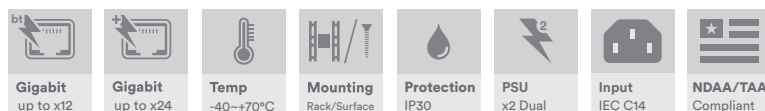# AMG156 8/16/24 CHANNEL INDUSTRIAL RACK GIGABIT 30/60/90W POE INJECTORS

Industrial Ethernet Solutions

AMG's industrial rack mount PoE injectors provide 30W or 60/90W of power injection on eight, sixteen or twenty four Gigabit Ethernet ports. Provided with single or dual power supply inputs and power fault relay as standard ensures maximum system reliability.

Gigabit up to x12	**Gigabit** up to x24	**Temp** -40~+70°C	**Mounting** Rack/Surface	**Protection** IP30	**PSU** x2 Dual	**Input** IEC C14	**NDAA/TAA** Compliant

[**AMG156 Series**]

/ OVERVIEW

AMG156 series industrial Power over Ethernet (PoE) injectors are designed for 19inch rack or desktop mounting within commercial or industrial applications.

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

Eight, sixteen or twenty four full speed 10/100/1000BASE-T(x) ports provide Ethernet In along with Ethernet Out plus 30, 60 or 90W IEEE active PoE (Passive PoE not supported).

Fitted with single or dual redundant AC power inputs and a power failure alarm relay ensures maximum operating reliability and the highest levels of performance with notification on failure.

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

/ FEATURES

— Innovative thermally efficient housing ensures high levels of device reliability under full load

— -40°C to +70°C temperature maintains performance in extreme conditions

— Plug & Play – no need for any user configuration

— 19inch 1U rack or desktop/shelf mount

— Power supply fault relay output

— Gigabit multirate RJ45 ports support all standard 10/100/1000Mb speeds

— Dual redundant 90-264VAC mains power inputs available with up to 960W PoE budget

— Supports 15W, 30W, 60W and 90W PoE

— Transparent to all traffic types including Jumbo Frames, VLAN's and Multicast etc

— 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
IEEE802.3af	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	8, 16 or 24x 10/100/1000T(X)
	RJ45 In/Out with 1.5kV
	Isolation Protection
Mains Power	1 or 2x IEC C14 Socket
Fault Relay	1x 2-Way Barrier Screw Terminal

Power.

Power Inputs	1 or 2
Input Voltage	90-264V$_{AC}$
Input Frequency	47-63 Hz
Input Current	12A (115V$_{AC}$) / 6A (230V$_{AC}$) Max
Input Fuse	16A/250V
Power Consumption:	
8 Channel	2W Max (without PoE Load)
16 Channel	4W Max (without PoE Load)
24 Channel	6W Max (without PoE Load)
Total PoE Budget	960W Max (model dependent)
Integrated PSU	56V$_{DC}$ @ 1000W (Refer to derating chart)
PSE Modes	Mode B (30W Ports)
	Mode A, Mode B (60/90W Ports)
Protection	Overload Current
PSU Fault Relay	Form A
	60V @ 2A Max

Packaging.

Shipping Weight	6.1kg / 13.45lb (Single PSU Models)
	7.5kg / 16.53lb (Dual PSU Models)
Dimensions	(W x D x H)
	515 × 417 × 96 mm
	20.28 × 16.42 × 3.78 in

Mechanical.

Housing	Metal
Dimensions:	(W x D x H) (Excluding 19inch Brackets)
	444 × 315 × 44 mm
	17.48 × 12.40 × 1.73 in
IP Rating	IP30
Installation	19inch Rack (1U) or Desktop
Weight	4.2kg / 9.26lb (Single PSU Models)
	5.6kg / 12.35lb (Dual PSU Models)

Environmental.

