

# AMG MANAGED INDUSTRIAL HARDENED SWITCHES



## Ruggedised Ethernet Switches

AMG Managed Industrial Ethernet Switches are the Ethernet only products in AMG's Multi-Service Ethernet Switch series. Along with other devices in the series, the products offer unique features which will prove of huge benefit when implementing IP based, integrated security systems. It also supports Layer 2 Managed Ethernet functionality.



10/100 x12	100/1000 x3	Managed Full	Temp -40°C~+75°C	Mounting DIN/Surface	Secure 802.1x

[ AMG9HM2-8F-2S ]

### OVERVIEW

AMG Managed Industrial Switches have up to 12 Fast Ethernet ports which can each support up to 30W PoE+. They also have up to 3 additional Dual Speed SFP ports for data uplink.

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

Supporting 10/100Mbps 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 Mbps full bandwidth Ethernet
- Compliant with all IEEE 802.3 variants (u/x/z)
- Compliant with all relevant Safety and EMC Standards
- Dual Speed SFP ports
- Supports RSTP, MSTP, ERPS, SNMP v1-3 and IGMP v1-3
- Port trunk functionality available with LACP
- LED indicators
- IEEE 802.1x Port Security
- Easy to maintain
- Extended operating temperature compared with industry equivalents -40°C to +75°C
- On-board PoE option

# Specifications.

## Standards.

IEEE 802.3i	10Base-T
IEEE 802.3u	100Base-TX, 100Base-FX
IEEE 802.3z	1000Base-X
IEEE 802.3x	Flow Control and Back Pressure
IEEE 802.3ad	Port Trunk with LACP
IEEE 802.3ac	Frame Size Extension
IEEE 802.3az	Energy Efficient Ethernet
IEEE 802.1D	Spanning Tree
IEEE 802.1w	Rapid Spanning Tree
IEEE 802.1p	QoS Priority Marking
IEEE 802.1Q	VLANs
IEEE 802.1x	Port Security
IEEE 802.1Qav	Egress Rate Shaping
IEEE 802.1X	Port Security
IEEE 802.3at	Power over Ethernet
IEEE 1588v2	Precision Time Protocol
RFC1112	IGMP v1
RFC2236	IGMP v2
RFC3376	IGMP v3
RFC2030	Simple Network Time Protocol
RFC2131	Dynamic Host Configuration Protocol
ITU-T G.8032	Ethernet Ring Protection Switching
Other	SNMP v1, v2c, v3 Access (Policy) Control List Synchronous Ethernet Cable Fault Diagnostics Ingress Rate Limiting (storm Control)
Backplane	1Gbps Max
Wake-on-LAN	Per Port
Processing Type	Store-and-Forward
Address Table Size	1K MAC addresses
Jumbo Frames	up to 10K
Bandwidth Control	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, FDX/HDX
Software Update Configuration:	Remote Programmable Web Browser SNMP

## Ethernet.

RJ45 Ports UTP	4x, 6x, 8x or 12x 10/100T
SFP Ports	2x, 3x or 4x 100/1000M

## Power.

Input Voltage	
No PoE	DC +12V to +24V
PoE	DC +48V to +56V
Power Consumption	6 Watts
Reverse Polarity Protection	Yes
Note:	Redundant PSUs are supported

## PoE/PoE+.

Output Power	25.5 to 34.2W
Output Voltage	DC +50V to +57V
Output Current Max	600mA
Total PoE Power Budget	240W

## General.

Operating Temp.	-40°C to +75°C
Storage Tempe.	-50°C to +85°C
Ambient Relative Humidity	0% to 95% (Non-condensing)
MTBF	>949,000 hrs

