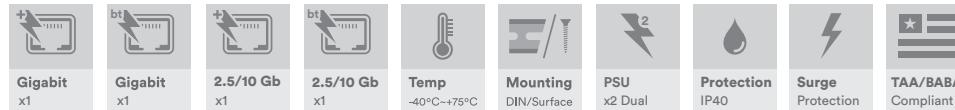


# AMG150 1 CHANNEL INDUSTRIAL 1/2.5/5/10Gb 30/60/90W POE INJECTORS



## Industrial Ethernet Solutions

AMG's industrial PoE injectors provide 30W or 60/90W of power injection on one 1Gb or 1/2.5/5/10Gb Ethernet port. Provided with dual power supply inputs and robust surge protection as standard ensures maximum system reliability.



[ AMG150 Series ]

### OVERVIEW

Designed in a compact DIN rail or wall mount housing, the AMG150 series industrial Power over Ethernet (PoE) injectors are ideally suited for providing power to remote edge network devices.

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

A Legacy model is also available to support 3rd party devices that require >60W PoE but do not meet the IEEE802.3bt specification.

Designed as standard single channel injectors supporting 1Gb Ethernet or 1/2.5/5/10Gb Ethernet depending on the model selected.

Fitted with dual redundant power inputs and robust surge protection ensures maximum operating reliability and the highest levels of performance.

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

PSUs need to be ordered separately.

### 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
- RJ45 ports support 1Gb or 1/2.5/5/10Gb speeds
- Dual redundant power inputs
- Supports 15W, 30W, 60W and 90W PoE
- Integrated surge protection with up to 20kA discharge capability for maximum protection in harsh environments
- Designed in the USA & UK. Manufactured in the United Kingdom or USA (BABA Compliant)
- AMG Lifetime Support Warranty

# Specifications.

## Standards.

IEEE802.3i	10Base-T
IEEE802.3u	100Base-TX
IEEE802.3ab	1000Base-T
IEEE802.3bz	2.5/5GBase-T
IEEE802.3an	10GBase-T
IEEE802.3af	15W PoE
IEEE802.3at	30W PoE+
IEEE802.3bt	60 & 90W PoE
Jumbo Frames	Transparent to Jumbo Frames
VLAN Support	Transparent to VLAN traffic
Multicast Support	Transparent to Multicast traffic

## Interface.

LED Indicators	2x Power PoE
RJ45 Ports	2x 10/100/1000T(X) RJ45 or 2x 100/1000/2.5G/5G/10G RJ45 with 2 kV Isolation Protection
Power	1x 4-way Screw Terminal

## Power.

Power Inputs	2
Operating Voltage	48-56V <sub>DC</sub> (30W PoE Models) 52-56V <sub>DC</sub> (90W PoE Models)
Power Consumption	2W Max (without PoE Load)
PSE Modes	Mode A, Mode B
Protection	Reverse Polarity, Overload Current

## Surge Protection\*.

Technology	GDT
Nominal Line Voltage	48-57V <sub>DC</sub>
Max DC Voltage	75V <sub>DC</sub>
Protection Level	75V <sub>DC</sub> (C3 Category Line/Line)
Impulse Current	2kA (D1 Category 10/350μs x 1)
Line/Line Nominal Discharge Current	2kA (C2 Category)
Line/Earth Nominal Discharge Current	10kA (C2 Category 8/20μs x 10)
IEC 61000-4-5 (Surge)	20kA (8/20μs x 1)
Pinout	(1-2)(3-6)(4-5)(7-8)
Failsafe Mode	Short-Circuit / Cut-Off
Disconnect Indicator	Transmission Interrupt

\*Earth must be connected for protection

## Packaging.

Shipping Weight	0.57kg / 1.26lb
Dimensions	(W x D x H) 220 x 170 x 40 mm 8.66 x 6.69 x 1.57 in

## Mechanical.

Housing Dimensions:	Anodised Aluminium (W x D x H) 37 x 88 x 107 mm 1.46 x 3.46 x 4.21 in
IP Rating	IP40
Installation	Wall Mount or DIN-Rail
Weight	0.44kg / 0.97lb

