AMG INDUSTRIAL HARDENED MANAGED PLUS SWITCHES WITH POE+

Ruggedised Industrial Ethernet Solutions

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

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

[AMG9HM2P-12GH-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.

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.

/ 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 up to 30W per port

— Console Port

— Optional Serial and I/O capability

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Specifications.

Standards.

IEEE 802.3i	10Base-T
IEEE 802.3u	100Base-TX, 100Base-FX
IEEE 802.3ab	1000Base-T
IEEE 802.3z	1000Base-X
IEEE 802.3x	Flow Control and Back Pressure
IEEE 802.3ac	Frame Size Extension
IEEE 802.3az	Energy Efficient Ethernet
IEEE 802.1D	Spanning Tree
IEEE 802.1w	Rapid Spanning Tree
IEEE 802.1s	Multiple Spanning Tree
IEEE 802.1p	QoS Priority Marking
IEEE 802.1Q	VLANs
IEEE 802.1x	Port Security
IEEE 802.3at/af	Power over Ethernet
RFC1112	IGMP v1
RFC2236	IGMP v2
RFC3376	IGMP v3
RFC2030	Simple Network Time Protocol
RFC2131/3736	Dynamic Host Configuration Protocol (client/server - IPv4)
ITU-T G.8032	Ethernet Ring Protection Switching (ERPS)
Other	SNMP v1, v2c, v3 Synchronous Ethernet Ingress Rate Limiting (storm Control)
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	10/100/1000, FDX/HDX
Software Update	Remote Programmable
Configuration:	Web Browser, SNMP, CLI

Regulatory.

Europe	CE
US	FCC

Ethernet.

RJ45 Ports UTP	Auto MDI/MDIX 4x, 8x, 12x or 16x 10/100T or 10/100/1000T
SFP Ports	1x, 2x, 3x or 4x 100/1000M

Power.

Input and Consumption

PoE:	46-56V_{DC}	5W + 15W
PoE+:	52-56V_{DC}	5W + 30W
PSE Modes	Mode A, Mode B	
Protection	Reverse Polarity, Overload Current	

Note: Redundant PSUs are supported

PoE/PoE+.

Output Power	15 to 30W
Output Voltage	DC +50V to +57V
Output Current Max	600mA
Total PoE Power Budget	Max up to 480W

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 × H × D
1 SFP ports	70.8 × 121 × 95.5 mm
2 SFP ports	106.5 × 121 × 95.5 mm
3 SFP ports	142 × 121 × 95.5 mm
4 SFP ports	177.5 × 121 × 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

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Specifications.

Part Numbers.
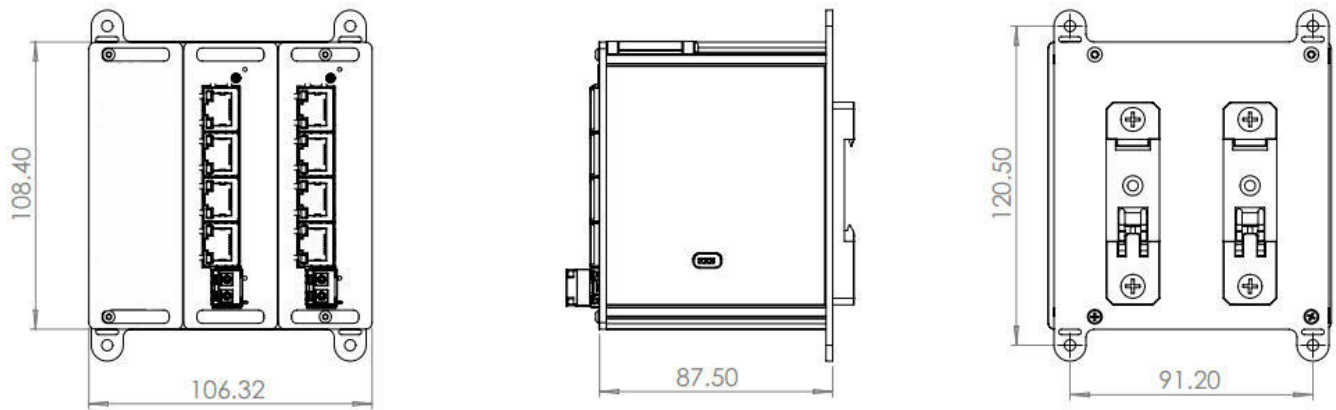
Part Number	Description
AMG9HM2P-4FH-1S-P120	4 × 10/100Base Ethernet with 802.3at PoE+ & 1 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 48-56VDC (PoE budget 120W)
AMG9HM2P-4FH-2S-P120	4 × 10/100Base Ethernet with 802.3at PoE+ & 2 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 48-56VDC (PoE budget 120W)
AMG9HM2P-8FH-2S-P240	8 × 10/100Base Ethernet with 802.3at PoE+ & 2 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 48-56VDC (PoE budget 240W)
AMG9HM2P-12FH-3S-P360	12 × 10/100Base Ethernet with 802.3at PoE+ & 3 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 48-56VDC (PoE budget 360W)
AMG9HM2P-16FH-4S-P480	16 × 10/100Base Ethernet with 802.3at PoE+ & 4 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 48-56VDC (PoE budget 480W)
AMG9HM2P-4GH-1S-P120	4 × 10/100/1000Base Ethernet with 802.3at PoE+ & 1 × 100/1000Base SFP, -40°C to +75°C, Managed PLUS, 48-56VDC (PoE budget 120W)
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Recommended PSUs.

AMG2016	48-56VDC 1.25A, 60W PSU, DIN rail mount
AMG2019	48-56VDC 2.5A, 120W PSU, DIN rail mount
AMG2012	48-56VDC 5.0A 240W PSU, DIN rail mount
AMG2013	48-56VDC 10.0A 480W PSU, DIN rail mount

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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