

AMG570 SERIES 16-24 PORT INDUSTRIAL GRADE MANAGED LAYER 2+ SWITCHES WITH OPTIONAL 30/90W POE



Industrial Ethernet Solutions

AMG's fully managed layer 2+ Ethernet switches provide 100Mbps, Gigabit and 2.5 Gigabit Ethernet switching for industrial network applications. Available with 8, 12 or 16x RJ45 Gigabit ports supporting optional 30/60/90W PoE, 2 or 6x 100Mb/1Gb SFP ports and 2x 100Mb/1Gb/2.5Gb SFP ports.



Gigabit up to x16	Gigabit up to x4	Gigabit up to x16	1/2.5 Gb x2	100/1000 up to x6	Contacts 1 In / 2 Out	Temp -40°C~+75°C	Mounting DIN/Surface	Protection IP40	PSU x2 Dual	NDAA/TAA Compliant

[AMG570-16GAT-8S-P360]

/ OVERVIEW

AMG570 series layer 2+ managed industrial Ethernet switches are designed in a thermally efficient DIN rail or wall mount housing and have 8, 12 or 16 Gigabit Ethernet RJ45 ports with an additional 4 or 8 multi-rate SFP ports that support 100Mb and 1Gb speeds. Two of these SFP ports also support 2.5Gb for high speed data uplink into core networks, providing application and site flexibility.

Available as non-PoE models 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 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)
- Dual or Triple Speed SFP ports (100Mb, 1Gb, 2.5Gb)
- Supports RSTP, MSTP, ERPS, MRP, SNMP and IGMP
- IEEE 802.1x port security enabled
- Supports 9.6K bytes jumbo frames
- Supports optional 15W, 30W, 60W and 90W PoE
- Layer 3 Static Routing
- Designed in the USA & UK. 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, 2236, 3376, 4604, 5711	IGMP v1, v2, v3
RFC2236, 3376	IGMP Snooping
RFC8907	TACACS
RFC2865, 2866	RADIUS
RFC5424	Syslog
RFC4250 - 4254	SSH
RFC5246	TLS1.2 / HTTPS
RFC854	Telnet
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	54 Gbps (Non-Blocking Wire Speed On All Ports. 99.999% Error Free Data Integrity)
Address Table	8K MAC Entries
Buffer Memory	4M bits
Jumbo Frames	9.6K Bytes
CPU	416MHz
SDRAM	2Gb
Flash	512Mb
VLAN's	4K
IGMP Groups	1024
IPv6 MLD Groups	1024
Throughput	40.18Mpps @ 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 Routing. Consult AMG Technical Services For Application Support	

Software Features.

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

QoS.

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

Security.

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

Specifications.

Alarms/Contact Closures.

Inputs	1x Dry Input
Outputs	1x Form A Relay
Alarm Outputs	1x Form A Relay
Output Rating	400V _{DC} @ 0.1A Max

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 Groups
Port Mirroring	
Software Update	HTTP/HTTPS
Config Export /Import	
Dual Firmware Images	
FTP/TFTP/SCP/SFTP	
SNTP	Client (IPv4 & IPv6)
Configuration	IPv4 & IPv6
LLDP	Link Layer Discovery Protocol
LLDP-MED	
sFlow	
Time Zone & Daylight Savings	
Cable Diagnostics	

Packaging.

Shipping Weight	1.66kg / 3.66lb
Dimensions	(W x D x H) 260 x 200 x 84 mm 10.24 x 7.87 x 3.31 in

Interface.

LED Indicators	2x Power Fault SFP Link/Activity RJ45 Link/Activity PoE (PoE Models Only)
RJ45 Ports	8/12/16x 10/100/1000T(X) RJ45 with Auto MDI/MDI-X and 1.5 kV Isolation Protection Half & Full Duplex Support 2x 100M/1G/2.5G SFP and 2 or 6x 100M/1G SFP
SFP Slot	
Power, I/O, Alarm Serial Console	1x 8-Way Screw Terminal USB Type C

(All Ports Comply With EIA Ethernet Data Communication Requirements)

Power.

Power Inputs	2
Operating Voltage:	
Non-PoE Models	12-56V _{DC}
30W PoE Models	50-56V _{DC}
90W PoE Models	52-56V _{DC}
Power Consumption	15 Watts Max (without PoE Load)
Total PoE Budget	360W Max (model dependent)
PSE Modes	Mode A (30W Ports) Mode A, Mode B (60/90W Ports)
PoE Enabled Ports	Ports 1-8, 1-12, 1-16 (model dependent)
Protection	Reverse Polarity Overload

Mechanical.

Housing	Anodised Aluminium
Dimensions:	(W x D x H) 80 x 123 x 156 mm 3.15 x 4.84 x 6.14 in
Excluding DIN & Wall Mounts	
IP Rating	IP40
Installation	Wall Mount or DIN-Rail
Construction	All Parts & Conductive Surfaces Are Non-Corrosive Materials No Self-Tapping Screws
Weight	1.44kg / 3.17lb

Specifications.

Environmental.

Operating Temp:	-40 to +75°C / -40 to +167°F
40 LFM Vented Enclosure	-40 to +70°C / -40 to +158°F
Sealed Enclosure	-40 to +60°C / -40 to +140°F
200 LFM Fan/Blower Enclosure	-34 to +75°C / -29 to +167°F
Storage Temp.	-40 to +85°C / -40 to +185°F
Humidity	5% to 95% (non-condensing)
MTBF	>500,000 hours
MTBF Standard	Telcordia SR-332 GF 30°C
Heat Dissipation	51 BTU/h (Non-PoE Models) 870 BTU/h (with 240W PoE Load) 1280 BTU/h (with 360W 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
Supply Chain	NDAA & TAA Compliant

Designed to meet NEMA TS2 & EN 50121-4

Part Numbers.

