

AMG250R SERIES INDUSTRIAL RACK MOUNTED MEDIA CONVERTERS



Industrial Ethernet Solutions

AMG's rack mounted media converters provide a multirate 100Mb/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.



| | | | | |
|--|--|--|--|--|
|  |  |  |  |  |
| 10/100 up to x4 | Gigabit up to x4 | 100/1000 up to x4 | Temp -40°C~+75°C | Mounting Rack |

[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 separately.

/ FEATURES

- Compact single slot size – ideal for high density rack mount requirements
- -40°C to +75°C temperature maintains performance in extreme conditions
- Plug & Play – no need for any user configuration
- Rack mount card cages available in 1U or 3U heights
- All SFP ports are multirate 100Mb/Gigabit – support single and multimode, single or dual fibre options up to 120Km
- Gigabit or 10/100Mb Ethernet copper ports provide high bandwidth support
- Auto-Negotiation (802.3u) – automatically determines the best connection speed
- Manufactured in the United Kingdom
- AMG Lifetime Support Warranty

Specifications.

Standards.

| | |
|---------------|-------------------------|
| IEEE802.3i | 10Base-T |
| IEEE802.3u | 100Base-TX & 100Base-FX |
| IEEE802.3ab | 1000Base-T |
| IEEE802.3z | 1000Base-X |
| IEEE802.3x | Flow Control |
| Jumbo Frames | 9.2Kbytes |
| Address Table | 2K MAC Entries |

Interface.

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|-------------------|--|
| LED Indicators | 1x Power SFP Link/Activity RJ45 Link/Activity |
| RJ45 Ports | 1, 2 or 4x 10/100TX RJ45 or 1, 2 or 4x 10/100/1000T(X) RJ45 with Auto MDI/MDI-X and 1.5 kV Isolation Protection |
| SFP Slot Power | 1, 2 or 4x 100/1000FX SFP Supplied From Rack |
| Front Ports | 1, 2 or 4x RJ45 Ports 1 or 2x SFP Ports |
| Rear Ports | 4x SFP Ports (Quad Channel Units Only) |

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

Power.

| | |
|--------------------|---------------------------------------|
| Power Inputs | 1 or 2 (Dependent On Rack Model Used) |
| Operating Voltage | 10-36V _{DC} |
| Power Consumption: | |
| Single Channel | 2W Max |
| Dual Channel | 4W Max |
| Quad Channel | 8W Max |
| Protection | Overload Current |

Packaging.

| | |
|-----------------|---|
| Shipping Weight | 0.75kg / 1.65lb |
| Dimensions | (W x D x H) 250 x 190 x 50 mm 9.84 x 7.48 x 1.97 in |

Mechanical.

| | |
|----------------------|---|
| Casing Dimensions | Anodised Aluminium (W x D x H) 32 x 172 x 120 mm 1.26 x 6.77 x 4.72 in |
| IP Rating | IP30 |
| Installation | AMG Card Cages |
| Rack Slots | 1 |
| Weight | 0.55kg / 1.21lb |

Environmental.

