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

Industrial Ethernet Solutions

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

10/100 up to x2	**Gigabit** up to x2	**SFP** 100/1000 up to x2	**Temp** -40°C~+75°C	**Mounting** DIN/Surface	**PSU** x2 Dual

[**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

— All SFP ports are multirate 100Mb/Gigabit – 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

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Specifications.

Standards.

IEEE802.3i	10Base-T
IEEE802.3u	100Base-TX & 100Base-FX
IEEE802.3ab	1000Base-T
IEEE802.3z	1000Base-X
IEEE802.3af	15W PoE
IEEE802.3at	30W PoE+
IEEE802.3bt	60 & 90W PoE
IEEE802.3x	Flow Control
Jumbo Frames	9.2Kbytes
Address Table	2K MAC Entries

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 and
	1.5 kV Isolation Protection
SFP Slot	1 or 2x 100/1000FX SFP
Power/Relay	1x 6 pin removable terminal
	block with locking screws

Power.

Power Inputs	2
Operating Voltage:	
Non-PoE Models	10-36V$_{DC}$
PoE Models	48-56V$_{DC}$
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	0.52kg / 1.15lb
Dimensions	(W x D x H)
	175 × 160 × 50 mm
	6.89 × 6.3 × 1.97 in

Mechanical.

Housing	Anodised Aluminium
Dimensions:	(W x D x H)
Excluding DIN & Wall Mounts	32 × 87 × 108 mm
	1.26 × 3.42 × 4.25 in
Including DIN & Wall Mounts	32 × 95 × 132 mm
	1.26 × 3.74 × 5.20 in
IP Rating	IP30
Installation	Wall Mount or DIN-Rail
Weight	0.3kg / 0.66lb

Environmental.

Operating Temp.	-40°C to +75°C
Storage Temp.	-40°C to +85°C
Humidity	5% to 95% (non-condensing)
MTBF	>250,000 hours
MTBF Standard	Telcordia (Bellcore) GB
Heat Dissipation	7 BTU/h (1Ch Non-PoE)
	14 BTU/h (2Ch Non-PoE)
	109 BTU/h (1Ch 30W PoE)
	218 BTU/h (2Ch 30W PoE)
	314 BTU/h (1Ch 90W PoE)
	628 BTU/h (2Ch 90W PoE)
Cooling	Passive Cooling
Noise Level	0 dBA

Regulatory.

Safety	IEC/EN 62368-1
EMI	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	IEC 60068-2-27
Free Fall	IEC 60068-2-32
Vibration	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

AMG Systems Ltd. 3 The Omega Centre, Stratton Business Park, Biggleswade, Bedfordshire, SG18 8QB, UK
T :: +44 (0) 1767 600 777 E :: sales@amgsystems.com
D33031-04   amgsystems.com

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Application Diagram.

amgsystems.com
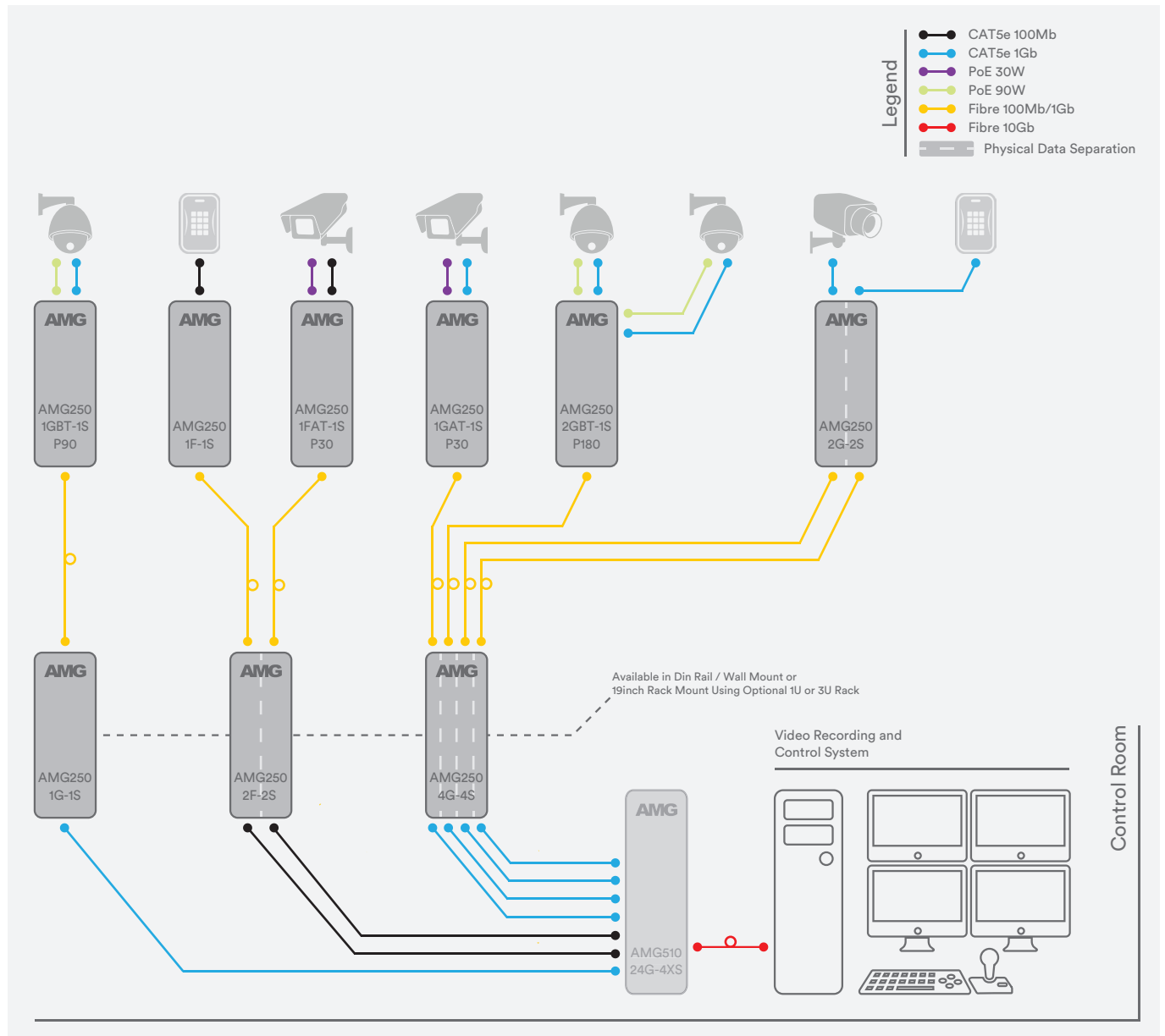
Part Numbers.

Single Channel Media Converters (1+1)

AMG250-1F-1S	1 × 10/100BaseT(x) RJ45, 1 × 100/1000BaseFx SFP
AMG250-1FAT-1S-P30	1 × 10/100BaseT(x) RJ45 with 30W PoE+, 1 × 100/1000BaseFx SFP
AMG250-1FBT-1S-P90	1 × 10/100BaseT(x) RJ45 with 60/90W PoE+, 1 × 100/1000BaseFx 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 (2+1)

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

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

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.

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