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 seperately.

/ 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)
- 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

 IEEE 802.3z
 1000Base-X

 IEEE 802.3x
 Flow Control

IEEE 802.3adPort Trunk with LACPIEEE 802.3azEnergy Efficient EthernetIEEE 802.1DSpanning 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 31 Gbps (Non-Blocking Wire Speed On All

Ports. 99.999% Error Free Data Integrity)

Address Table **4K MAC Entries Buffer Memory** 1.75M bits Jumbo Frames 10K Bytes CPU 500MHz **SDRAM** 2Gb 512Mb Flash VLAN's 4K **IGMP** Groups 1024 IPv6 MLD Groups 1024

Throughput 23.07Mpps @ 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)

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)



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

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

Serial Console USB Type C

(All Ports Comply With EIA Ethernet Data Communication Requirements)

Packaging.

Shipping Weight 1.35kg / 2.98lb Dimensions (W x D x H)

260 × 200 × 60 mm 10.24 × 7.87 × 2.36 in

Power.

Power Inputs 2
Operating Voltage:

 $\begin{array}{ll} \mbox{Non-PoE Models} & \mbox{12-56V}_{\mbox{\scriptsize DC}} \\ \mbox{30W PoE Models} & \mbox{50-56V}_{\mbox{\scriptsize DC}^*} \\ \mbox{90W PoE Models} & \mbox{52-56V}_{\mbox{\scriptsize DC}^*} \end{array}$

*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 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

IP Rating IP40

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.

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 907,476 hours

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

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) Safety IEC/EN 62368-1 Shock IEC 60068-2-27 EN55032 Class A EMI Free Fall IEC 60068-2-32 FCC Part 15B Class A Vibration IEC 60068-2-6 **EMS** EN61000-4-2 (ESD)

> Environmental Reach, RoHS, WEEE EN61000-4-3 (RS) Supply Chain NDAA & TAA Compliant EN61000-4-4 (EFT)

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

Designed to meet NEMA TS2 & 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 |
| AMG570-4GBT-4G-3S-P360 | 8x 10/100/1000TX (4x 90W PoE & 4x Non-PoE), 3x 100M/1G/2.5G SFP |

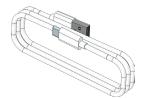
Included Accessories.

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-I12-P24 DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 12VDC, 24W

PoF Models

SFP Modules

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-148-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

