

# AMG INDUSTRIAL HARDENED UNMANAGED SWITCHES WITH POE+



## Ruggedised Industrial Ethernet Solutions

Available with 2, 4, 6, 8, 12 and 16 Ethernet ports, AMG's Unmanaged switches provide a 100Mbps or Gigabit Ethernet uplink across Multimode or Singlemode fibre via the SFP port.



10/100 up to x16	Gigabit up to x16	100/1000 up to x4	Temp -40°C--75°C	Mounting DIN/Surface

[ AMG9HMU-8GH-2S-P240 ]

### / OVERVIEW

Every port can automatically sense your type of cable so there is no need for crossover cables whether you are connecting the switch to another switch or a computer and can also automatically sense if the connected network devices are running at 10Mbps, 100Mbps or 1000Mbps and half/full-duplex mode, and adjust accordingly.

With 30W PoE+ on each Ethernet port and housed in a compact chassis, these DIN rail mountable devices are ideally suited for connecting and powering field based equipment such as IP CCTV cameras and industrial controllers to Ethernet networks over long distances using all types of fibre. Fibre connectivity is determined by separate SFP device selection, providing application and site flexibility.

SFPs and PSUs need to be ordered separately.

**NB** These products are not user programmable.

### / FEATURES

- Compact size – ideal for confined spaces, including camera poles and roadside cabinets
- -40°C to 75°C temperature – maintains performance in extreme conditions
- Non-programmable – no need for any user configuration or computer setup
- DIN rail mountable – quick to install and remove for maintenance
- Dual Speed SFP port – supports single and multimode, single or dual fibre options up to 120Km
- Gigabit or 10/100M Ethernet copper ports – high bandwidth support
- Auto MDI or MDI-X config – eliminates the need for crossover cables
- Auto-Negotiation (802.3u) – automatically determines the best connection speed
- Automatic Link Restoration - restores operation when recovering from a temporary fault

# Specifications.

## Standards.

IEEE802.3	10BaseT
IEEE802.3u	100BaseTX
IEEE802.3ab	1000BaseT
IEEE802.3z	1000BaseSX/LX
IEEE802.3af	15W PoE
IEEE802.3at	30W PoE+

## Interface.

### LED Indicators

Power:	ON = Link; Flashing = Activity
Fiber Link/Act:	ON = Link; Flashing = Activity
Copper Link/Act:	ON = Link; Flashing = Activity

### RJ45 Ports

2, 4, 6, 8, 12 or 16x 10/100Tx or 10/100/1000TX RJ45 PoE/PoE+ with Auto MDI/MDI-X

### SFP Slot

1, 2, 3 or 4x 100/1000M

### Power

1x 6 pin removable terminal block

## Power.

### Input and Consumption

PoE:	46-56V <sub>DC</sub>	5W + 15W
PoE+:	52-56V <sub>DC</sub>	5W + 30W
PSE Modes	Mode A, Mode B	
Protection	Reverse Polarity, Overload Current	

Note: Redundant PSUs are not supported.

## Mechanical.

Casing Anodised Aluminium

### Dimensions

W x H x D

1 SFP ports	35.2 x 121 x 95.5 mm
2 SFP ports	70.8 x 121 x 95.5 mm
3 SFP ports	106.5 x 121 x 95.5 mm
4 SFP ports	142 x 121 x 95.5 mm

Note: Depth 95.5mm includes 8mm DIN-Rail bracket.

### IP Rating

IP30

### Installation

Wall Mount or DIN-Rail

### Weight

up to 1kg

## Packaging.

Shipping Weight

up to 1.5kg

Dimensions

250 x 200 x 65 mm

## Environmental.

Operating Temp.

-40°C to 75°C

Storage Temp.

-40°C to 85°C

Humidity

5% to 90% (non-condensing)

Compliances

Reach, RoHS and WEEE

MTBF

>310,000 hrs

## Regulatory.

Electrical Safety

CE/EN60950-1

Immunity

EN55022

Emissions

EN61000-3-2

### Environmental

Cold:

EN 60068-2-1  
Test Ab/Ad to -40°C

Hot:

EN 60068-2-2  
Test Bb/Bd to +75°C

Change in temp:

EN 60068-2-14 Test Nb

Humidity:

EN 60068-2-56  
Test Cb +55°C/95%RH

Condensation:

EN 60068-2-30 Test Db  
RH30°C, 90-100% RH

### Shock and Vibration

Vibration

(swept sinewave):

EN 60068-2-6 – Test Fc

Vibration (random):

EN 60068-2-64 – Test Fh

Shock:

EN 60068-2-27 – Test Ea

Altitude test:

