# AMG INDUSTRIAL HARDENED MANAGED PLUS SWITCHES

# Ruggedised Industrial Ethernet Solutions

AMG Managed PLUS Industrial Ethernet Switches, along with other devices in the series, offer full Layer 2 Managed Ethernet functionality.





[AMG9HM2P-12G-3S]

#### OVERVIEW

AMG Managed PLUS Industrial Switches have up to 16 Fast or Gigabit Ethernet ports with up to 4 additional Dual Speed SFP ports for data uplink.

The switches uniquely offer a common web-browser interface with the rest of all AMG Ethernet switch range for configuration of all aspects of the device.

Supporting 10/100/1000Mbps data rates, full duplex, this flexible, compact and easy to use fully managed Ethernet switch also has the benefit of Rapid Spanning Tree and Multiple Spanning Tree Protocols, with Ethernet Ring Protection Switching and IGMP functionality to deal with the multicast traffic which is commonly used in IP CCTV deployments.

#### / FEATURES

- Compact format for minimum space usage
- 10/100/1000 Mbps full bandwidth Ethernet
- Compliant with all IEEE 802.3 variants (u/ab/x/z)
- Compliant with all relevant Safety and EMC Standards
- Dual Speed SFP ports
- Supports RSTP, MSTP, ERPS, SNMP v1/v2c/v3 and IGMP v1/v2/v3
- LED indicators
- IEEE 802.1x Port Security
- Extended operating temperature compared with industry equivalents -40°C to +75°C
- On-board PoE option
- Console Port
- Optional Serial and I/O capability



# Specifications.

## Standards.

IEEE 802.3i IEEE 802.3u IEEE 802.3ab IEEE 802.3z IEEE 802.3x	10Base-T 100Base-TX, 100Base-FX 1000Base-T 1000Base-X Flow Control and Back Pressure
IEEE 802.3ac IEEE 802.3az IEEE 802.1D IEEE 802.1w IEEE 802.1s IEEE 802.1Q IEEE 802.1Q IEEE 802.1x RFC1112 RFC2236 RFC3376	Frame Size Extension Energy Efficient Ethernet Spanning Tree Rapid Spanning Tree Multiple Spanning Tree QoS Priority Marking VLANs Port Security IGMP v1 IGMP v2 IGMP v3
RFC2030	Simple Network Time Protocol
RFC2131/3736 ITU-T G.8032	Dynamic Host Configuration Protocol (client/server - IPv4) Ethernet Ring Protection Switching (ERPS)
Other	SNMP v1, v2c, v3 Synchronous Ethernet Ingress Rate Limiting (storm Control)
Wake-on-LAN Processing Type Address Table Size Jumbo Frames Bandwidth Control	Per Port Store-and-Forward 1K MAC addresses up to 10K Ingress Packet Filter and Egress Rate Limit The packet filter rate can be set from 100K to 250Mbps

#### Interface.

LED Indicators	
Per unit	10/100/1000, FDX/HDX
Software Update	Remote Programmable
Configuration:	Web Browser, SNMP, CLI

#### Ethernet.

RJ45 Ports UTP	4x, 8x, 12x or 16x 10/100T or 10/100/1000T
SFP Ports	1x, 2x, 3x or 4x 100/1000M
Power.	
Input Voltage	
No PoE Power Consumption	DC +12V to +24V 6 Watts
Reverse Polarity	o marto
Protection	Yes
Note: Redundant PS	SUs are supported
General.	
Operating Temp.	-40°C to +75°C
Storage Tempe.	-50°C to +85°C
Ambient Relative Humidity	0% to 95% (Non-condensing)
MTBF	>310,000 hrs
Mechanical.	
Casing	IP 30 Protection Metal case
Dimensions	$W \times H \times D$
1 SFP ports	70.8 × 121 × 95.5 mm
2 SFP ports	106.5 × 121 × 95.5 mm
3 SFP ports inc. 4G-4S	142 × 121 × 95.5 mm
4 SFP ports	177.5 × 121 × 95.5 mm
Note: Depth 95.5mm bracket.	includes 8mm DIN-Rail
IP Rating	IP30
Installation	Wall Mount or DIN-Rail
Weight	up to 1kg

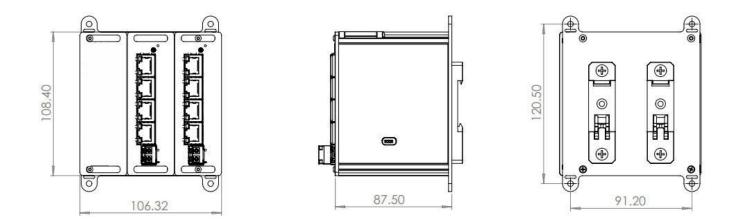
Auto MDI/MDIX

## Regulatory.

Europe	CE
US	FCC



# Specifications.



# Part Numbers.

AMG9HM2P-4F-1S	4 × 10/100Base Ethernet & 1 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 12-24Vbc Power input
AMG9HM2P-4F-2S	4 × 10/100Base Ethernet & 2 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 12-24Vbc Power input
AMG9HM2P-8F-2S	8 × 10/100Base Ethernet & 2 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 12-24Vbc Power input
AMG9HM2P-12F-3S	12 × 10/100Base Ethernet & 3 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 12-24Vbc Power input
AMG9HM2P-16F-4S	16 × 10/100Base Ethernet & 4 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 12-24Vbc Power input
AMG9HM2P-4G-1S	4 × 10/100/1000Base Ethernet & 1 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 12-24Vbc Power input
AMG9HM2P-4G-2S	4 × 10/100/1000Base Ethernet & 2 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 12-24Vbc Power input
AMG9HM2P-4G-4S	$4\times10/100/1000 \text{Base Ethernet}, 2\times100/1000 \text{Base SFP} \& 2\times1000 \text{Base SFP}, -40^\circ\text{C} \text{ to } +75^\circ\text{C}, \text{Managed PLUS}, 12-24 \text{V}_{\text{DC}} \text{Power input}$
AMG9HM2P-8G-2S	8 × 10/100/1000 Base Ethernet & 2 × 100/1000 Base SFP, -40°C to +75°C, Managed PLUS, 12-24 V <sub>DC</sub> Power input
AMG9HM2P-12G-3S	12 × 10/100/1000Base Ethernet & 3 × 100/100Base SFP, -40°C to +75°C, Managed PLUS, 12-24 $V_{DC}$ Power input
AMG9HM2P-16G-4S	16 × 10/100/1000Base Ethernet & 4 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 12-24 $V_{DC}$ Power input

# Recommended PSUs.

AMG2001 AMG2002 AMG2004A  $\begin{array}{l} Standalone \mbox{ PSU, } 15V_{\rm DC}, \mbox{ 15W} \\ Standalone \mbox{ PSU, } 15V_{\rm DC}, \mbox{ 30W} \\ DIN-Rail mounting \mbox{ PSU, } 15V_{\rm DC}, \mbox{ 48W} \end{array}$ 

# 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



