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/1/2.5Gb SFP ports.























[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, Multiple Spanning Tree and Ethernet Ring Protection Switching (ERPS) protocols 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 compact thermally efficient housing ensures high levels of device relaibility 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 (up to 2.5Gb Speed)
- Supports RSTP, MSTP, ERPS, 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 802.3adPort 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

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** 2Gb Flash 512Mb VLAN's 4K **IGMP** Groups 1024

Throughput 13.39Mpps @ 64 bytes

Priority Queues 8

IPv6 MLD Groups

Bandwidth Control Ingress Packet Filter and

1024

Egress Rate Limit

Layer 3 Features.

Static Routing:

Interfaces 8 Max
Routes 32 Max
DHCP Server (IPv4)

Software Features.

Redundancy STP

RSTP MSTP

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)

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



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 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.

SFP Slot

Shipping Weight 1.25kg / 2.76lb Dimensions (W x D x H)

192 × 162 × 60 mm 7.56 × 6.38 × 2.36 in

Power.

Power Inputs 2
Operating Voltage:

 $\begin{array}{lll} \text{Non-PoE Models} & \text{12-48V}_{\text{DC}} \\ \text{PoE Models} & \text{48-56V}_{\text{DC}} \end{array}$

Power Consumption 8 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 1-4
Protection Overload

Mechanical.

Housing Anodised Aluminium

Dimensions: (W x D x H) (Excluding Wall Brackets)

48 × 92 × 126 mm 1.89 × 3.62 × 4.96 in

IP Rating IP40

Installation Wall Mount or DIN-Rail

Weight 1kg / 2.20lb

Environmental.

Operating Temp. -40°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)
1256 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



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
AMG570-4GBT-2S-P360	4x 10/100/1000TX (4x 90W PoE), 2x 100M/1G/2.5G SFP

Recommended PSUs.

Non-PoE Models

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

PoE Models

AMGPSU-I48L-P120 DIN-Rail Mounting Light Industrial Grade PSU, -20 to +60°C, 48-55VDC, 120W AMGPSU-I48-P120 DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 47-53VDC, 120W DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-53VDC, 240W DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-55VDC, 480W DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-55VDC, 480W

Notes.

Included Accessories: DIN Rail & Wall Mounting Brackets, USB Type A to Type C Console Cable (1.5M)
Optional Accessories: SFP modules - Optical/Copper see separate list, need to be ordered separately





