DR or AMG2031 card cages dual redundant power inputs and power failure alarm relay ensures maximum operating reliability and the highest levels of performance.

SFPs need to be ordered seperately.

#### / FEATURES

- Compact single slot (7HP) size ideal for high density rack mount requirements
- -40°C to 75°C temperature maintains performance in extreme conditions
- Non-programmable no need for any user configuration or computer setup
- Rack mount card cages available in 1U or 3U heights
- Gigabit multirate or 100M SFP ports support single and multimode, single or dual fibre options up to 120Km
- Gigabit or 10/100M Ethernet copper ports high bandwidth support
- Auto-Negotiation (802.3u) automatically determines the best connection speed
- Automatic Link Restoration restores operation when recovering from a temporary fault



### Specifications.

Standards.

 IEEE802.3
 10BaseT

 IEEE802.3u
 100BaseTX

 IEEE802.3ab
 1000BaseT

 IEEE802.3z
 1000BaseFX

Jumbo Frames 10Kbytes

Interface.

**LED Indicators** 

Power: ON = Unit Powered Up
Fiber Link/Act: ON = Link; Flashing = Activity
Copper Link/Act: ON = Link; Flashing = Activity
RJ45 Ports 1, 2 or 4x 10/100Tx or

1, 2 or 4x 10/100/1000TX RJ45

with Auto MDI/MDI-X

SFP Slot 1, 2 or 4x 100M or

1, 2 or 4x 100/1000M SFP

Power Supplied From Rack

Note: Redundant PSUs are supported with fault alarm in AMG2015-DR and AMG2031 racks

Power.

Input and Consumption

Single Channel:  $12\text{-}24V_{DC}$  2W Dual Channel:  $12\text{-}24V_{DC}$  4W Quad Channel:  $12\text{-}24V_{DC}$  8W

Protection Overload Current

Mechanical.

Casing Anodised Aluminium
Dimensions 32 × 172 × 120 mm

IP Rating IP30

Installation AMG Card Cages

Weight 0.55kg

Packaging.

Shipping Weight 0.75kg

Dimensions 250 × 200 × 65 mm

Environmental.

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

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

MTBF (Hours)\*

Unit 609,000

Regulatory.

Electrical Safety CE/EN60950-1 Immunity EN55022 Emissions EN61000-3-2

**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 30 °C



#### Part Numbers.

#### **Single Channel Rack Mount Media Converters**

AMG250R-1F-1S 1 × 10/100BaseT(x) RJ45, 1 × 100BaseFx SFP, -40°C to +75°C, Rack Mount

AMG250R-1G-1S 1 × 10/100/1000BaseT(x) RJ45, 1 × 100/1000BaseFx SFP, -40°C to +75°C, Rack Mount

#### Single Channel Dual Port Rack Mount Media Converters

AMG250R-2F-1S 2 × 10/100BaseT(x) RJ45, 1 × 100BaseFx SFP, -40°C to +75°C, Rack Mount

AMG250R-2G-1S 2 × 10/100/1000BaseT(x) RJ45, 1 × 100/1000BaseFx SFP, -40°C to +75°C, Rack Mount

#### **Dual Channel Rack Mount Media Converters**

AMG250R-2F-2S 2 × 10/100BaseT(x) RJ45, 2 × 100BaseFx SFP, -40°C to +75°C, Rack Mount

AMG250R-2G-2S 2 × 10/100/1000BaseT(x) RJ45, 2 × 100/1000BaseFx SFP, -40°C to +75°C, Rack Mount

#### **Quad Channel Rack Mount Media Converters**

AMG250R-4F-4S	4 × 10/100BaseT(x) RJ45, 4 × 100BaseFx SFP, -40°C to +75°C, Rack Mount
AMG250R-4G-4S	4 x 10/100/1000RacaT(x) R.I45_4 x 100/1000RacaEx SEP -40°C to ±75°C Rack Mount

## Recommended Racks.

AMG2031 1U 19inch 3 Slot Chassis With Dual Redundant PSU Inputs, 12-24VDC AMG2015 3U 19inch 12 Slot Chassis With Single PSU, 120-240VAC

AMG2015-DR 3U 19inch 12 Slot Chassis With Dual Redundant PSU's, 120-240VAC

#### Notes.

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