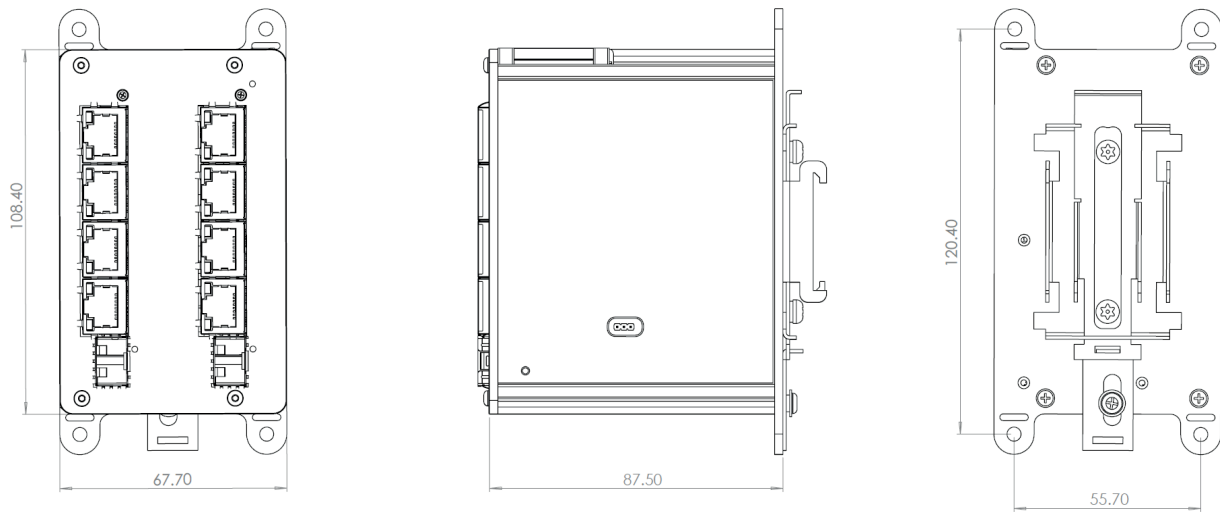
to 5,000m

Free Fall:

IEC 60068-2-32

\*Calculation model based on PoE version at 30 °C

# Specifications.



## Part Numbers.

AMG9HMU-2FH-1S-P60	2 x 10/100Base PoE/PoE+ Ethernet & 1 x 100/1000Base SFP, -40°C to +75°C, 46-56VDC Power input (PoE budget 60W)
AMG9HMU-4FH-1S-P120	4 x 10/100Base PoE/PoE+ Ethernet & 1 x 100/1000Base SFP, -40°C to +75°C, 46-56VDC Power input (PoE budget 120W)
AMG9HMU-4FH-2S-P120	4 x 10/100Base PoE/PoE+ Ethernet & 2 x 100/1000Base SFP, -40°C to +75°C, 46-56VDC Power input (PoE budget 120W)
AMG9HMU-8FH-2S-P240	8 x 10/100Base PoE/PoE+ Ethernet & 2 x 100/1000Base SFP, -40°C to +75°C, 46-56VDC Power input (PoE budget 240W)
AMG9HMU-12FH-3S-P360	12 x 10/100Base PoE/PoE+ Ethernet & 3 x 100/1000Base SFP, -40°C to +75°C, 46-56VDC Power input (PoE budget 360W)
AMG9HMU-16FH-4S-P480	16 x 10/100Base PoE/PoE+ Ethernet & 4 x 100/1000Base SFP, -40°C to +75°C, 46-56VDC Power input (PoE budget 480W)
AMG9HMU-2GH-1S-P60	2 x 10/100/1000Base PoE/PoE+ Ethernet & 1 x 100/1000Base SFP, -40°C to +75°C, 46-56VDC Power input (PoE budget 60W)
AMG9HMU-4GH-1S-P120	4 x 10/100/1000Base PoE/PoE+ Ethernet & 1 x 100/1000Base SFP, -40°C to +75°C, 46-56VDC Power input (PoE budget 120W)
AMG9HMU-4GH-2S-P120	4 x 10/100/1000Base PoE/PoE+ Ethernet & 2 x 100/1000Base SFP, -40°C to +75°C, 46-56VDC Power input (PoE budget 120W)
AMG9HMU-8GH-2S-P240	8 x 10/100/1000Base PoE/PoE+ Ethernet & 2 x 100/1000Base SFP, -40°C to +75°C, 46-56VDC Power input (PoE budget 240W)
AMG9HMU-12GH-3S-P360	12 x 10/100/1000Base PoE/PoE+ Ethernet & 3 x 100/1000Base SFP, -40°C to +75°C, 46-56VDC Power input (PoE budget 360W)
AMG9HMU-16GH-4S-P480	16 x 10/100/1000Base PoE/PoE+ Ethernet & 4 x 100/1000Base SFP, -40°C to +75°C, 46-56VDC Power input (PoE budget 480W)

## Recommended PSUs.

AMG2016	48-56VDC 1.25A, 60W PSU, DIN rail mount (suitable for 4 x 15W PoE or 2 x 30W PoE+)
AMG2019	48-56VDC 2.5A, 120W PSU, DIN rail mount (suitable for 4 x 30W PoE+)
AMG2012	48-56VDC 5.0A 240W PSU, DIN rail mount (suitable for 8 x 30W PoE+)
AMG2013	48-56VDC 10.0A 480W PSU, DIN rail mount (suitable for 16 x 30W PoE+)

## Notes.

Other port and PoE options are also available.

For models 4+1 and 8+2 is available expansion SFP card with additional 1 to 3 SFPs.

Optional Accessories: SFP modules - Optical/Copper see separate list, need to be ordered separately

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Manufacturer 