AMG750 SERIES
INDUSTRIAL GRADE 4G/LTE
ROUTER WITH WIFI & POE

Industrial Ethernet Solutions

AMG's 750 series 4G/LTE routers provide industrial cellular remote connectivity with dual SIM fail-over or WAN load balancing along with 2.4/5GHz wireless and 4 Gigabit Ethernet ports with IEEE 802.3at PoE.

Gigabit x4	**Gigabit** x1 WAN	**Cellular** 4G/3G/2G	**Wireless** 2.4 / 5GHz	**USB** x1	**Managed** Full	**Temp** -40°C~+75°C	**Mounting** DIN	**Booster** Dual 24-48

[AMG750 Series]

/ **OVERVIEW**

The AMG750 series Industrial Cellular Managed Router provides 5 x Gigabit Ethernet ports. 1 x Gigabit Ethernet port provides a configurable WAN connection while 4 x Gigabit Ethernet ports provide connection for remote devices and feature IEEE 802.3at 30W PoE+ support.

An integrated dual SIM 4G/LTE Cat4 modem provides connection in remote deployment scenarios where a wired connection is not available and combined with the wired WAN port can also act in fail-over or load balancing modes.

A dual band 2.4/5GHz wireless connection is also provided for local wifi access and supports 802.11 a/b/g/n/ac as well as a USB port supporting device logging functions. An RS232 or RS485 channel is provided to allow legacy serial data equipment to be connected at remote locations as well as a digital input and relay output for device monitoring and control applications.

Dual power supply inputs are provided for the highest levels of system operation with a wide input range of 24-56 VDC supported. Fully integrated voltage boosting technology ensures that reliable PoE can be supplied to all 4 Ethernet ports even when being powered by 24 VDC sources.

/ **FEATURES**

— 2G/3G/4G/LTE Cat4 Cellular modem with Dual SIM card and fail-over support

— Gigabit Ethernet WAN port supports load balancing or fail-over applications

— 4 x Gigabit Ethernet ports with IEEE 802.3at PoE+

— 2.4/5GHz Dual Band WiFi Radio 802.11 a/b/g/n/ac

— Dual Power Inputs with 24-56 VDC support including voltage booster technology

— RS232/485 serial data channel for legacy equipment

— USB port supports remote data logging

— Layer 3 support including static and dynamic routing RIP v1/v2, OSPF, BGP

— VPN tunneling supports IPsec, Open VPN, PPTP, L2TP and GRE with up to 16 independent tunnels

— Rugged DIN rail mount housing

— AMG Lifetime Support Warranty

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Specifications.

Standards & Protocols.

IEEE802.3i	10BaseT
IEEE802.3u	100BaseTX
IEEE802.3ab	1000BaseT
IEEE802.3x	Flow Control
IEEE802.1p	QoS Priority Marking
IEEE802.1Q	VLANs
IEEE802.1x	Port Security
IEEE802.3af/at	Power over Ethernet (PoE) 15/30W
RFC1112	IGMP v1
RFC2236	IGMP v2
RFC2030	Simple Network Time Protocol
RFC2131/3736	Dynamic Host Configuration Protocol (client/server - IPv4)
IEEE802.11a	2.4GHz Wireless
IEEE802.11b	2.4GHz Wireless
IEEE802.11g	2.4GHz Wireless
IEEE802.11n	2.4/5GHz Wireless
IEEE802.11ac	5GHz Wireless
Other	Static Route, RIP v1/v2, OSPF, BGP, IPv4, IPv6 Dual Stack, Static IPv6, DHCPv6, PPPoEv6 NAT 1-1, 1-many, Transversal, DMZ, Virual Server & Computer, VPN Pass-through SNMP v1, v2c, v3, TR-069
Jumbo Frames	9.6Kbytes

Interface.

LED Indicators	Power 1, Power 2, PoE Ports 1-4, SIM A/B & Signal Strength, WiFi, LAN/WAN Link Activity, Serial, Status
RJ45 Ports	1x 10/100/1000BASE-T(X) WAN 4x 10/100/1000BASE-T(X) LAN with Auto MDI/MDI-X
Cellular Antenna	2x SMA (female)
WiFi Antenna	2x SMA (male)
SIM Card A/B	Full Size SIM Card Tray
USB Ports	1x Type A
Serial	4-way Screw Terminal
Power/DI/DO	8-way Screw Terminal

WAN & Uplink.