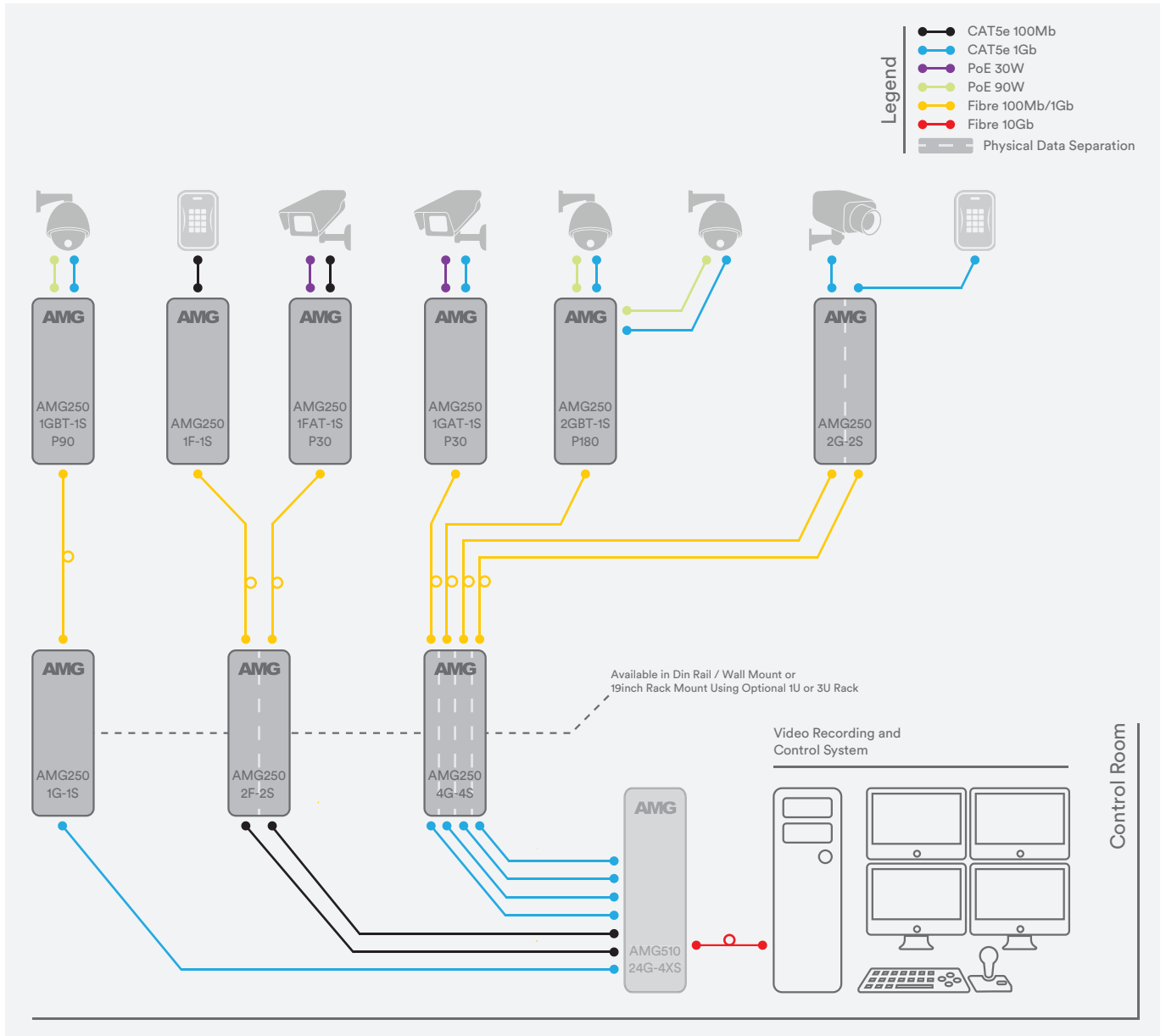
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|------------------|--|
| Operating Temp. | -40°C to +75°C |
| Storage Temp. | -40°C to +85°C |
| Humidity | 5% to 95% (non-condensing) |
| MTBF | 2,573,692 hours |
| MTBF Standard | Telcordia SR-332 GF 30°C |
| Heat Dissipation | 7 BTU/h (Single Channel) 14 BTU/h (Dual Channel) 28 BTU/h (Quad Channel) |
| Cooling | Passive Cooling |
| Noise Level | 0 dBA |

Regulatory.

| | |
|---------------------------------|---|
| Safety EMI | IEC/EN 62368-1 EN 55032 Class A CISPR 32 FCC Part 15B Class A |
| EMS | EN 61000-4-2 (ESD) EN 61000-4-3 (RS) EN 61000-4-4 (EFT) EN 61000-4-5 (Surge) EN 61000-4-6 (CS) EN 61000-4-8 (PFMF) |
| Shock Free Fall Vibration | IEC 60068-2-27 IEC 60068-2-32 IEC 60068-2-6 |
| Environmental | IEC 60068-2-1 (-40°C Cold) IEC 60068-2-2 (+75°C Hot) IEC 60068-2-14 (Temp Change) Reach RoHS WEEE |

Designed to meet NEMA TS2 & EN 50121-4

Application Diagram.



