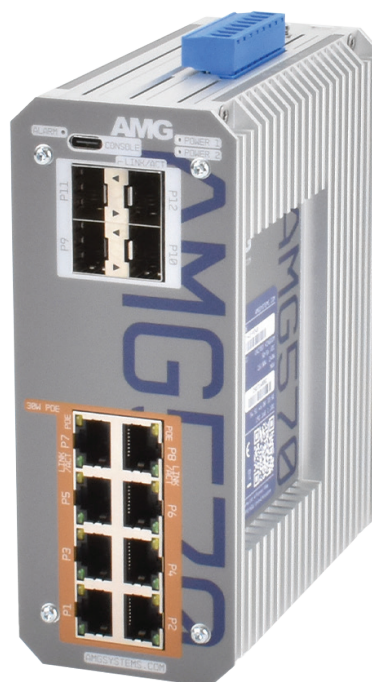# AMG570 SERIES 12-16 PORT INDUSTRIAL GRADE MANAGED LAYER 2+ SWITCHES WITH OPTIONAL 30/90W POE

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 or 12x RJ45 Gigabit ports supporting optional 30/60/90W PoE, 2x 100Mb/1Gb SFP ports and 2x 100Mb/1Gb/2.5Gb SFP ports.

Gigabit up to x12	**Gigabit** up to x2	**Gigabit** up to x12	**SFP** 1/2.5 Gb x2	**SFP** 100/1000 x2	**Contacts** 1 In / 2 Out	**Temp** -40°C~+75°C	**Mounting** DIN/Surface	**Protection** IP40	**PSU** x2 Dual	**NDAA/TAA** Compliant

[AMG570-8GAT-4S-P240]

OVERVIEW

AMG570 series layer 2+ managed industrial Ethernet switches are designed in a thermally efficient DIN rail or wall mount housing and have 8 or 12 Gigabit Ethernet RJ45 ports with an additional 4 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

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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
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	
MVR	Multicast VLAN Registration	
MRP/GVRP	VLAN Registration	
LACP	Dynamic Trunk	
	Static Trunk	
SFP Monitoring	DDM	
IGMP Snooping	v1/v2/v3 (8 VLAN's Max)	
IGMP Querier		
MLD Snooping	IPv6 v1 (8 VLAN's Max)	
MLD Querier	IPv6	
IPMC	64 Profiles (128 Rules Each)	

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	
BPDU Guard	
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)

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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 Goups
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	1.52kg / 3.35lb
Dimensions	(W x D x H)
	260 × 200 × 60 mm
	10.24 × 7.87 × 2.36 in

Interface.

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

Mechanical.

Housing	Anodised Aluminium
Dimensions:	(W x D x H)
Excluding DIN & Wall Mounts	62 × 123 × 156 mm
	2.44 × 4.84 × 6.14 in
IP Rating	IP40
Installation	Wall Mount or DIN-Rail
Construction	All Parts & Conductive Surfaces Are Non-Corrosive Materials
	No Self-Tapping Screws
Weight	1.30kg / 2.87lb

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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 12 Port Switches (8+4)

|	
AMG570-8G-4S*	8x 10/100/1000TX, 2x 100M/1G SFP, 2x 100M/1G/2.5G SFP
AMG570-8GAT-4S-P240*	8x 10/100/1000TX (8x 30W PoE), 2x 100M/1G SFP, 2x 100M/1G/2.5G SFP
AMG570-2GBT-6GAT-4S-P360*	8x 10/100/1000TX (2x 90W 6x 30W PoE), 2x 100M/1G SFP, 2x 100M/1G/2.5G SFP

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

AMG570-12G-4S*	12x 10/100/1000TX, 2x 100M/1G SFP, 2x 100M/1G/2.5G SFP
AMG570-12GAT-4S-P360*	12x 10/100/1000TX (12x 30W PoE), 2x 100M/1G SFP, 2x 100M/1G/2.5G SFP
AMG570-2GBT-10GAT-4S-P360*	12x 10/100/1000TX (2x 60/90W & 10x 30W PoE), 2x 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-4S-P240/C

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Included Accessories.

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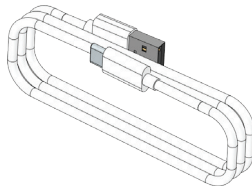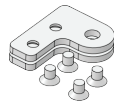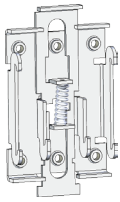
Optional Accessories.

AMGMNT-MAG-06   6x Rear Mounted Magnets, Mounting Plates & Screws Kit For AMG570 Series, need to be ordered separately
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   100Mb & 1Gb Optical/Copper Modules see separate list, need to be ordered separately
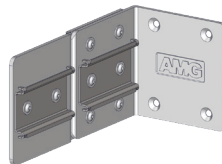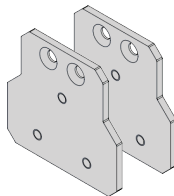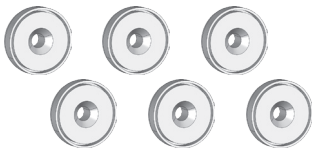
Recommended PSUs.

Non-PoE Models
AMGPSU-W12-P25   Plug Top Mounting Lite Industrial Grade PSU, 0 to +70°C, 12VDC, 25W, NDAA Compliant, UK/EU/US Plug Heads Included
AMGPSU-I12-P24A   DIN-Rail Mount Industrial Grade PSU, -25 to +70°C, 12VDC, 24W, NDAA Compliant*
AMGPSU-T12-P15   DIN-Rail Mount Industrial Grade PSU, -25 to +70°C, 12VDC, 15W, NDAA & TAA Compliant*

PoE Models
AMGPSU-I48-P240A   DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-55VDC, 240W, NDAA Compliant*^
AMGPSU-I48-P290   DIN-Rail Mounting Industrial Grade PSU, -25 to +70°C, 48-55VDC, 290W, NDAA & TAA Compliant*
AMGPSU-I48-P480A   DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-55VDC, 480W, NDAA Compliant*^
AMGPSU-I48-P530   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).

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