

# AMG570-4G-2S SERIES 6 PORT INDUSTRIAL GRADE MANAGED LAYER 2+ SWITCHES



## Industrial Ethernet Solutions

AMG's fully managed compact layer 2+ Ethernet switches provide 100Mbps, Gigabit and 2.5 Gigabit Ethernet switching for industrial network applications. Available with 4x RJ45 Gigabit ports supporting optional 30/60/90W PoE and 2x 100Mb/1Gb/2.5Gb SFP ports.



Gigabit up to x4	Gigabit up to x2	Gigabit up to x4	1/2.5 Gb x2	Managed Layer 2+	Contacts 1 In / 2 Out	Temp -40°C ~ +75°C	Mounting DIN/Surface	Protection IP40	PSU x2 Dual

[ AMG570-4GAT-2S-P120 ]

### / OVERVIEW

AMG570 series layer 2+ managed industrial Ethernet switches are designed in a compact thermally efficient DIN rail or wall mount housing and have 4 Gigabit Ethernet RJ45 ports with an additional 2 multi-rate SFP ports that support 100Mb, 1Gb and 2.5Gb for high speed data uplink into core networks, providing application and site flexibility.

Available as a non-PoE model as well as multiple PoE models for IEEE802.3at 30W and/or IEEE802.3bt 60/90W they are suitable for powering the latest high powered PoE devices over a wide industrial operating temperature range.

The AMG570 series support a wide range of management functions as well as Rapid Spanning Tree Protocol (RSTP), Multiple Spanning Tree Protocol (MSTP), Media Redundancy Protocol (MRP) and Ethernet Ring Protection Switching (ERPS) for network redundancy. IGMP functionality is supported to handle the multicast traffic which is commonly used in IP CCTV deployments.

SFPs and PSUs need to be ordered separately.

### / FEATURES

- Innovative compact thermally efficient housing ensures high levels of device reliability under full load
- -40°C to +75°C temperature maintains performance in extreme conditions
- DIN rail or wall mountable - quick to install and remove for maintenance
- Compliant with all IEEE 802.3 speeds (i/u/ab/z)
- Triple Speed SFP ports (100Mb, 1Gb, 2.5Gb)
- Supports RSTP, MSTP, ERPS, MRP, SNMP v1-3 and IGMP v1-3
- IEEE 802.1x port security enabled
- Supports 10K bytes jumbo frames
- Supports optional 15W, 30W, 60W and 90W PoE
- Layer 3 Static Routing
- Manufactured in the United Kingdom
- AMG Lifetime Support Warranty

# 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
IEEE 802.3ad	Port Trunk with LACP
IEEE 802.3az	Energy Efficient Ethernet
IEEE 802.1D	Spanning Tree (STP)
IEEE 802.1w	Rapid Spanning Tree (RSTP)
IEEE 802.1s	Multiple Spanning Tree (MSTP)
IEEE 802.1p	QoS Priority Marking
IEEE 802.1Q	VLANs
IEEE 802.1v	VLAN Classification
IEEE 802.1X	Port Security
IEEE 802.3AB	LLDP
IEEE 802.3at	30W PoE+
IEEE 802.3bt	60 & 90W PoE
RFC1112	IGMP v1
RFC2236	IGMP v2
RFC3376	IGMP v3
RFC2030	SNTP
RFC2131	DHCP
IEC 62439-2	Media Redundancy Protocol
ITU-T G.8032	Ethernet Ring Protection Switching (ERPS)

## Hardware Features.

Architecture	Store-and-Forward
Switch Latency	<7µs
Switch Fabric	18Gbps
Address Table	4K MAC Entries
Buffer Memory	1.75M bits
Jumbo Frames	10K Bytes
CPU	500MHz
SDRAM	512M Bytes
Flash	512M bits
VLAN's	4K
IGMP Groups	1024
IPv6 MLD Groups	1024
Throughput	13.39Mpps @ 64 bytes
Priority Queues	8
Bandwidth Control	Ingress Packet Filter and Egress Rate Limit

## Layer 3 Features.

Static Routing:	
Interfaces	8 Max
Routes	32 Max
DHCP	Server (IPv4)

## Software Features.

Redundancy	STP RSTP MSTP MRP ERPS (G.8032) 802.1Q
VLAN	Port Based VLAN Private VLAN Voice VLAN Multicast VLAN Registration VLAN Registration Dynamic Trunk Static Trunk
MVR MRP/GVRP LACP	DDM v1/v2/v3 (8 VLAN's Max)
SFP Monitoring IGMP Snooping IGMP Querier MLD Snooping MLD Querier IPMC	IPv6 v1 (8 VLAN's Max) IPv6 64 Profiles (128 Rules Each)

## QoS.

Class of Service Diffserv Rate Limiting Priority Queue	802.1p QoS & DSCP RFC2474 Ingress / Egress WRR / Strict / Hybrid Priority
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## Security.

Port Security Storm Control 802.1x Dynamic ARP Inspection Sticky MAC TACACS+ HTTPS/SSL BPDU Guard DHCP Snooping Loop Protection IP Source Guard IP Authorisation Managers Access (Policy) Control List (ACL L2/3/4) Custom User Rights	MAC/IP Based Rate Limiting RADIUS Authentication IPv4 & IPv6 15 Levels (20 Users Max)
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## Alarms/Contact Closures.

