

# 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.

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 <sub>DC</sub>
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) 35x 172 x 128 mm 1.38 x 6.77 x 5.04 in
IP Rating	IP30
Installation Rack Slots	AMG Card Cages 1
Weight	0.55kg / 1.21lb

## Environmental.

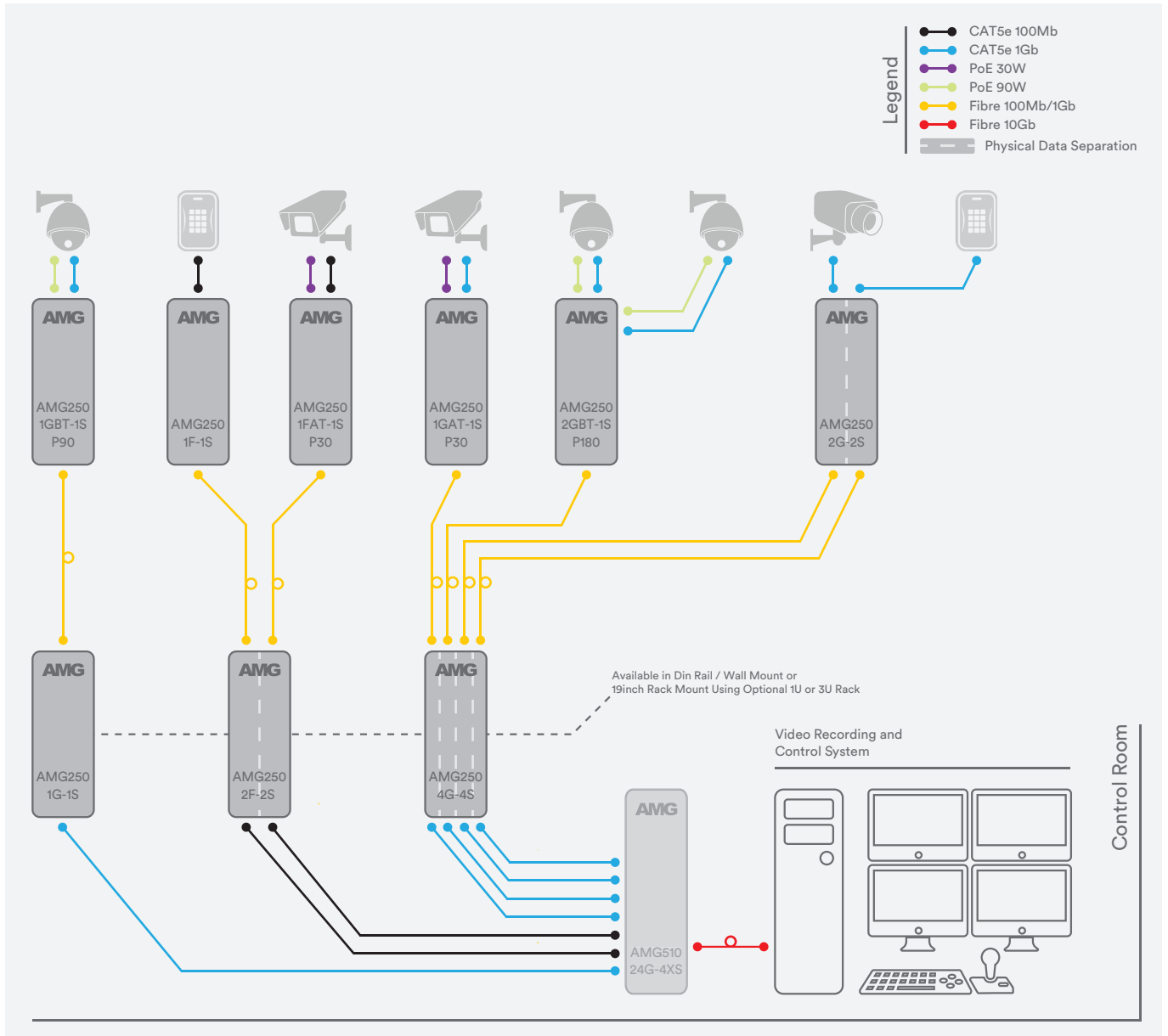
Operating Temp.	-40°C to +75°C
Storage Temp.	-40°C to +85°C
Humidity	5% to 95% (non-condensing)
MTBF	2,573,692 hours
MTBF Standard	Telcordia SR-332 GF 30°C
Heat Dissipation	7 BTU/h (Single Channel) 14 BTU/h (Dual Channel) 28 BTU/h (Quad Channel)
Cooling	Passive Cooling
Noise Level	0 dBA

## 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)

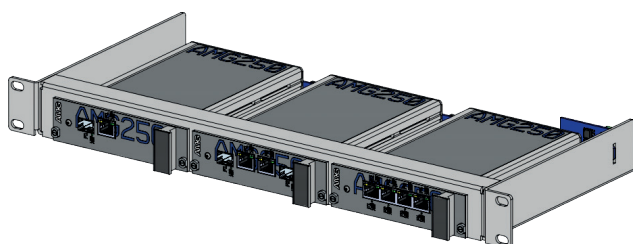
AMG250R-2F-2S	2 × 10/100BaseT(x) RJ45, 2 × 100/1000BaseFx SFP, Rack Mount
AMG250R-2G-2S	2 × 10/100/1000BaseT(x) RJ45, 2 × 100/1000BaseFx SFP, Rack Mount

## Quad Channel Rack Mount Media Converters (4+4)

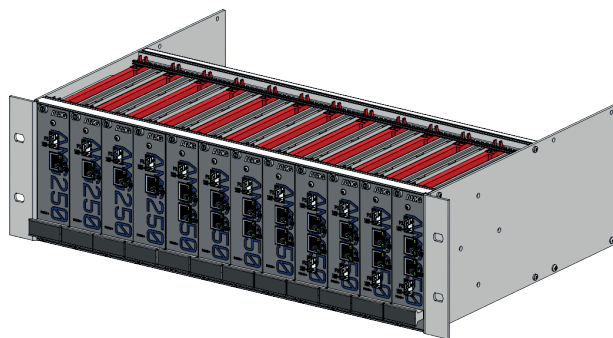
AMG250R-4F-4S	4 × 10/100BaseT(x) RJ45, 4 × 100/1000BaseFx SFP, Rack Mount
AMG250R-4G-4S	4 × 10/100/1000BaseT(x) RJ45, 4 × 100/1000BaseFx SFP, Rack Mount

# 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](http://www.amgsystems.com) for the latest product specifications.*