AMG160 SERIES INDUSTRIAL ETHERNET EXTENDERS OVER COAX OR 2-WIRE WITH 30W POE



[AMG160-1F-1EC / AMG160-1F-1ET]

Industrial Ethernet Solutions

AMG's Extend-Net[™] industrial Ethernet extenders provide 10/100Mb Ethernet over long distances of coax or 2-wire cable with support for pass-through 30W PoE. These single channel models feature coaxial or screw terminal connectors and support distances up to 914m.



OVERVIEW

Designed in a compact tube style housing that can be DIN rail or wall mounted using the included accessory brackets, the AMG160 Extend-Net[™] series industrial Ethernet Extenders are ideally suited for connecting equipment to Ethernet networks over long distances using standard Coax or 2-wire cables.

Distances up to 550m @ 100Mb speed and 914m @ 10Mb speed are possible over standard Coax cables.

The AMG160 UTP series support IEEE802.3af 15.4W and IEEE802.3at 30W PoE pass-through and are suitable for powering the latest PoE devices over a wide industrial operating temperature range at extended distances.

A 48-56 $V_{\rm DC}$ local power input is provided for instances where local power is available and the maximum possible PoE level is required at the remote device but this is not required for operation when used with a PoE enabled edge device such as an IP camera as the units also support pass-through PoE powering.

PSUs need to be ordered seperately.

/ FEATURES

- Compact size ideal for confined spaces, including conduit, camera poles and roadside cabinets
- -40°C to +75°C temperature maintains performance in extreme conditions
- DIP switches for Local/Remote & 10/100Mb modes
- Standalone, DIN rail or wall mountable flexible mounting options are included with every unit
- Extends Ethernet up to 550m (1,700 ft) at 100Mbps
- Extends Ethernet up to 914m (3,000 ft) at 10Mbps
- Supports 15W & 30W PoE Pass-Through
- Unicast, Multicast & Jumbo Frames are supported along with full symetrical bandwidth performance
- Manufactured in the United Kingdom
- AMG Lifetime Support Warranty



 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

 D37139-00
 amgsystems.com

Standards.

		0 0	
IEEE802.3i IEEE802.3u IEEE802.3af IEEE802.3at	10Base-T 100Base-TX 15W PoE 30W PoE+	Shipping Weight Dimensions	0.52kg / 1.15lb (W x D x H) 175 × 160 × 50 mm 6.89 × 6.3 × 1.97 in
Jumbo Frames	10Kbytes	Mechanical.	
Interface.		Housing Dimensions:	Anodised Aluminium (W x D x H)
LED Indicators	1x Power Ethernet Link/Activity Ethernet 100Mb Speed	Excluding Wall Bracket	89 × 35 × 32 mm 3.50 × 1.38 × 1.26 in 113 × 35 × 35 mm
Ethernet Port	Extend-Net™ Link/Activity 1x 10/100TX RJ45 with Auto MDI/MDI-X and 1.5 kV Isolation Protection	IP Rating Installation Weight	4.45 × 1.38 × 1.38 in IP40 Wall Mount or DIN-Rail 0.3kg / 0.66lb
Extend-Net™ Port	1x BNC or 2 pin removable terminal block with Surge Protection	Environmental.	
Power	1x 2 pin removable terminal block	Operating Temp. Storage Temp.	-40°C to +75°C -40°C to +85°C
DIP Switch. Switch Type	2 Position	Humidity MTBF MTBF Standard Heat Dissipation	5% to 95% (non-condensing) >1,000,000 hours Telcordia SR-332 GF 30°C 5 BTU/h (No PoE)
Functions	10Mb or 100Mb Mode Remote or Local Operation	Cooling	58 BTU/h (15.4W POE) 107 BTU/h (30W POE) Passive Cooling
Power.		Noise Level	0 dBA
Power Inputs Operating Voltage	1 48-56V _{pc} or	Regulatory.	
Power Consumption Protection	PoE Pass-Through	Safety EMI	IEC/EN 62368-1 EN 55032 Class A CISPR 32 FCC Part 15B Class A
Extend-Net™.		EMS	EN 61000-4-2 (ESD) EN 61000-4-3 (RS)
Maximum Distance: 100Mb 10Mb	550m (1,700 ft)* 914m (3,000 ft)* *Refer to Distance Chart	Shock	EN 61000-4-4 (EFT) EN 61000-4-5 (Surge) EN 61000-4-6 (CS) EN 61000-4-8 (PFMF) IEC 60068-2-27 IEC 60068-2-32 IEC 60068-2-6 Reach, RoHS, WEEE
Cable Types	Coaxial or 2-Wire	Free Fall Vibration	

Packaging.

Designed to meet NEMA TS2 & EN 50121-4



Extend-Net[™] Single Channel Industrial Ethernet Extenders over Coax or 2-Wire Cable

AMG160-1F-1EC 1 × 10/100BaseT(x) RJ45, 1 x Extend-Net[™] Coax Ethernet Extender (Coaxial Connector) 1 × 10/100BaseT(x) RJ45, 1 x Extend-Net[™] 2-Wire Ethernet Extender (Screw Terminal Connector) AMG160-1F-1ET

Included Accessories.

DIN Rail Adapter Rear Mounted Plastic DIN Rail Clip & Screws For DIN Rail Mounting AMG160 Series Products (Black) Wall Mount Adapter Rear Mounted Aluminium Wall Mounting Plate & Screws For Wall / Surface Mounting AMG160 Series Products (Silver)

Recommended PSUs.

AMGPSU-I48-P60

DIN-Rail Mounting Industrial Grade PSU, 48-56VDC, 60W

Notes.

Distance figures are based on a 50V PSE PoE power source, and external power supplies for the extenders. Distance figures are obtained using in-house testing mirroring installations. Factors such as copper cable quality, the number of connectors and joints in the cable run, the use of PoE, and environmental conditions encountered within the installation might affect the actual transmission distance and should be taken into consideration. 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

AMG Systems Ltd. 3 The Omega Centre, Stratton Business Park, Biggleswade, Bedfordshire, SG18 8QB, UK :: +44 (0) 1767 600 777 E :: sales@amgsystems.com D37139-00