Part Numbers.

Single Channel Rack Mount Media Converters (1+1)

| | |
|---------------|--|
| AMG250R-1F-1S | 1 × 10/100BaseT(x) RJ45, 1 × 100/1000BaseFx SFP, Rack Mount |
| AMG250R-1G-1S | 1 × 10/100/1000BaseT(x) RJ45, 1 × 100/1000BaseFx SFP, Rack Mount |

Single Channel Dual Port Rack Mount Media Converters (2+1)

| | |
|---------------|--|
| AMG250R-2F-1S | 2 × 10/100BaseT(x) RJ45, 1 × 100/1000BaseFx SFP, Rack Mount |
| AMG250R-2G-1S | 2 × 10/100/1000BaseT(x) RJ45, 1 × 100/1000BaseFx SFP, Rack Mount |

Dual Channel Rack Mount Media Converters (2+2)

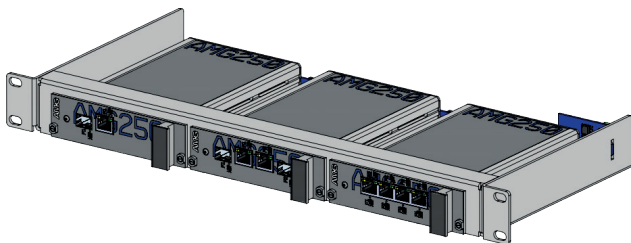
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|---------------|--|
| AMG250R-2F-2S | 2 × 10/100BaseT(x) RJ45, 2 × 100/1000BaseFx SFP, Rack Mount |
| AMG250R-2G-2S | 2 × 10/100/1000BaseT(x) RJ45, 2 × 100/1000BaseFx SFP, Rack Mount |

Quad Channel Rack Mount Media Converters (4+4)

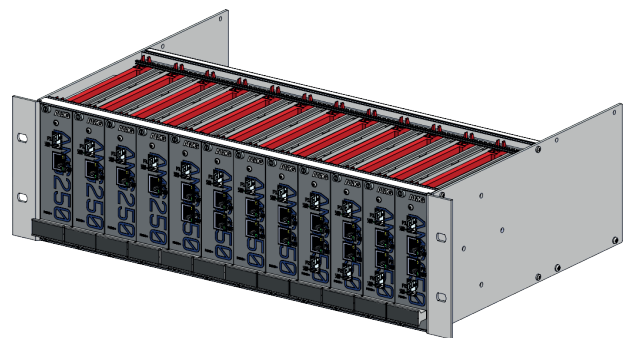
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|---------------|--|
| AMG250R-4F-4S | 4 × 10/100BaseT(x) RJ45, 4 × 100/1000BaseFx SFP, Rack Mount |
| AMG250R-4G-4S | 4 × 10/100/1000BaseT(x) RJ45, 4 × 100/1000BaseFx SFP, Rack Mount |

Recommended Racks.

| | |
|------------|--|
| AMG2031 | 1U 19inch 3 Slot Rack With Dual Redundant PSU Inputs, 12-24VDC (Single PSU included. Additional PSU can be ordered separately) |
| AMG2015 | 3U 19inch 12 Slot Rack With Single PSU, 100-240VAC |
| AMG2015-DR | 3U 19inch 12 Slot Rack With Dual Redundant PSU's, 100-240VAC |




AMG2031 - 1U 19inch 3 Slot Rack



AMG2015-DR] - 3U 19inch 12 Slot Rack

Notes.

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

Proud to be a British Manufacturer 

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.