## Environmental.

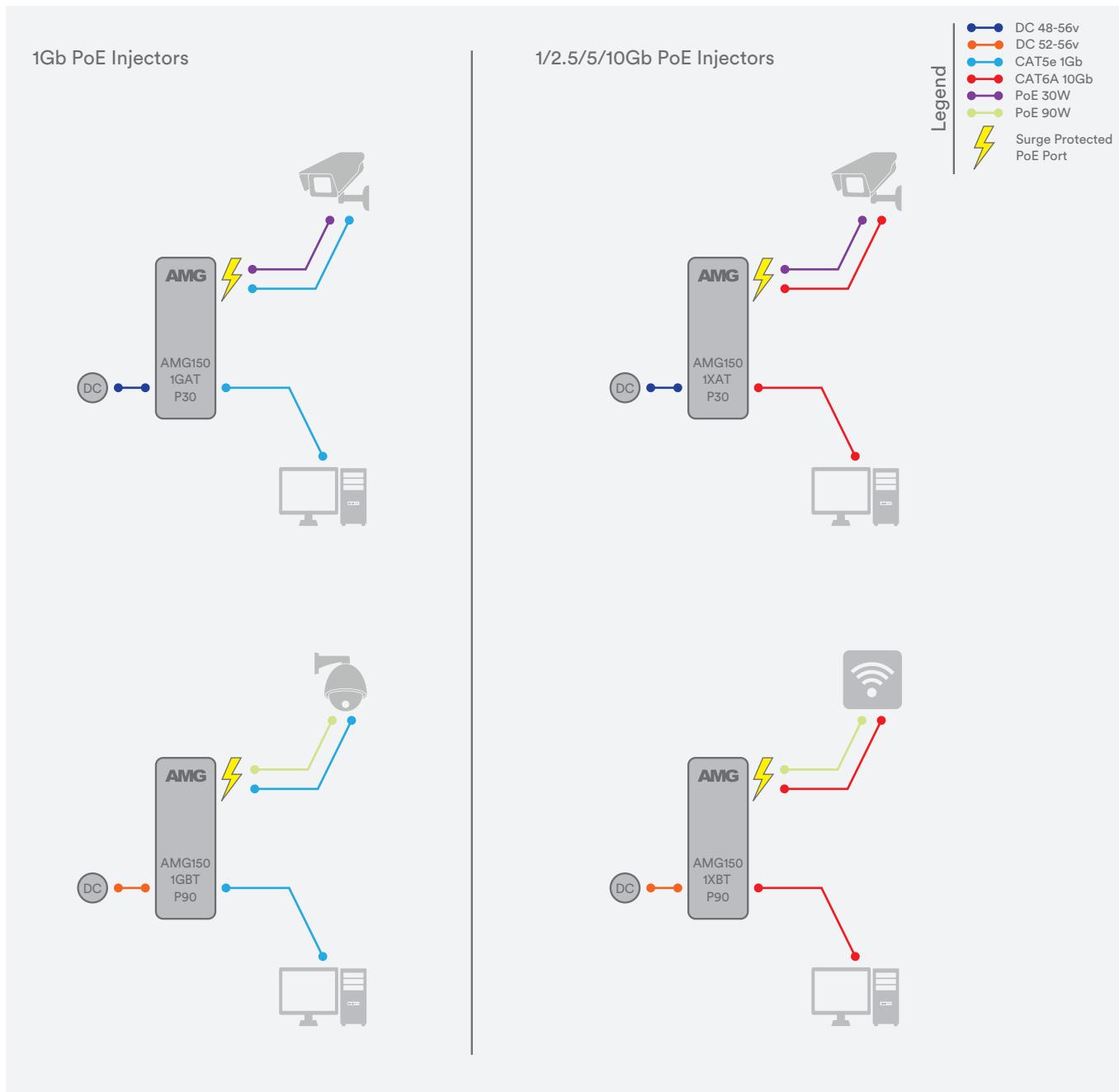
Operating Temp.	-40 to +75°C / -40 to +167°F
Storage Temp.	-40 to +85°C / -40 to +185°F
Humidity	5% to 95% (non-condensing)
MTBF	>500,000 hours
MTBF Standard	Telcordia SR-332 GF 30°C
Heat Dissipation	109 BTU/h (30W PoE) 212 BTU/h (60W PoE) 317 BTU/h (90W PoE)
Cooling	Passive Cooling
Noise Level	0 dBA

## Regulatory.

Safety	IEC/EN 62368-1
EMI	EN 55032 Class A CISPR 32
EMS	FCC Part 15B Class A 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
Surge	IEC/EN 61643-21
Environmental	Reach RoHS WEEE
Supply Chain	NDAA & TAA Compliant BABA Compliant (Order -B Version)

