

# AMG155 SERIES INDUSTRIAL MAINS POWERED GIGABIT 120W POE INJECTOR



## Industrial Ethernet Solutions

AMG's industrial PoE injectors provide up to 90W of power injection on one or two Gigabit Ethernet ports with 120W total power available. Provided with integrated mains power input and a fault relay as standard ensures maximum system reliability.



 Gigabit x2	 Temp -40°C→+75°C	 Mounting DIN/Surface	 PSU AC & DC	 NDAA/TAA Compliant
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[ AMG155 Series ]

### / OVERVIEW

Designed in a compact DIN rail or wall mount housing, the AMG155 series industrial Power over Ethernet (PoE) injectors are ideally suited for providing power to remote edge network devices.

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

The unique AMG dual active port PoE function enables the units to operate as standard single channel injectors where power is supplied out from a single port or provide PoE power out of both ports simultaneously allowing 2 devices to be powered.

Fitted with an integrated fully industrial mains power supply along with a redundant DC power input and power failure alarm relay ensures maximum operating reliability and the highest levels of performance. The integrated mains power supply can also provide any remaining power as a standard DC voltage output to power 3rd party external devices.

### / FEATURES

- Compact size – ideal for confined spaces, including camera poles and roadside cabinets
- -40°C to +75°C temperature maintains performance in extreme conditions
- Provides 4KV (8/20µs) surge protection
- DIN rail mountable – quick to install and remove
- Dual PoE ports support 2 PD devices simultaneously
- Gigabit multirate RJ45 ports support all standard 10/100/1000Mb speeds
- Integrated mains power supply with 54V<sub>DC</sub> @ 120W output and a 2nd DC power input for redundancy
- Fault relay for dual power input failure notification
- Supports 15W, 30W, 60W and 90W PoE
- 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
IEEE802.3at	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 DC Power Output RJ45 Link/Activity PoE
RJ45 Ports	2x 10/100/1000T(X) RJ45 with Auto MDI/MDI-X and 1.5 kV Isolation Protection
Mains Power	1x IEC C14 Socket with locking security bracket or 1x 3-Way Barrier Screw Terminal
DC Power/Relay	1x 6 pin removable terminal block with locking screws
Fuse	User accessible 5 × 20mm fuse

## Power.

Power Inputs	2
Input 1 Voltage	85-264V <sub>AC</sub> or 120-370V <sub>DC</sub>
Input 1 Frequency	47-63 Hz
Input 1 Current	2A (115V <sub>AC</sub> ) / 1A (230V <sub>AC</sub> )
Input 1 Fuse	3.15A/250V Slow-Blow
Input 2 Voltage	52-56V <sub>DC</sub>
Power Consumption	2W Max (without PoE Load)
Integrated PSU Type	54V <sub>DC</sub> @ 120W (Refer to derating chart)
PSE Mode	Mode A, Mode B
Protection	Reverse Polarity (DC Input Only), Overload Current
Fault Relay	Form A, 60V @ 2A Max

## Surge Protection.

### AC Surge Protection:

Line-Earth 1.2/50µs (8/20µs)	±4KV
Line-Line 1.2/50µs (8/20µs)	±2KV

### RJ45/PoE Surge Protection:

Lightning	20A (8/20µs)
Transient	40A (5/50ns)

## Packaging.

Shipping Weight	1.2kg / 2.65lb
Dimensions	(W x D x H) 175 × 160 × 100 mm 6.89 × 6.3 × 3.94 in

## Mechanical.

Housing	Anodised Aluminium
Dimensions:	(W x D x H) 73 × 88 × 107 mm 2.87 × 3.46 × 4.21 in
Excluding DIN & Wall Mounts	
IP Rating	IP40
Installation	Wall Mount or DIN-Rail
Weight	0.8kg / 1.76lb