Operating Temp.	-40°C to +70°C
Storage Temp.	-40°C to +85°C
Humidity	20% to 90% (non-condensing)
MTBF	>250,000 hours
MTBF Standard	Telcordia SR-332 GF 30°C
Heat Dissipation	826 BTU/h (240W PoE)
	1651 BTU/h (480W PoE)
	2477 BTU/h (720W PoE)
	3296 BTU/h (960W PoE)
Cooling	2/4x Cooling Fans (Temp Controlled)
Airflow	Side Inflow - Rear Exhaust
Noise Level	74 dBA (Under Full Load)

Regulatory.

Safety	EN 62368-1
	IEC 60601-1
	GB4943.1
EMI	EN 55032 Class B
	CISPR 32
	FCC Part 15B Class B
	EN 61000-3-2 (Harmonic Current)
	EN 61000-3-3 (Flicker)
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)
Environmental	Reach
	RoHS
	WEEE
Supply Chain	NDAA & TAA Compliant

Designed to meet NEMA TS2 & EN 50121-4

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Product Characteristic Curve.

Temperature Derating Curve

Output Power (%)

100
80
60
50

-40 -30   50 60 70
Ambient Temperature (°C)

- 960W Models
- 720W Models

Input Voltage
90-264 VAC

Input Voltage Derating Curve

Output Power (%)

100
80

50

Ambient Temperature 25°C

90 100   264   VAC
Input Voltage
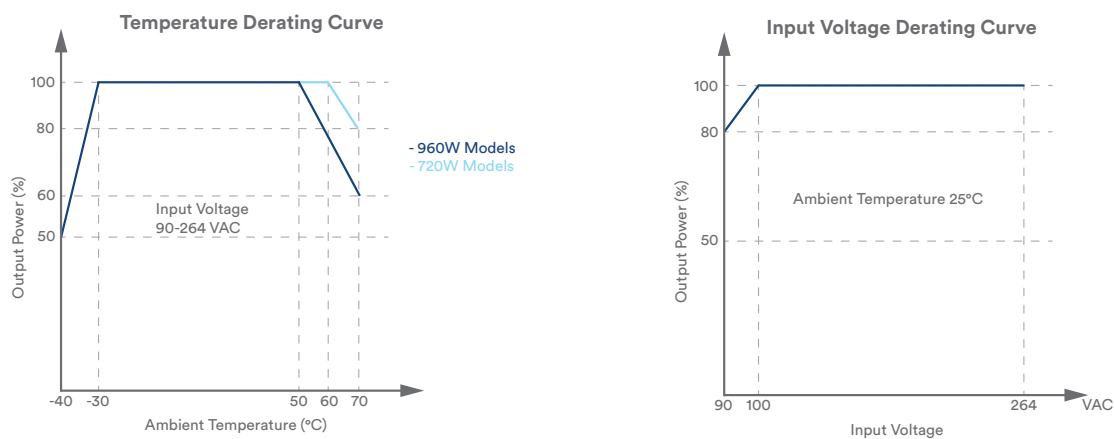
Note: Temperature Derating Chart Applies To 720 & 960W Models Only
        Input Voltage Derating Chart Applies To All Models

AMG

Part Numbers.

