# AMG110-2X DUAL CHANNEL INDUSTRIAL 1/2.5/5/10Gb 30/60/90/95W POE SURGE PROTECTORS

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#### Industrial Ethernet Solutions

AMG's industrial Ethernet surge protectors provide robust protection for 1/2.5/5/10Gb Ethernet equipment with support for pass-through PoE up to 95W. These dual channel models are designed to protect multiple devices in a single package.

















[ AMG110-2X-SP ]

#### / OVERVIEW

Designed in a compact DIN rail or wall mount housing, the AMG110 series industrial Power over Ethernet (PoE) surge protectors are ideally suited for protecting network devices that may be susceptible to damage from surge or voltage transient events.

Designed as a dual channel surge protector supporting 1/2.5/5/10Gb Ethernet and transparent to all types of PoE including IEEE802.3at 30W or IEEE802.3bt 60/90W and non-standard PoE such as 95W.

Industry leading protection is provided to EN61000-4-5 and IEC/EN 61643-21 standards.

To ensure the correct protection the AMG110 must be correctly grounded to ensure any surge or transient voltage has an obstruction free path to ground which then protects the connected equipment from damage.

For installation examples refer to the product application diagrams and installation manual.

#### / FEATURES

- Compact size ideal for confined spaces, including camera poles and roadside cabinets
- -40°C to +85°C temperature maintains performance in extreme conditions
- Plug & Play no need for any user configuration
- DIN rail or wall mountable quick to install and remove for maintenance (an optional magnetic mount is also available)
- RJ45 ports support 1/2.5/5/10Gb speeds
- Transparent to all Ethernet traffic including jumbo frames, multicast and VLAN's etc.
- Supports 15W, 30W, 60W, 90W and 95W 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 2.5/5GBase-T IEEE802.3bz IEEE802.3an 10GBase-T IEEE802.3af 15W PoE 30W PoE+ IEEE802.3at 60 & 90W PoE IEEE802.3bt

Jumbo Frames
VLAN Support
Multicast Support
Transparent to Jumbo Frames
Transparent to VLAN traffic
Transparent to Multicast traffic

Interface.

Ground Connection 1x M3 Earth Stud

RJ45 Ports 2x 100/1000/2.5G/5G/10G RJ45

In/Out Channels

Surge Protection\*.

Technology GDT
Surge Current Rating 20kA / Pair
Nominal Line Voltage 48-57V
Max DC Voltage 150V (@ 100V/s)

Max Impulse

Spark-Over Voltage 500V (C3 Category 1KV/µs)

Nominal Current 1A (per pair)
Leakage Current <1 \( \mu A \)
DC Holdover 80V (<150 ms)
Capacitance <2 pF

Impulse Current 2kA (D1 Category 10/350 µs x 1)

Line/Line Nominal

Discharge Current 2kA (C2 Category)

Line/Earth Nominal

Discharge Current 10kA (C2 Category 8/20µs x 10)

Maximum Discharge

Current 20kA (8/20µs x 1)
Response Time <75ns

Protected Pairs (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 0.55kg / 1.21lb Dimensions (W x D x H)

 $220 \times 170 \times 40 \text{ mm}$  $8.66 \times 6.69 \times 1.57 \text{ in}$ 

Mechanical.

Housing Anodised Aluminium

Dimensions: (W x D x H)

(Excluding Wall Brackets) 37 × 88 × 107 mm

1.46 × 3.46 × 4.21 in

IP Rating IP40

Installation Wall Mount or DIN-Rail

**Optional Magnetic Mounts** 

Weight 0.42kg / 0.93lb

Environmental.

Operating Temp. -40 to +85°C / -40 to +185°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

Cooling Passive Cooling

Noise Level 0 dBA

Regulatory.

**EMS** 

EMI EN 55032 Class A

CISPR 32

FCC Part 15B Class A EN 55035 Class A

Surge IEC/EN 61643-21 EN 61000-4-5 (Class 4)

 Shock
 IEC 60068-2-27

 Free Fall
 IEC 60068-2-32

 Vibration
 IEC 60068-2-6

Environmental Reach

RoHS

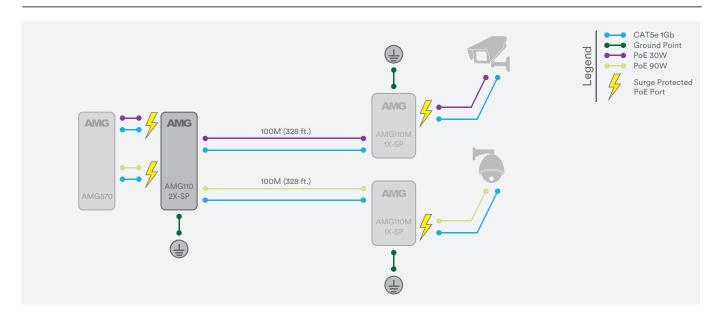
WEEE

Supply Chain NDAA & TAA Compliant

Designed to meet NEMA TS2 & UL497B



## Application Diagram.



#### Part Numbers.

#### 1/2.5/5/10Gb Industrial Dual Channel PoE Surge Protectors

AMG110-2X-SP

Industrial Dual Channel 30/60/90/95W PoE Surge Protector, 2 × 10/100/1000/2.5G/5G/10GBase-T(x) RJ45 Ports (Inputs),

2 × 10/100/1000/2.5G/5G/10GBase-T(x) RJ45 Ports (Outputs) With 20kA Surge Protection

#### Included Accessories.

**DIN Rail Adapter** Wall Mounting Brackets Earth Cable

Rear Mounted Metal DIN Rail Clip & Screws For DIN Rail Mounting AMG110 Series Products 2x Wall Mouting Brackets & Screws For Wall / Surface Mouting AMG110 Series Products 385mm (15in) 14AWG Earth Cable With M3 & M5 Ring Terminals For Earth Connection To AMG110 Series Products







## Optional Accessories.

AMG2035 Side Mounted Wall Bracket Adapter Kit For DIN Rail Mounting AMG110 Series Products In Depth Restricted Installations. Adapter Kit Can Be Extended Using The Included Extension Kit To Also Mount Additional Products.

AMGMNT-MAG-04 4x Rear Mounted Magnets & Screws Kit For AMG110 Series.



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