## Environmental.

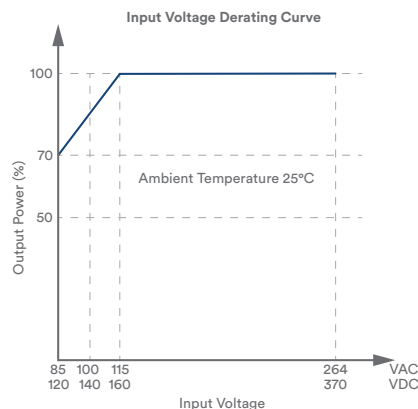
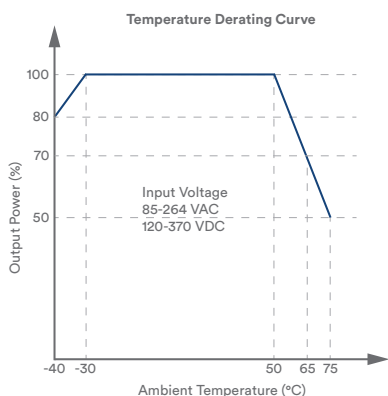
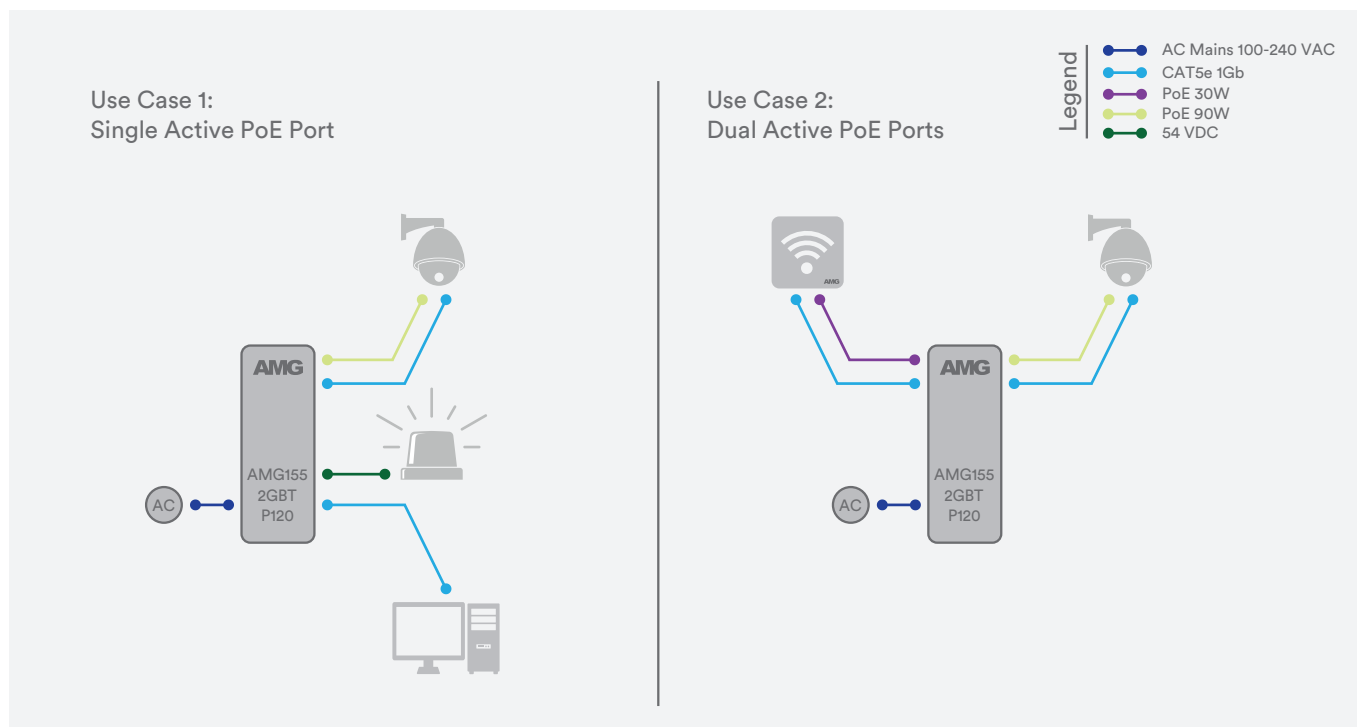
Operating Temp.	-40 to +75°C / -40 to +167°F
Storage Temp.	-40 to +85°C / -40 to +185°F
Humidity	20% to 90% (non-condensing)
MTBF	>300,000 hours
MTBF Standard	MIL-HDBK-217F GB 25°C
Heat Dissipation	314 BTU/h (1Ch 90W PoE, No Ext. Load) 409 BTU/h (1Ch 90W PoE + 1Ch 30W PoE, No Ext. Load)
Cooling	Passive Cooling
Noise Level	0 dBA

## Regulatory.

Safety	EN 62368-1 Class I
EMI	EN 55032 Class B CISPR 32 FCC Part 15B Class B
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 61000-4-11 (Dips)
Shock	IEC 60068-2-27
Free Fall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Environmental	Reach, RoHS, WEEE
Supply Chain	NDA & TAA Compliant

Designed to meet NEMA TS2 & EN 50121-4

# Application Diagram.



## Part Numbers.

### Industrial PoE Injectors With Integrated Mains PSU

AMG155-2GBT-P120	2 × 10/100/1000BaseT(x) RJ45 with 30/60/90W PoE, 120W PSU, IEC Input
AMG155-2GBT-P120-T	2 × 10/100/1000BaseT(x) RJ45 with 30/60/90W PoE, 120W PSU, Barrier Terminal Input

## Recommend Redundant PSUs.

AMGPSU-I48-P120      DIN-Rail Mounting Industrial Grade PSU, 48-53VDC, 120W

## Notes.

- Included Accessories: Left Angle Region Specific IEC Line Cord (For Barrier Terminal Block Models No Line Cord Is Included), Wall Mounting Brackets, DIN Rail Clip, IEC Plug Locking Bracket\* (\*IEC Models Only)
- Optional Accessories: Secure Locking Region Specific Line Cords

*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.*