Inputs	1x Dry Input
Outputs	1x Form A Relay
Alarm Outputs	1x Form A Relay
Output Rating	400V <sub>DC</sub> @ 0.1A Max

# Specifications.

## PoE Management.

Scheduling  
Ping Watchdog with Reboot  
Enable/Disable, Priority Level, Power Level

## Management.

DHCP	Client / Relay (IPv4 & IPv6) Option 66/67/82
Event/Error Log	Syslog Client
Management Access	SNMP Web GUI Telnet / SSH v2.0 / CLI
Access Management	Filtering
SNMP	v1/v2c/v3
RMON	1/2/3/9 Goups
Port Mirroring	
Software Update	HTTP/HTTPS
Config Export /Import	
Dual Firmware Images	
SNTP	Client (IPv4 & IPv6)
Configuration	IPv4 & IPv6
LLDP	Link Layer Discovery Protocol
LLDP-MED	
sFlow	
Time Zone & Daylight Savings	
Cable Diagnostics	

## Interface.

LED Indicators	2x Power Fault SFP Link/Activity RJ45 Link/Activity PoE (PoE Models Only)
RJ45 Ports	4x 10/100/1000T(X) RJ45 with Auto MDI/MDI-X and 1.5 kV Isolation Protection
SFP Slot	2x 100M/1G/2.5G SFP
Power, I/O, Alarm	1x 8-Way Screw Terminal
Serial Console	USB Type C
Reset	Ultra-Small Tactile Switch

## Packaging.

Shipping Weight	0.8kg / 1.76lb
Dimensions	(W x D x H) 220 x 175 x 54 mm 8.66 x 6.89 x 2.13 in

## Power.

Power Inputs	2
Operating Voltage:	
Non-PoE Models	12-48V <sub>DC</sub>
30W PoE Models	50-56V <sub>DC*</sub>
90W PoE Models	52-56V <sub>DC*</sub>
Power Consumption	8 Watts Max (without PoE Load)
Total PoE Budget	240W Max (model dependent)
PSE Modes	Mode A (30W Ports) Mode A, Mode B (60/90W Ports)
PoE Enabled Ports	Ports 1-4
Protection	Overload

\*Low Voltage PoE Booster Models Available (see separate data sheet)

## Mechanical.

Housing	Anodised Aluminium
Dimensions:	(W x D x H) (Excluding Wall Brackets) 48 x 93 x 126 mm 1.89 x 3.66 x 4.96 in
IP Rating	IP40
Installation	Wall Mount or DIN-Rail
Weight	0.7kg / 1.54lb

## Environmental.

Operating Temp:	-40°C to +75°C
40 LFM Vented Enclosure	-40°C to +70°C
Sealed Enclosure	-40°C to +60°C
200 LFM Fan/Blower Enclosure	-34°C to +75°C
Storage Temp.	-40°C to +85°C
Humidity	5% to 95% (non-condensing)
MTBF	>250,000 hours
MTBF Standard	Telcordia SR-332 GF 30°C
Heat Dissipation	27 BTU/h (Non-PoE Models) 437 BTU/h (with 120W PoE Load) 846 BTU/h (with 240W PoE Load)
Cooling	Passive Cooling
Noise Level	0 dBA

## Regulatory.

Safety	IEC/EN 62368-1
EMI	EN55032 Class A, CISPR 32 FCC Part 15B Class A
EMS	EN61000-4-2 (ESD) EN61000-4-3 (RS) EN61000-4-4 (EFT) EN61000-4-5 (Surge) EN61000-4-6 (CS) EN61000-4-8 (PFMF)
Shock	IEC 60068-2-27
Free Fall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Environmental	Reach, RoHS, WEEE

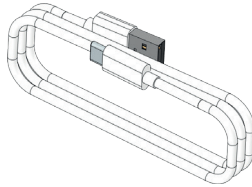
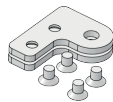
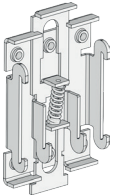
# Part Numbers.

## Industrial Layer 2+ Managed Switches

AMG570-4G-2S	4x 10/100/1000TX, 2x 100M/1G/2.5G SFP
AMG570-4GAT-2S-P120	4x 10/100/1000TX (4x 30W PoE), 2x 100M/1G/2.5G SFP
AMG570-2GBT-2GAT-2S-P240	4x 10/100/1000TX (2x 90W PoE + 2x 30W PoE), 2x 100M/1G/2.5G SFP

## Included Accessories.

DIN Rail Adapter	Rear Mounted Metal DIN Rail Clip & Screws For DIN Rail Mounting AMG570 Series Products
Wall Mounting Brackets	2x Wall Mounting Brackets & Screws For Wall / Surface Mounting AMG570 Series Products
USB Console Cable	USB Type A to Type C Console Cable (1.5M)



## Recommended PSUs.


<b>Non-PoE Models</b> AMGPSU-I12-P24	DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 12VDC, 24W
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<b>PoE Models</b> AMGPSU-I48-P120	DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 47-53VDC, 120W*
AMGPSU-I48-P240	DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-53VDC, 240W*
AMGPSU-I48-P480	DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-55VDC, 480W*

\*Also available with no exposed mains terminals and direct IEC input. Order with -IEC at the end of the part code (e.g. AMGPSU-I48-P120-IEC)

## Optional Accessories.

AMG2035	Side Mounted Wall Bracket Adapter Kit For DIN Rail Mounting AMG570 Series Products In Depth Restricted Installations. Adapter Kit Can Be Extended Using The Included Extension Kit To Also Mount A DIN Rail Power Supply Up To 480W
SFP Modules	Optical / Copper SFP Modules, 100Mb, 1Gb, 2.5Gb

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*In a continuing effort to improve and advance technology, product specifications are subject to change without notice. Please visit [www.amgsystems.com](http://www.amgsystems.com) for the latest product specifications.*