WAN	Cellular, Ether-WAN, Failover, Load Balance
Cellular	3GPP, 2G/3G/4G IP Pass-through, IPv4/6
Cellular Speed	Category 4 150Mb Down / 50Mb Up Max
Ether-WAN	Dynamic IP, Static IP, PPPoE, PPTP, L2TP
Network Monitor	ICMP/DNS Query

WiFi.

Mode	AP Router, WDS Only, WDS Hybrid Modes
Functions	Multi-SSID, WMM
Security	WEP, WPA, WPA2, WPA-PSK, WPA2-PSK, 802.1x

Field Communications.

Virtual COM	RFC2217, TCP Client, TCP Server, UDP
Modbus	Gateway for Modbus TCP/RTU/ASCII Master/Slave Access; Slave for Device Status/Information Access
Data Logging	Sniffer, Off-Line / Full-Time Proxy, Mixed Modes
I/O	1 x Digital Input (Logic 0: 0~2V, Logic 1: 5~30V) 1 x Relay Output (30V @ 1A)

Object.

Scheduling	Time Schedule List
Grouping	Host Grouping List
Ext. Server	Email, Syslog, RADIUS, SCEP, FTP, DDNS, IGMP
Certificate	My Certificate, Trusted Certificate, Issue Certificate

Service.

Cellular Toolkit	Data Usage, SMS, SIM PIN, USSD, Network Scan
Event Handling	User Defined Manage/Notify Event; Action & Trigger by SMS, Mail, Syslog, SNMP

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Specifications.

Security.

VPN Tunneling	IPsec (IKE or X.509 Pre-Shared Key), Open VPN, PPTP, L2TP, GRE
Scenario	Site/Host to Site/Host, Hub & Spoke, Dynamic VPN
VPN Capability	IPsec: up to 16 Tunnels
Firewall	SPI Firewall with Stealth Mode, IPS
Access Control	Packet Filter, URL Blocking, MAC Filter

Administration.

Configuration	Web GUI, CLI, Command Script, Password Authentication
Management	SNMPv3 Std & AMG MIB, TR069
System	Upgrade, Backup & Restore, Reboot on Fault (Kernel Watchdog), Reboot on Schedule, Reset, Syslog
FTP	FTP Server, User Account
Diagnostic	Packet Analyser, Diagnostic Tools
PoE	Power Control, Manual On/Off, Schedule On/Off, Alive Check

Power.

Input	Dual 24-56V_{DC} with PoE Voltage Booster
Consumption	15.6W Max (Excluding PoE) 135.6W Max (Including PoE)

Mechanical.

Housing	Metal
Dimensions	(W x D x H) 62 × 125 × 160 mm 2.44 × 4.92 × 6.30 in
IP Rating	IP40
Installation	Wall Mount or DIN Mount
Weight	1.2kg / 2.65lb

Environmental.

Operating Temp.	-40°C to 75°C
Storage Temp.	-40°C to 85°C
Humidity	10% to 95% (non-condensing)
MTBF	198,062 Hours
MTBF Standard	Telcordia SR-332 GB 70°C

Regulatory.

Electrical Safety	CE/EN60950-1
Immunity	EN55032: 2015 +AC: 2016 B EN55024
Emissions	EN61000 FCC Part 15
Radio	EN 301 489 EN 300 328 EN 301 893 EN50385
Environmental	Reach, RoHS, WEEE

Part Numbers.

4G Industrial Cellular Routers

AMG750-1G-4GAT-1E4-P120	4G Router (EU), 5 × 10/100/1000BaseT(x) RJ45 (4 x PoE), WiFi, RS232/485, Dual-SIM
AMG750-1G-4GAT-1U4-P120	4G Router (USA), 5 × 10/100/1000BaseT(x) RJ45 (4 x PoE), WiFi, RS232/485, Dual-SIM
AMG750-1G-4GAT-1A4-P120	4G Router (AUS), 5 × 10/100/1000BaseT(x) RJ45 (4 x PoE), WiFi, RS232/485, Dual-SIM

Recommended PSU's.

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
AMGPSU-I48-P240	DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 48-53VDC, 240W

Notes.

Included Accessories	DIN Rail Bracket, Ethernet Cable, Direct Attach 4G/LTE & 2.4/5GHz WiFi Antennas
Optional Accessories	External 4G/LTE & WiFi Antennas

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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