

AMG570-8G-3S-LV 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 30/60/90W PoE and 3x 100Mb/1Gb/2.5Gb SFP ports. Integrated low voltage DC-DC PoE Booster.



Gigabit
up to x8



Gigabit
up to x4



Gigabit
up to x4



1/2.5 Gb
x3



Managed
Layer 2+



Contacts
1 In / 2 Out



Temp
-40°C~+75°C



Mounting
DIN/Surface



Protection
IP40



Booster
Dual 12/24



NDA/TAA
Compliant

[AMG570-8GAT-3S-P190-LV]

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 LV models feature a fully isolated 9-36VDC or 20-60VDC booster circuit with a regulated 53VDC output to supply PoE from a low voltage power input.

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 commonly used in IP CCTV deployments.

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
- Integrated low voltage DC-DC PoE booster
- Supports 10K bytes jumbo frames
- Supports 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 802.3ad	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	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
Flash	512Mb
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 Multicast VLAN Registration VLAN Registration Dynamic Trunk Static Trunk DDM v1/v2/v3 (8 VLAN's Max)
MVR MRP/GVRP LACP	IPv6 v1 (8 VLAN's Max) IPv6 64 Profiles (128 Rules Each)
SFP Monitoring IGMP Snooping IGMP Querier MLD Snooping MLD Querier IPMC	

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 Groups
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	1x Power Alarm SFP Link/Activity RJ45 Link/Activity PoE
RJ45 Ports	8x 10/100/1000T(X) RJ45 with Auto MDI/MDI-X and 1.5 kV Isolation Protection Half & Full Duplex Support
SFP Slot	3x 100M/1G/2.5G SFP
Power, I/O, Alarm Serial Console	1x 8-Way Screw Terminal USB Type C (All Ports Comply With EIA Ethernet Data Communication Requirements)

Packaging.

Shipping Weight	1.50kg / 3.31lb
Dimensions	(W x D x H) 260 × 200 × 60 mm 10.24 × 7.87 × 2.36 in

Power.

Power Inputs	2
Operating Voltage:	
P90 Models	2x 9-36V _{DC}
P190 Models	2x 20-60V _{DC}
P240/P290 Models	2x 9-36V _{DC}
Power Consumption	10 Watts Max (without PoE Load)
Total PoE Budget	90/190/240/290W Max
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 x D x H) 59 × 123 × 156 mm 2.32 × 4.84 × 6.14 in Excluding DIN & Wall Mounts
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

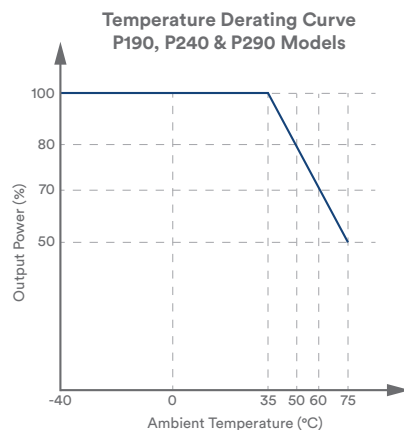
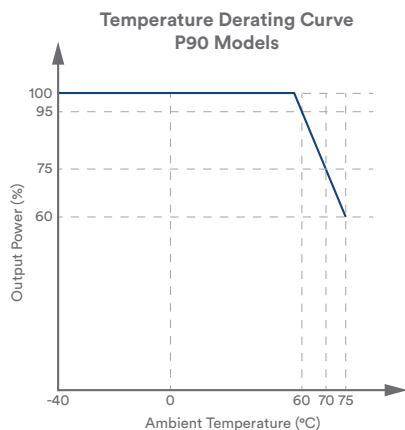
Environmental.

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	MIL-HDBK-217F GF 25°C
Heat Dissipation	341 BTU/h (with 90W PoE Load) 682 BTU/h (with 190W PoE Load) 853 BTU/h (with 240W PoE Load) 1024 BTU/h (with 290W PoE Load)
Cooling	Passive Cooling
Noise Level	0 dBA

Specifications.

Regulatory.			
Safety	IEC/EN 62368-1	Shock	EN61000-4-8 (PFMF)
	EN55032 Class A	Free Fall	IEC 60068-2-27
EMI	FCC Part 15B Class A	Vibration	IEC 60068-2-32
EMS	EN61000-4-2 (ESD)	Environmental	IEC 60068-2-6
	EN61000-4-3 (RS)	Traffic	Reach, RoHS, WEEE
	EN61000-4-4 (EFT)	Supply Chain	NEMA TS2
	EN61000-4-5 (Surge)		NDAA & TAA Compliant
	EN61000-4-6 (CS)		
		Designed to meet EN 50121-4	

Product Characteristic Curve.



Part Numbers.

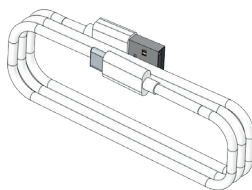
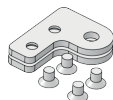
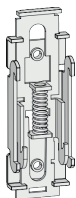
Industrial Layer 2+ Managed Switches With Integrated Isolated DC-DC PoE Voltage Booster

AMG570-8GAT-3S-P90-LV	8x 10/100/1000TX (8x 30W PoE, Max 90W), 3x 100M/1G/2.5G SFP, 9-36VDC
AMG570-8GAT-3S-P190-LV	8x 10/100/1000TX (8x 30W PoE, Max 190W), 3x 100M/1G/2.5G SFP, 20-60VDC
AMG570-8GAT-3S-P240-LV	8x 10/100/1000TX (8x 30W PoE, Max 240W), 3x 100M/1G/2.5G SFP, 9-36VDC
AMG570-2GBT-4GAT-2G-3S-P190-LV	8x 10/100/1000TX (2x 90W, 4x 30W PoE, Max 190W & 2x Non-PoE), 3x 100M/1G/2.5G SFP, 20-60VDC
AMG570-2GBT-4GAT-2G-3S-P290-LV	8x 10/100/1000TX (2x 90W, 4x 30W PoE, Max 290W & 2x Non-PoE), 3x 100M/1G/2.5G SFP, 9-36VDC
AMG570-4GBT-4G-3S-P190-LV	8x 10/100/1000TX (4x 90W PoE, Max 190W & 4x Non-PoE), 3x 100M/1G/2.5G SFP, 20-60VDC
AMG570-4GBT-4G-3S-P290-LV	8x 10/100/1000TX (4x 90W PoE, Max 290W & 4x Non-PoE), 3x 100M/1G/2.5G SFP, 9-36VDC

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



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

SFP Modules

Proud to be a British
Manufacturer 

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

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