Industrial Layer 2+ Managed 16 Port Switches (8+8)

AMG570-8G-8S*	8x 10/100/1000TX, 6x 100M/1G SFP, 2x 100M/1G/2.5G SFP
AMG570-8GAT-8S-P240*	8x 10/100/1000TX (8x 30W PoE), 6x 100M/1G SFP, 2x 100M/1G/2.5G SFP
AMG570-2GBT-6GAT-8S-P360*	8x 10/100/1000TX (2x 60/90W & 6x 30W PoE), 6x 100M/1G SFP, 2x 100M/1G/2.5G SFP

Industrial Layer 2+ Managed 20 Port Switches (16+4 & 12+8)

AMG570-16G-4S*	16x 10/100/1000TX, 2x 100M/1G SFP, 2x 100M/1G/2.5G SFP
AMG570-16GAT-4S-P360*	16x 10/100/1000TX (16x 30W PoE), 2x 100M/1G SFP, 2x 100M/1G/2.5G SFP
AMG570-4GBT-8GAT-4G-4S-P360*	16x 10/100/1000TX (4x 60/90W, 8x 30W PoE & 4x Non-PoE), 2x 100M/1G SFP, 2x 100M/1G/2.5G SFP
AMG570-12G-8S*	12x 10/100/1000TX, 6x 100M/1G SFP, 2x 100M/1G/2.5G SFP
AMG570-12GAT-8S-P360*	12x 10/100/1000TX (12x 30W PoE), 6x 100M/1G SFP, 2x 100M/1G/2.5G SFP
AMG570-4GBT-8GAT-8S-P360*	12x 10/100/1000TX (4x 60/90W & 8x 30W PoE), 6x 100M/1G SFP, 2x 100M/1G/2.5G SFP

Industrial Layer 2+ Managed 24 Port Switches (16+8)

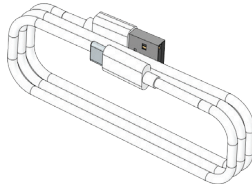
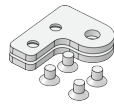
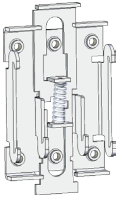
AMG570-16G-8S*	16x 10/100/1000TX, 6x 100M/1G SFP, 2x 100M/1G/2.5G SFP
AMG570-16GAT-8S-P360*	16x 10/100/1000TX (16x 30W PoE), 6x 100M/1G SFP, 2x 100M/1G/2.5G SFP
AMG570-4GBT-8GAT-4G-8S-P360*	16x 10/100/1000TX (4x 60/90W, 8x 30W PoE & 4x Non-PoE), 6x 100M/1G SFP, 2x 100M/1G/2.5G SFP

* For conformal coated circuit boards please add /C to the end of the part code. For example AMG570-8GAT-8S-P240/C

Included Accessories.

DIN Rail Adapter
Wall Mounting Brackets
USB Console Cable

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

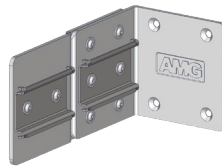
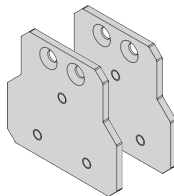


Optional Accessories.

AMGMNT-MAG-06
AMG2035

6x Rear Mounted Magnets, Mounting Plates & Screws Kit For AMG570 Series, need to be ordered separately
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
100Mb & 1Gb Optical/Copper Modules see separate list, need to be ordered separately

SFP Modules



Recommended PSUs.

Non-PoE Models

AMGPSU-W12-P25
AMGPSU-I12-P24A
AMGPSU-T12-P15

Plug Top Mounting Lite Industrial Grade PSU, 0 to +70°C, 12VDC, 25W, NDAA Compliant, UK/EU/US Plug Heads Included
DIN-Rail Mount Industrial Grade PSU, -25 to +70°C, 12VDC, 24W, NDAA Compliant*
DIN-Rail Mount Industrial Grade PSU, -25 to +70°C, 12VDC, 15W, NDAA & TAA Compliant*

PoE Models

AMGPSU-I48-P240A
AMGPSU-I48-P290
AMGPSU-I48-P480A
AMGPSU-I48-P530

DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-55VDC, 240W, NDAA Compliant**
DIN-Rail Mounting Industrial Grade PSU, -25 to +70°C, 48-55VDC, 290W, NDAA & TAA Compliant*
DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-55VDC, 480W, NDAA Compliant**
DIN-Rail Mounting Industrial Grade PSU, -25 to +70°C, 48-55VDC, 530W, NDAA & TAA Compliant*

* Also available in kit form including mains line cord, DC cable and DIN rail. Order with -K at the end of the part code (e.g. AMGPSU-I48-P240A-K).

^ Also available with no exposed mains terminals and direct IEC input kit. Order with -IEC at the end of the part code (e.g. AMGPSU-I48-P240A-IEC).

In a continuing effort to improve and advance technology, product specifications are subject to change without notice. Please visit www.amgsystems.com for the latest product specifications.

AMG Systems Ltd. 4 Pioneer Way, Castleford, WF10 5QU, UK T: +44 (0) 1767 600 777 E: sales@amgsystems.com
AMG Systems Inc. 62 Spring Hill Road, Trumbull, CT 06611, USA T: +1-855-AMGPOE1 (855-264-7631) E: usasales@amgsystems.com
D36353-04 amgsystems.com

Proud to be a British
Manufacturer



AMG