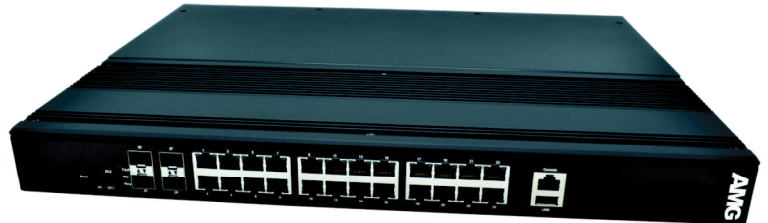










AMG560-24G SERIES 28 PORT INDUSTRIAL GRADE MANAGED LAYER 2 SWITCH



Industrial Ethernet Solutions

AMG's fully managed layer 2 Ethernet switches provide 100Mbps, Gigabit and 10 Gigabit Ethernet switching for industrial edge network applications. Available with 24x RJ45 Gigabit ports supporting optional 30W PoE+ and 4x Gigabit SFP or 4x 1/10 Gigabit SFP+ ports.



| | | | | | | | | | |
|--|--|---|---|---|--|---|---|--|---|
|  Gigabit up to x24 |  Gigabit up to x24 |  Gigabit up to x4 |  1/10 Gb up to x4 |  Managed Full |  Secure 802.1x |  USB x1 |  Temp -40°C~+75°C |  Mounting Rack/Surface |  PSU x2 Dual |
|--|--|---|---|---|--|---|---|--|---|

[AMG560-24GAT-4XS-P300]

OVERVIEW

AMG560 series layer 2 managed industrial Ethernet switches are designed in a 1U 19inch mount housing and have 28 Ethernet ports in total. 24 Gigabit Ethernet RJ45 ports plus an additional 4 Gigabit only or multi-rate SFP/SFP+ ports providing up to 10Gb speeds for data uplink and backbone connectivity. Fibre connectivity is determined by separate SFP device selection, providing application and site flexibility.

The 24 Gigabit Ethernet RJ45 ports optionally support IEEE802.3at 30W PoE+ and are suitable for powering PoE devices over a wide industrial operating temperature range.

The AMG560 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.

The integrated USB port provides easy access to save & restore configuration settings and system logs.

SFPs and DC PSUs need to be ordered separately.

FEATURES

- 19inch 1U rack or desktop/shelf mount
- -40°C to +75°C temperature maintains performance in extreme conditions
- Available with 90-264VAC mains power input or combinations of AC & DC redundant power inputs
- Compliant with all IEEE 802.3 speeds (i/u/ab/z/ae)
- Dual Speed SFP+ ports (up to 10Gb Speed)
- Supports RSTP, MSTP, ERPS, SNMP v1-3 and IGMP v1-3
- Port trunk functionality available with LACP
- IEEE 802.1x port security enabled
- Supports up to 16K bytes jumbo frames
- Supports optional 15W and 30W PoE
- USB port for configuration free replacement
- AMG Lifetime Support Warranty

Specifications.

Standards.

| | |
|--------------|--|
| IEEE 802.3i | 10Base-T |
| IEEE 802.3u | 100Base-TX |
| IEEE 802.3ab | 1000Base-T |
| IEEE 802.3z | 1000Base-X |
| IEEE 802.3ae | 10GBase-R |
| IEEE 802.3x | Flow Control |
| IEEE 802.3ad | Port Trunk with LACP |
| 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 802.1X | Port Security |
| IEEE 802.3AB | LLDP |
| IEEE 802.3af | Power over Ethernet 15.4W |
| IEEE 802.3at | Power over Ethernet 30W |
| RFC1112 | IGMP v1 |
| RFC2236 | IGMP v2 |
| RFC3376 | IGMP v3 |
| RFC2030 | Simple Network Time Protocol (SNTP) |
| RFC2131 | Dynamic Host Configuration Protocol (DHCP) |
| ITU-T G.8032 | Ethernet Ring Protection Switching (ERPS) |
| IEEE 1588v2 | PTP Time Sync |

