AMG510-22G SERIES 26 PORT COMMERCIAL GRADE MANAGED LAYER 2+ SWITCH



Commercial Ethernet Solutions

AMG's fully managed layer 2+ Ethernet switches provide 100Mbps and Gigabit Ethernet switching for commercial network applications. Available with 22x RJ45 Gigabit ports and 2x Gigabit RJ45/SFP Combo ports supporting optional 30W PoE+ along with 2x 100Mb/1Gb SFP Ports.

























[AMG510-22G Series]

/ OVERVIEW

AMG510 series layer 2+ managed Ethernet switches are designed for 19inch rack or desktop mounting within commercial grade applications. The AMG510-22G series has 22 Gigabit Ethernet RJ45 ports and an additional 2 Gigabit RJ45/SFP combo ports with optional IEEE 802.3at compliant 30W PoE+ as well as 2 multi-rate SFP only ports that support both 100Mb and 1Gb speeds for maximum flexibility.

Support for the latest in security features ensure that the AMG510 series can provide robust security and reliability as part of an overall secure network design strategy.

The AMG510 series support a wide range of management functions as well as Rapid Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP) for network redundancy. IGMP functionality is supported to handle the multicast traffic which is commonly used in IP CCTV deployments.

SFPs need to be ordered separately.

/ FEATURES

- 19inch 1U rack or desktop/shelf mount
- O°C to +50°C temperature for commercial grade applications
- 90-264VAC mains power input
- Compliant with all IEEE 802.3 speeds (i/u/ab/z)
- Dual Speed SFP ports (supporting 100Mb & 1Gb speeds)
- Supports RSTP, MSTP, SNMP v1-3 and IGMP v1-3
- Port trunk functionality available with LACP
- IEEE 802.1x port security enabled
- Supports 9.6K bytes jumbo frames
- Layer 3 Static Routing
- AMG 3 Year 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+
RFC1112, 2236, 3376, IGMP v1, v2, v3

4604, 5711

RFC2236, 3376 IGMP Snooping

RFC8907 TACACS RFC2865, 2866 RADIUS RFC5424 Syslog RFC4250 - 4254 SSH

RFC5246 TLS1.2 / HTTPS

RFC854 Telnet RFC2030 SNTP RFC2131 DHCP

Hardware Features.

Architecture Store-and-Forward

Switch Latency <7µs Switch Fabric 52Gbps

Address Table 8K MAC Entries

Buffer Memory 4M bits Jumbo Frames 9.6K bytes **CPU** 400MHz **SDRAM** 128Mb Flash 16Mb VLAN's 4K IGMP Groups 1024 IPv6 MLD Groups 1024 Throughput 38.68Mpps

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

VLAN 802.1Q

Port Based VLAN
Private VLAN
Voice VLAN

MVR Multicast VLAN Registration

LACP Dynamic Trunk

Static Trunk

GARP/GVRP

IGMP Snooping v1/v2/v3 (8 VLAN'S Max)

IGMP Querier

MLD Snooping IPv6 (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

TACACS+ HTTPS/SSL BPDU Guard DHCP Snooping Loop Protection

IP Source Guard IPv4 & IPv6 IP Authorisation Managers

Manufacturer OUI Port Security
Access (Policy) Control List (ACL L2/3/4)

Custom User Rights 15 Levels (20 Users 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.

RJ45 Ports

LED Indicators 1x Power

SFP Link/Activity RJ45 Link/Activity RJ45 Speed

PoE (PoE Models Only)

22x 10/100/1000T(X) RJ45 with Auto MDI/MDI-X

Combo Ports 2x 10/100/1000T(X) RJ45 or

2x 100/1000FX SFP

SFP Slots 2x 100/1000FX SFP Power 1x IEC C14 Socket

Serial Console RJ45

Power.

Power Inputs

Operating Voltage 90-264V_{AC}

Power Consumption 30 Watts Max (without PoE Load)

Total PoE Budget 460W Max PSE Modes Mode A PoE Enabled Ports Ports 1-24

Packaging.

Shipping Weight 3.4kg / 7.50lb (Non-PoE Models)

5.5kg / 12.13lb (PoE Models)

Dimensions $(W \times D \times H)$

(Non-PoE Models) 500 × 310 × 91 mm

19.69 × 12.20 × 3.58 in 515 × 417 × 96 mm

20.28 × 16.42 × 3.78 in

Mechanical.

(PoE Models)

Housing Metal

Dimensions: (W x D x H) Excluding 19inch Brackets

(Non-PoE Models) 440 × 220 × 44 mm

 $17.32 \times 8.66 \times 1.73$ in

(PoE Models) 440 × 330 × 44 mm

17.32 × 12.99 × 1.73 in

IP Rating IP30 (Non-PoE Models)

IP20 (PoE Models)

Installation 19inch Rack (1U) or Desktop Weight 2.5kg / 5.51lb (Non-PoE Models)

2.5kg / 5.51lb (Non-PoE Models) 4.3kg / 9.48lb (PoE Models)

Environmental.

Operating Temp. 0 to +50°C / 32 to +122°F Storage Temp. -20 to +80°C / -4 to +176°

Storage Temp. -20 to +80°C / -4 to +176°F Humidity 5% to 90% (non-condensing)

MTBF 125,897 hours (Non-PoE Models) 105,225 hours (PoE Models)

MTBF Standard MIL-HDBK-217F GB
Heat Dissipation 102 BTU/h (Non-POE Models)

1672 BTU/h (with Max PoE Load)

Cooling Passive Cooling (Non-PoE Models)

2x Cooling Fans (Temp Controlled)

Airflow Front to Back
Noise Level 0 dBA (Non-PoE Models)

61 dBA (PoE Models)

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)

EN61000-4-11 (Dips)

Environmental Reach, RoHS, WEEE Supply Chain NDAA & TAA Compliant



Part Numbers.

1Gb Commercial Layer 2+ Managed Switches

AMG510-22G-2C-2S	22 × 10/100/1000TX & 2 × 100/1000M RJ45/SFP Combo & 2 × 100/1000FX SFP
AMG510-22GAT-2CAT-2S-P460	$22\times10/100/1000TX~\&~2\times100/1000M$ RJ45/SFP Combo 30W PoE (460W Budget) & $2\times100/1000FX$ SFP

Notes.

Included Accessories: Optional Accessories: 19inch Mounting Brackets, 4x Rubber Feet, Console Cable, Region Specific Line Cord 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.