8 Channel Industrial Rack Mount PoE Injectors

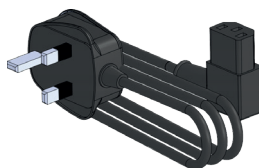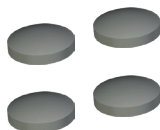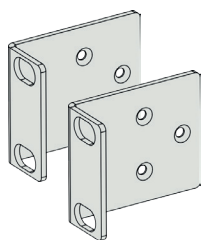|	
AMG156-8GAT-P240	8 × 10/100/1000BaseT(x) RJ45 In Ports, 8 × 10/100/1000BaseT(x) RJ45 with 30W PoE+ Out Ports, 240W Max PoE Budget, 1 x AC PSU
AMG156-8GAT-RP240	8 × 10/100/1000BaseT(x) RJ45 In Ports, 8 × 10/100/1000BaseT(x) RJ45 with 30W PoE+ Out Ports, 240W Max PoE Budget, 2 x AC PSU's (Redundant)
AMG156-4GBT-4GAT-P480	8 × 10/100/1000BaseT(x) RJ45 In Ports, 4 × 10/100/1000BaseT(x) RJ45 with 90W PoE++ & 4 × 10/100/1000BaseT(x) RJ45 with 30W PoE+ Out Ports, 480W Max PoE Budget, 1 x AC PSU
AMG156-4GBT-4GAT-RP480	8 × 10/100/1000BaseT(x) RJ45 In Ports, 4 × 10/100/1000BaseT(x) RJ45 with 90W PoE++ & 4 × 10/100/1000BaseT(x) RJ45 with 30W PoE+ Out Ports, 480W Max PoE Budget, 2 x AC PSU's (Redundant)

16 Channel Industrial Rack Mount PoE Injectors

AMG156-16GAT-P480	16 × 10/100/1000BaseT(x) RJ45 In Ports, 16 × 10/100/1000BaseT(x) RJ45 with 30W PoE+ Out Ports, 480W Max PoE Budget, 1 x AC PSU
AMG156-16GAT-RP480	16 × 10/100/1000BaseT(x) RJ45 In Ports, 16 × 10/100/1000BaseT(x) RJ45 with 30W PoE+ Out Ports, 480W Max PoE Budget, 2 x AC PSU's (Redundant)
AMG156-8GBT-8GAT-P960	16 × 10/100/1000BaseT(x) RJ45 In Ports, 8 × 10/100/1000BaseT(x) RJ45 with 90W PoE++ & 8 × 10/100/1000BaseT(x) RJ45 with 30W PoE+ Out Ports, 960W Max PoE Budget, 1 x AC PSU
AMG156-8GBT-8GAT-RP960	16 × 10/100/1000BaseT(x) RJ45 In Ports, 8 × 10/100/1000BaseT(x) RJ45 with 90W PoE++ & 8 × 10/100/1000BaseT(x) RJ45 with 30W PoE+ Out Ports, 960W Max PoE Budget, 2 x AC PSU's (Redundant)

24 Channel Industrial Rack Mount PoE Injectors

AMG156-24GAT-P720	24 × 10/100/1000BaseT(x) RJ45 In Ports, 24 × 10/100/1000BaseT(x) RJ45 with 30W PoE+ Out Ports, 720W Max PoE Budget, 1 x AC PSU
AMG156-24GAT-RP720	24 × 10/100/1000BaseT(x) RJ45 In Ports, 24 × 10/100/1000BaseT(x) RJ45 with 30W PoE+ Out Ports, 720W Max PoE Budget, 2 x AC PSU's (Redundant)
AMG156-12GBT-12GAT-P960	24 × 10/100/1000BaseT(x) RJ45 In Ports, 12 × 10/100/1000BaseT(x) RJ45 with 90W PoE++ & 12 × 10/100/1000BaseT(x) RJ45 with 30W PoE+ Out Ports, 960W Max PoE Budget, 1 x AC PSU
AMG156-12GBT-12GAT-RP960	24 × 10/100/1000BaseT(x) RJ45 In Ports, 12 × 10/100/1000BaseT(x) RJ45 with 90W PoE++ & 12 × 10/100/1000BaseT(x) RJ45 with 30W PoE+ Out Ports, 960W Max PoE Budget, 2 x AC PSU's (Redundant)

Included Accessories.

19inch Mounting Ears	2x Rack Mounting Brackets & Screws For 19inch Mounting AMG156 Series Products
Rubber Feet	4x Rubber Feet For Desktop / Surface Mouting AMG156 Series Products
IEC Power Cable	1x or 2x Region Specific UK/EU/US IEC Line Cord (Depending On Model)