Designed to meet NEMA TS2 & EN 50121-4

# Application Diagram.



## Recommended PSUs.

AMGPSU-I48-P60A	DIN-Rail Mounting Industrial Grade PSU, -25 to +70°C, 43-55VDC, 60W, NDAA Compliant*
AMGPSU-T48-P60	DIN-Rail Mounting Industrial Grade PSU, -25 to +70°C, 41-55VDC, 60W, NDAA & TAA Compliant*
AMGPSU-I48-P120A	DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-55VDC, 120W, NDAA Compliant*^
AMGPSU-I48-P145	DIN-Rail Mounting Industrial Grade PSU, -25 to +70°C, 48-55VDC, 145W, NDAA & TAA Compliant*
AMGPSU-I48-P240A	DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-55VDC, 240W, NDAA Compliant*^
AMGPSU-I48-P290	DIN-Rail Mounting Industrial Grade PSU, -25 to +70°C, 48-55VDC, 290W, NDAA & TAA Compliant*

\* Also available in kit form including mains line cord, DC cable and DIN rail. Order with -K at the end of the part code (e.g. AMGPSU-I48-P120A-K).  
 ^ Also available with no exposed mains terminals and direct IEC input kit. Order with -IEC at the end of the part code (e.g. AMGPSU-I48-P120A-IEC).

# Part Numbers.

## 1Gb Industrial PoE Injectors

AMG150-1GAT-P30	Industrial 1 Port PoE Injector, 1×10/100/1000Base-T(x) RJ45 Port (Input), 1×10/100/1000Base-T(x) RJ45 Port With 802.3at 30W PoE+ (Output)
AMG150-1GBT-P90	Industrial 1 Port PoE Injector, 1×10/100/1000Base-T(x) RJ45 Port (Input), 1×10/100/1000Base-T(x) RJ45 Port With 802.3bt 60/90W PoE (Output)
AMG150-1GBT-P90/L	Industrial 1 Port PoE Injector, 1×10/100/1000Base-T(x) RJ45 Port (Input), 1×10/100/1000Base-T(x) RJ45 Port With Legacy 802.3bt 60/90/95W PoE (Output)

## 1/2.5/5/10Gb Industrial PoE Injectors

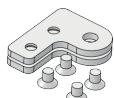
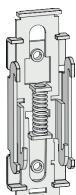
AMG150-1XAT-P30	Industrial 1 Port PoE Injector, 1×10/100/1000/2.5G/5G/10GBase-T(x) RJ45 Port (Input), 1×10/100/1000/2.5G/5G/10GBase-T(x) RJ45 Port With 802.3at 30W PoE+ (Output)
AMG150-1XBT-P90	Industrial 1 Port PoE Injector, 1×10/100/1000/2.5G/5G/10GBase-T(x) RJ45 Port (Input), 1×10/100/1000/2.5G/5G/10GBase-T(x) RJ45 Port With 802.3bt 60/90W PoE+ (Output)
AMG150-1XBT-P90/L	Industrial 1 Port PoE Injector, 1×10/100/1000/2.5G/5G/10GBase-T(x) RJ45 Port (Input), 1×10/100/1000/2.5G/5G/10GBase-T(x) RJ45 Port With Legacy 802.3bt 60/90/95W PoE (Out)



Standard Part Codes Are Manufactured In The UK. For Made In The USA Models That Are Fully BABA Compliant Add -B At The End Of The Partcode.  
e.g. AMG150-1GBT-P90-B

## Included Accessories.

DIN Rail Adapter  
Wall Mounting Brackets      Rear Mounted Metal DIN Rail Clip & Screws For DIN Rail Mounting AMG150 Series Products  
2x Wall Mouting Brackets & Screws For Wall / Surface Mouting AMG150 Series Products



## Optional Accessories.

AMGMNT-MAG-04      4x Rear Mounted Magnets, Screws & Torx Key Kit For AMG150 Series, need to be ordered separately  
AMG2035      Side Mounted Wall Bracket Adapter Kit For DIN Rail Mounting AMG150 Series Products In Depth Restricted Installations.  
Adapter Kit Can Be Extended Using The Included Extension Kit To Also Mount A DIN Rail Power Supply Up To 480W



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.

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