Hardware Features.

| | |
|-------------------|---|
| Architecture | Store-and-Forward |
| Switch Latency | <7µs |
| Switch Fabric | 56Gbps (1GB Models) 128Gbps (10GB Models) |
| Address Table | 16K MAC entries |
| Buffer Memory | 12M bits |
| Jumbo Frames | 9.2K bytes |
| VLAN's | 4K |
| IGMP Groups | 512 |
| Throughput | 41.66Mpps (1GB Models) 95.24Mpps (10GB Models) |
| Priority Queues | 8 |
| Bandwidth Control | Ingress Packet Filter and Egress Rate Limit |

Software Features.

| | |
|----------------|--------------------------------------|
| Redundancy | STP RSTP MSTP ERPS (G.8032) |
| VLAN | 802.1Q Port Based VLAN Q-in-Q |
| LACP | Link Aggregation Control Protocol |
| SFP Monitoring | DDM |
| IGMP Snooping | v1/v2/v3 |
| IGMP Querier | |

QoS.

| | |
|------------------|-----------------------|
| Class of Service | 802.1p QoS & DSCP |
| Rate Limiting | Ingress / Egress |
| Priority Queue | WRR / Strict Priority |

Security.

| | |
|---------------|-----------------------|
| Port Security | MAC-based |
| Storm Control | Rate Limiting |
| 802.1x | RADIUS Authentication |
| TACACS+ | |
| HTTPS/SSL | |
| SSH v2.0 | |
| DHCP Snooping | |

Management.

| | |
|------------------------------|---|
| DHCP | Client / Server / Relay Option 66/67/82 |
| Event/Error Log | Syslog Client SMTP E-Mail USB |
| Management Access | SNMP Web GUI Telnet / SSH v2.0 CLI |
| SNMP | v1/v2c/v3 |
| RMON | 1/2/3/9 Groups |
| Port Mirroring | |
| Software Update | HTTP/HTTPS/USB |
| Config Export /Import | |
| SNTP | Client |
| LLDP | Link Layer Discovery Protocol |
| Time Zone & Daylight Savings | |
| Industrial Profiles | Modbus TCP & Ethernet/IP |
| IPv4 & IPv6 | |

Specifications.

PoE Management.

Scheduling
Ping Watchdog with Reboot
Enable/Disable, Priority Level, Power Level

Alarms/Contact Closures.

| | |
|---------------|-----------------------------|
| Inputs | 1x Digital Input (Isolated) |
| Input Current | 8mA Max |
| State 1 | +13 to +30V |
| State 0 | -30 to +3V |
| Outputs | 1x Relay Output |
| Type | Form A |
| Output Rating | 24V _{DC} @ 1A |

Interface.

| | |
|-----------------|--|
| LED Indicators | 2x Power Fault Ring State Ring Master SFP Link/Activity RJ45 Link/Activity PoE |
| RJ45 Ports | 24x 10/100/1000T(X) RJ45 with Auto MDI/MDI-X and 1.5 kV Isolation Protection |
| SFP Slot | 4x 1000FX SFP or |
| SFP+ Slot | 4x 1/2.5/10G SFP+ |
| Power - AC | 1x IEC C14 Socket |
| Power - DC | 1x 4 pin screw terminal |
| DI/Relay | 1x 4 pin screw terminal |
| Serial Console | 1x RJ45 |
| Config/Firmware | USB Type A |
| Reset | Ultra-small Tactile Switch |

Power.

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|--------------------|---------------------------------------|
| Power Inputs | 1 or 2 (Model Dependent) |
| Operating Voltage: | |
| AC Input | 90-264V _{AC} |
| DC Inputs | 48-56V _{DC} |
| Power Consumption | 18 Watts Max (1Gb Models) |
| (without PoE Load) | 22 Watts Max (10Gb Models) |
| Total PoE Budget | 300W Max (AC Power) |
| | 720W Max (DC Power) |
| PSE Modes | Mode A |
| PoE Enabled Ports | Ports 1-24 |
| Protection | Reverse Polarity, Overload Current |

USB.

