

# AMG150-LV 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. Integrated low voltage DC-DC PoE Booster.



Gigabit x1	Gigabit x1	2.5/10 Gb x1	2.5/10 Gb x1	Temp -40°C~+75°C	Mounting DIN/Surface	PSU x2 Dual	Protection IP40	Surge Protection	Booster Dual 12/24	NDAA/TAA Compliant

[ AMG150-LV 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.

The LV models feature a fully isolated 9-36VDC or 20-60VDC booster circuit with a regulated 53VDC output to supply PoE from a low voltage power input.

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
- Integrated low voltage DC-DC PoE booster
- Supports 15W, 30W, 60W and 90W PoE
- Integrated surge protection with up to 20kA discharge capability for maximum protection
- Designed in the USA & UK. Manufactured in the United Kingdom
- 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	9-36V <sub>DC</sub> (30W PoE Models) 20-60V <sub>DC</sub> (90W PoE Models)
Power Consumption	5W 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	0.70kg / 1.54lb
Dimensions	(W x D x H) 220 x 170 x 40 mm 8.66 x 6.69 x 1.57 in

## Mechanical.

Housing	Anodised Aluminium
Dimensions:	(W x D x H) 37 x 88 x 107 mm 1.46 x 3.46 x 4.21 in
(Excluding Wall Brackets)	
IP Rating	IP40
Installation	Wall Mount or DIN-Rail
Weight	0.57kg / 1.26lb

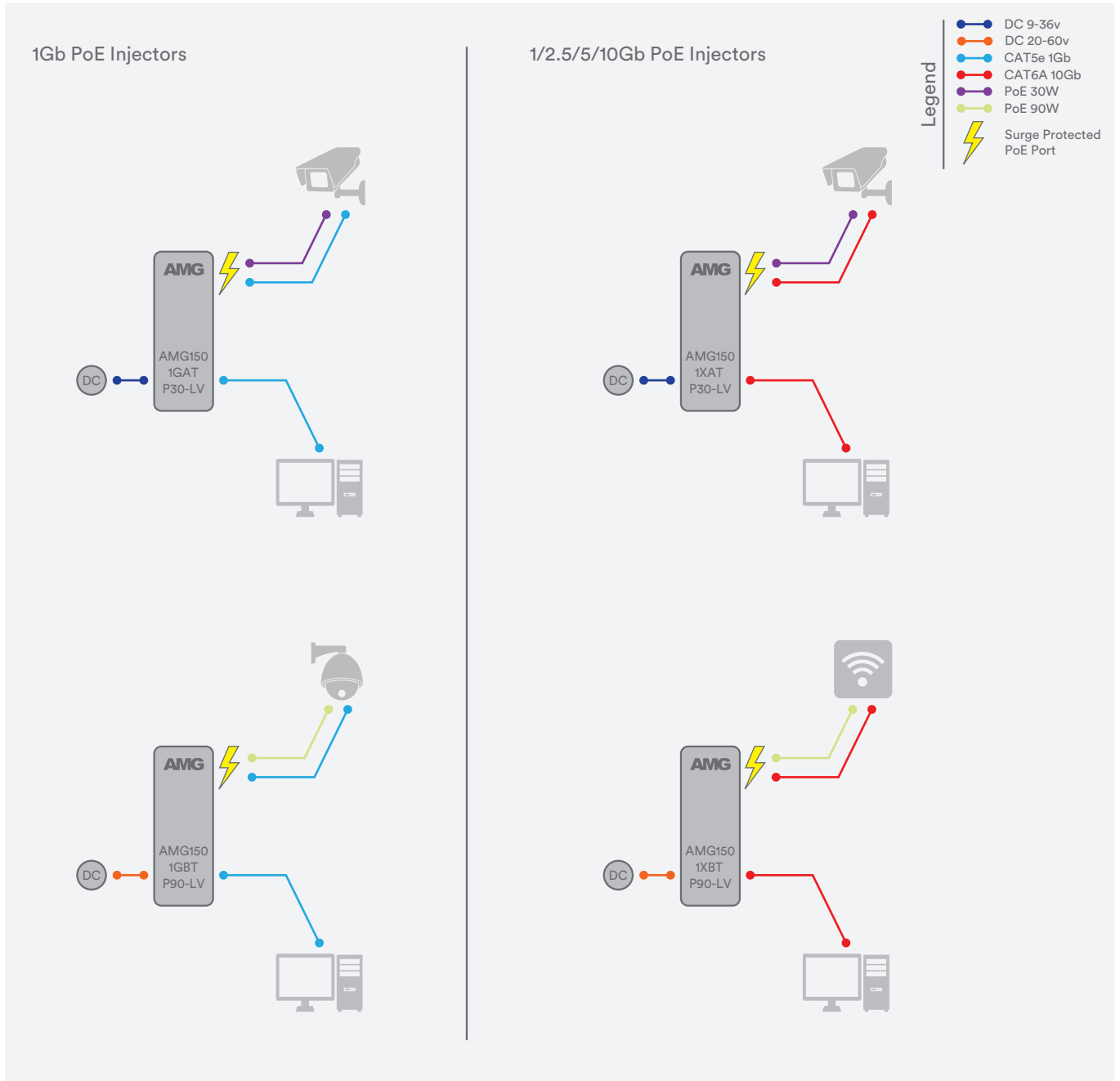
## Environmental.

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	MIL-HDBK-217F GF 25°C
Heat Dissipation	119 BTU/h (30W PoE) 222 BTU/h (60W PoE) 324 BTU/h (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
Surge	IEC/EN 61643-21
Environmental	Reach RoHS WEEE
Supply Chain	NDA & TAA Compliant
Designed to meet	NEMA TS2 & EN 50121-4

# Application Diagram.



# Part Numbers.

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## 1Gb Industrial PoE Injectors With Integrated Isolated DC-DC PoE Voltage Booster

AMG150-1GAT-P30-LV	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), 9-36VDC
AMG150-1GBT-P90-LV	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), 20-60VDC

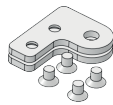
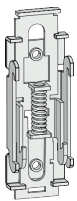
## 1/2.5/5/10Gb Industrial PoE Injectors With Integrated Isolated DC-DC PoE Voltage Booster

AMG150-1XAT-P30-LV	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 802.3at 30W PoE+ (Output), 9-36VDC
AMG150-1XBT-P90-LV	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 802.3bt 60/90W PoE+ (Output), 20-60VDC

# Included Accessories.

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



# Optional Accessories.

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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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