AMG570-8G-3S SERIES 11 PORT INDUSTRIAL GRADE MANAGED LAYER 2+ SWITCHES



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 8x RJ45 Gigabit ports supporting optional 30/60/90W PoE and 3x 100Mb/1Gb/2.5Gb SFP ports.

























[AMG570-8GAT-3S-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 Gigabit Ethernet RJ45 ports with an additional 3 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 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)
- $--\hspace{0.1cm}$ Supports RSTP, MSTP, ERPS, MRP, SNMP and IGMP
- IEEE 802.1x port security enabled
- Supports 10K 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 1000Base-X IEEE 802.3z 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

VLAN Classification IEEE 802.1v

IEEE 802.1X Port Security **IEEE 802.3AB LLDP** IEEE 802.3at 30W PoE+ IEEE 802.3bt 60 & 90W PoE RFC1112, 2236, 3376, IGMP v1, v2, v3

4604, 5711

RFC2236, 3376 **IGMP Snooping**

RFC8907 **TACACS RADIUS** RFC2865, 2866 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.

Store-and-Forward Architecture

Switch Latency

Switch Fabric ${\bf 31~Gbps}~({\sf Non-Blocking~Wire~Speed~On~All}$

Ports. 99.999% Error Free Data Integrity) **4K MAC Entries**

Address Table **Buffer Memory** 1.75M bits Jumbo Frames 10K Bytes **CPU** 500MHz **SDRAM** 2Gb Flash 512Mb VLAN's 4K **IGMP** Groups 1024

1024 Throughput 23.07Mpps @ 64 bytes

Priority Queues

IPv6 MLD Groups

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.

STP Redundancy

> RSTP **MSTP MRP**

ERPS (G.8032)

VLAN 802.1Q

> Port Based VLAN Private VLAN Voice VLAN

Multicast VLAN Registration MVR

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

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)



Specifications.

Alarms/Contact Closures.

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

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) IPv4 & IPv6 Configuration

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 8x 10/100/1000T(X) RJ45

> with Auto MDI/MDI-X and 1.5 kV Isolation Protection Half & Full Duplex Support 3x 100M/1G/2.5G SFP

SFP Slot Power, I/O, Alarm

1x 8-Way Screw Terminal **USB Type C**

Serial Console

(All Ports Comply With EIA Ethernet Data Communication Requirements)

Packaging.

Shipping Weight 1.35kg / 2.98lb **Dimensions** $(W \times D \times H)$

> 260 × 200 × 60 mm $10.24 \times 7.87 \times 2.36$ in

Power.

Power Inputs Operating Voltage:

12-56V_{DC} Non-PoE Models 50-56V_{DC*} 30W PoE Models 52-56V_{DC*} 90W PoE Models

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

Power Consumption 10 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 (model dependent)

Protection Reverse Polarity

Overload

Mechanical.

Housing Anodised Aluminium

Dimensions: $(W \times D \times H)$ Excluding DIN & Wall Mounts 59 × 123 × 156 mm $2.32 \times 4.84 \times 6.14$ in

IP40

IP Rating Installation Wall Mount or DIN-Rail Construction All Parts & Conductive

Surfaces Are Non-Corrosive

Materials

No Self-Tapping Screws

Weight 1.15kg / 2.54lb

Environmental.

-40 to +75°C / -40 to +167°F Operating Temp:

-40 to +70°C / -40 to +158°F 40 LFM Vented Enclosure -40 to +60°C / -40 to +140°F Sealed Enclosure 200 LFM Fan/Blower Enclosure -34 to +75°C / -29 to +167°F -40 to +85°C / -40 to +185°F Storage Temp. 5% to 95% (non-condensing) Humidity

MTBF 907,476 hours

MTBF Standard Telcordia SR-332 GF 30°C 34 BTU/h (Non-PoE Models) **Heat Dissipation**

853 BTU/h (with 240W PoE Load) 1262 BTU/h (with 360W PoE Load)

Cooling **Passive Cooling**

Noise Level 0 dBA



Specifications.

Regulatory.

EN61000-4-8 (PFMF) Shock IEC 60068-2-27 Safety IEC/EN 62368-1 Free Fall IEC 60068-2-32 EN55032 Class A EMI Vibration IEC 60068-2-6 FCC Part 15B Class A Environmental Reach, RoHS, WEEE

EMS EN61000-4-2 (ESD) Traffic **NEMATS2** EN61000-4-3 (RS)

Supply Chain NDAA & TAA Compliant EN61000-4-4 (EFT)

EN61000-4-5 (Surge) EN61000-4-6 (CS)

Designed to meet EN 50121-4

Part Numbers.

Industrial Layer 2+ Managed Switches

AMG570-8G-3S 8x 10/100/1000TX, 3x 100M/1G/2.5G SFP AMG570-8GAT-3S-P240 8x 10/100/1000TX (8x 30W PoE), 3x 100M/1G/2.5G SFP AMG570-2GBT-4GAT-2G-3S-P300 8x 10/100/1000TX (2x 90W, 4x 30W PoE & 2x Non-PoE), 3x 100M/1G/2.5G SFP 8x 10/100/1000TX (4x 90W PoE & 4x Non-PoE), 3x 100M/1G/2.5G SFP AMG570-4GBT-4G-3S-P360

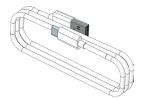
Included Accessories.

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 Mouting Brackets & Screws For Wall / Surface Mouting AMG570 Series Products USB Type A to Type C Console Cable (1.5M)







Recommended PSUs.

Non-PoE Models

AMGPSU-W12-P25 Plug Top Mounting Light Industrial Grade PSU, 0 to +70°C, 12VDC, 25W, UK/EU/US Plug Heads Included AMGPSU-I12-P24 DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 12VDC, 24W*

PoE Models

AMGPSU-I48-P120 DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-53VDC, 120W*^ DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-53VDC, 240W*^ AMGPSU-I48-P240 AMGPSU-I48-P480 DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-55VDC, 480W*^

* 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-148-P120-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-P120-IEC).

ptional 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

Optical / Copper SFP Modules, 100Mb, 1Gb, 2.5Gb SFP Modules

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



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