Firmware Update
Configuration Backup / Restore
Boot Up & System Log

Mechanical.

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|--------------|---|
| Housing | Metal |
| Dimensions: | (W x D x H) Excluding 19inch Brackets 440 x 331 x 44 mm 17.32 x 13.03 x 1.73 in |
| IP Rating | IP30 |
| Installation | 19inch Rack (1U) or Desktop |
| Weight | 6kg / 13.23lb |

Environmental.

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|------------------|--|
| Operating Temp. | -40°C to +75°C (With 1Gb SFP) -40°C to +60°C (With 10Gb SFP+) |
| Storage Tempe. | -40°C to +85°C |
| Humidity | 5% to 95% (non-condensing) |
| MTBF | >250,000 hours |
| MTBF Standard | Telcordia (Bellcore) GB |
| Heat Dissipation | 1085 BTU/h (1Gb Models 300W PoE) 2518 BTU/h (1Gb Models 720W PoE) 75 BTU/h (10Gb Models Non-PoE) 1099 BTU/h (10Gb Models 300W PoE) 2532 BTU/h (10Gb Models 720W PoE) |
| Cooling | Passive |
| Noise Level | 0 dBA |

Regulatory.

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|---------------|---|
| 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 | IEC60068-2-27 |
| Free Fall | IEC60068-2-32 |
| Vibration | IEC60068-2-6 |
| Environmental | Reach, RoHS, WEEE |

Designed to meet NEMA TS2 & EN 50121-4

Part Numbers.

1Gb Industrial Layer 2 Managed PoE Switches

| | |
|--------------------------|--|
| AMG560-24GAT-4S-P300 | 24 x 10/100/1000TX 30W PoE (300W Max) & 4 x 1000M SFP (1 x AC Input) |
| AMG560-24GAT-4S-RP300-AD | 24 x 10/100/1000TX 30W PoE (300W Max) & 4 x 1000M SFP (1 x AC + 1x DC Input) |
| AMG560-24GAT-4S-RP720-DD | 24 x 10/100/1000TX 30W PoE (720W Max) & 4 x 1000M SFP (2 x DC Inputs) |

10Gb Industrial Layer 2 Managed Switches

| | |
|----------------------|--|
| AMG560-24G-4XS | 24 x 10/100/1000TX & 4 x 1G/2.5G/10G SFP+ (1 x AC Input) |
| AMG560-24G-4XS-RP-AD | 24 x 10/100/1000TX & 4 x 1G/2.5G/10G SFP+ (1 x AC + 1x DC Input) |
| AMG560-24G-4XS-RP-DD | 24 x 10/100/1000TX & 4 x 1G/2.5G/10G SFP+ (2 x DC Inputs) |

10Gb Industrial Layer 2 Managed PoE Switches

| | |
|---------------------------|---|
| AMG560-24GAT-4XS-P300 | 24 x 10/100/1000TX 30W PoE (300W Max) & 4 x 1G/2.5G/10G SFP+ (1 x AC Input) |
| AMG560-24GAT-4XS-RP300-AD | 24 x 10/100/1000TX 30W PoE (300W Max) & 4 x 1G/2.5G/10G SFP+ (1 x AC + 1x DC) |
| AMG560-24GAT-4XS-RP720-DD | 24 x 10/100/1000TX 30W PoE (720W Max) & 4 x 1G/2.5G/10G SFP+ (2 x DC Inputs) |

Recommended PSUs.

Non-PoE Models With DC Inputs

AMGPSU-I48-P60 DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-56VDC, 60W

PoE Models With DC Inputs

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

Notes.

Included Accessories: 19inch Mounting Brackets, Console Cable, Region Specific Line Cord (AC Models Only)
Optional Accessories: SFP/SFP+ modules - Optical/Copper see separate list, need to be ordered separately

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.