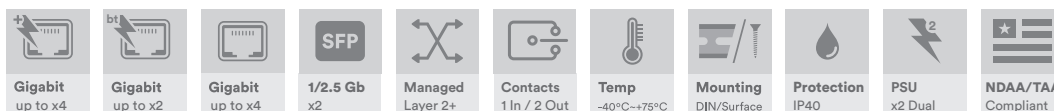# AMG570-4G-2S SERIES
6 PORT INDUSTRIAL GRADE
MANAGED LAYER 2+ SWITCHES

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/1Gb/2.5Gb SFP ports.

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

[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 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 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 (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

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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	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	18Gbps
Address Table	4K MAC Entries
Buffer Memory	1.75M bits
Jumbo Frames	10K Bytes
CPU	500MHz
SDRAM	512M Bytes
Flash	512M bits
VLAN's	4K
IGMP Groups	1024
IPv6 MLD Groups	1024
Throughput	13.39Mpps @ 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)

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

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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	
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	4x 10/100/1000T(X) RJ45 with Auto MDI/MDI-X and 1.5 kV Isolation Protection
SFP Slot	2x 100M/1G/2.5G SFP
Power, I/O, Alarm	1x 8-Way Screw Terminal
Serial Console	USB Type C

Packaging.

Shipping Weight	0.8kg / 1.76lb
Dimensions	(W x D x H)
	220 × 175 × 54 mm
	8.66 × 6.89 × 2.13 in

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

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	8 Watts Max (without PoE Load)
Total PoE Budget	240W 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 DIN & Wall Mounts	48 × 93 × 126 mm
	1.89 × 3.66 × 4.96 in
IP Rating	IP40
Installation	Wall Mount or DIN-Rail
Weight	0.7kg / 1.54lb

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	27 BTU/h (Non-PoE Models)
	437 BTU/h (with 120W PoE Load)
	846 BTU/h (with 240W PoE Load)
Cooling	Passive Cooling
Noise Level	0 dBA

Regulatory.

Safety	IEC/EN 62368-1
EMI	EN55032 Class A, 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	

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

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)
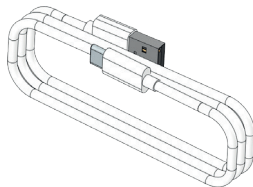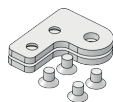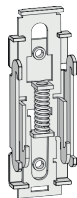
Recommended PSUs.

Non-PoE Models
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, 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-I48-P120-IEC)

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

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