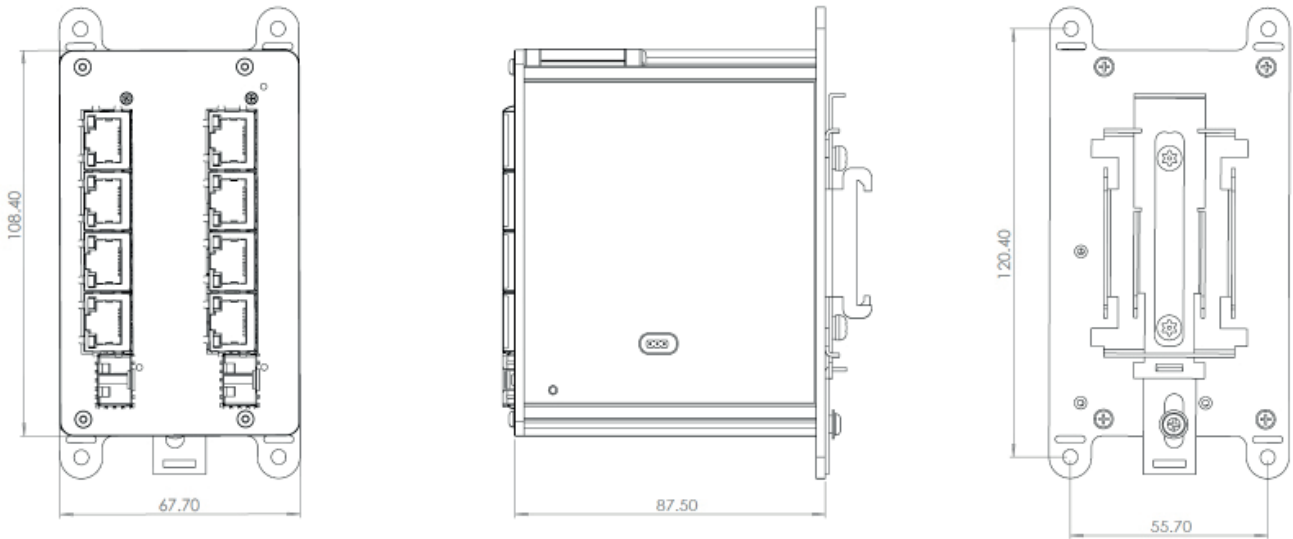
## Mechanical.

Casing	IP 30 Protection Metal case
Dimensions (W x D x H)	
14HP	70 x 170 x 112 mm
21HP	105 x 170 x 112 mm
28HP	140 x 170 x 112 mm
35HP	175 x 170 x 112 mm
Weight	1kg
Installation	Wall Mount or DIN-Rail Design

## Regulatory.

Europe	CE
US	FCC

# Specifications.



## Part Numbers.

AMG9HM2-4F-2S	21HP 4 × 10/100TX & 2 × 100/1000M SFP, -40°C to +75°C
AMG9HM2-8F-2S	21HP 8 × 10/100TX & 2 × 100/1000M SFP, -40°C to +75°C
AMG9HM2-12F-3S	28HP 12 × 10/100TX & 3 × 100/1000M SFP, -40°C to +75°C
AMG9HM2-16F-2S	35HP 16 × 10/100TX & 2 × 100/1000M SFP, -40°C to +75°C
AMG9HM2-16F-4S	35HP 16 × 10/100TX & 4 × 100/1000M SFP, -40°C to +75°C
AMG9HM2-4FH-2S	21HP 4 × 10/100TX with 802.3at PoE+ & 2 × 100/1000M SFP, -40°C to +75°C
AMG9HM2-4FH-4S	35HP 4 × 10/100TX with 802.3at PoE+ & 4 × 100/1000M SFP, -40°C to +75°C
AMG9HM2-6FH-2S	21HP 6 × 10/100TX with 802.3at PoE+ & 2 × 100/1000M SFP, -40°C to +75°C
AMG9HM2-8FH-2S	21HP 8 × 10/100TX with 802.3at PoE+ & 2 × 100/1000M SFP, -40°C to +75°C
AMG9HM2-12FH-3S	28HP 12 × 10/100TX with 802.3at PoE+ & 3 × 100/1000M SFP, -40°C to +75°C
AMG9HM2-16FH-2S	35HP 16 × 10/100TX with 802.3at PoE+ & 2 × 100/1000M SFP, -40°C to +75°C
AMG9HM2-16FH-4S	35HP 16 × 10/100TX with 802.3at PoE+ & 4 × 100/1000M SFP, -40°C to +75°C

## Recommended PSUs.

Non-PoE	AMG2004	15V <sub>DC</sub> , 24W Power Supply, DIN-Rail mounting.
PoE Variants	AMG2016	48-56V <sub>DC</sub> 2.5A, 60W PSU, DIN rail mount (suitable for 2 × 30W or 4 × 15W PoE)
	AMG2019	48-56V <sub>DC</sub> 2.5A, 120W PSU, DIN rail mount (suitable for 4 × 30W or 8 × 15W PoE)
	AMG2012	48-56V <sub>DC</sub> 5A, 240W PSU, DIN rail mount (suitable for 8 × 30W PoE)

## Notes.

Rackmount Options are also available

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

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