

# AMG210M SERIES COMMERCIAL GRADE MINI MEDIA CONVERTERS



## Commercial Ethernet Solutions

AMG's 210M series mini Ethernet media converters provide flexible options for 100Mbps, Gigabit or 10 Gigabit Ethernet communication across fibre via the SFP or SFP+ port with intelligent configuration features such as link fault pass-through.



10/100 x1	100 x1	Gigabit up to x2	100/1000 x1	1/10 Gb x1	1/10 Gb x1	Temp 0 ~ +50°C	Mounting Rack/Wall	PSU Included

[ AMG210M Series ]

### / OVERVIEW

Designed in an ultra compact housing, these mini media converters are ideally suited for connecting equipment to Ethernet networks over long distances using all types of fibre through the integrated SFP or SFP+ port.

User selectable DIP switches allow for configuration of advanced features such as link fault pass-through, port isolation, jumbo frames, automatic laser shutdown and SFP speed selection.

The 10Gb models support 1G, 2.5G, 5G & 10G modes as well as 3R functions for equalization amplification, clock extraction and integer regeneration for the highest 10G data performance with low transmission jitter.

The mini media converters can be used standalone, wall mounted using the included mounting kit or can be installed within an AMG210C rack where up to 12 units can be located within a 1U 19inch rack space. The rack solution provides an ultra high density rack mount option.

PSUs are included with each unit and SFPs can either be included (depending on model ordered) or can be ordered separately allowing for selection from AMG's extensive range of SFP(+) modules to suit any application.

### / FEATURES

- Ultra Compact size – ideal for confined spaces, and provides highly cost effective solutions
- Auto-Negotiation – automatically determines the best connection speed
- Wall mountable using the included wall bracket
- Rack mountable using the optional 19 inch 1U rack
- 100Mb, Multirate 100/1000Mb or 1/2.5/10Gb SFP(+) port supports singlemode and multimode, single or dual fibre options up to 120Km either included or ordered separately
- Single or dual Ethernet copper ports – high bandwidth support up to 10G BASE-T
- Supports Jumbo Frames up to 16K bytes
- Intelligent features supported including link fault pass-through, port isolation and many others.
- AMG 3 Year Support Warranty

# Specifications.

## Standards.

IEEE802.3i	10Base-T
IEEE802.3u	100Base-TX & 100Base-FX
IEEE802.3ab	1000Base-T
IEEE802.3z	1000Base-X
IEEE802.3bz	2.5/5GBase-T
IEEE802.3an	10GBase-T
IEEE802.3ae	10GBase-R
IEEE802.3x	Flow Control

Jumbo Frames	2Kbytes (100Mb Models) 9.6Kbytes (1Gb Models) 16Kbytes (10Gb Models)
--------------	--

## Interface.

LED Indicators	1x Power SFP/SFP+ Link/Activity RJ45 Link/Activity RJ45 Speed
RJ45 Ports	1x 10/100TX RJ45 or 1x 10/100/1000T(X) RJ45 or 2x 10/100/1000T(X) RJ45 or 1x 100/1000/2.5G/5G/10G RJ45 with Auto MDI/MDI-X
SFP Slot	1x 100FX SFP or 1x 100/1000FX SFP with DIP switch speed selection
SFP+ Slot	1x 1G/2.5G/10G SFP+ with DIP switch speed selection
Power	1x 2.1mm Input Socket

## Power.

Operating Voltage	5-12V <sub>DC</sub> or 6-12V <sub>AC</sub>
Power Consumption	3W Max (100Mb & 1Gb Models)* 5W Max (10Gb Models)*

\*Excludes SFP/SFP+ Module

## Mechanical.

Housing Dimensions	Metal (W x D x H) 90 x 60 x 20 mm 3.54 x 2.36 x 0.79 in
IP Rating	IP30
Installation	Surface, Wall Mount or Rack Mount* (*requires optional rack)
Weight	0.12kg / 0.26lb

## Packaging.

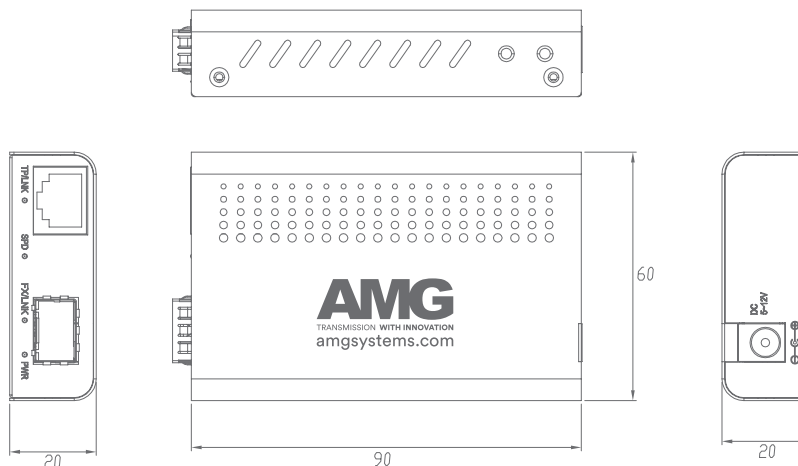
Shipping Weight	0.35kg / 0.77lb
Dimensions	(W x D x H) 131 x 82 x 80 mm 5.16 x 3.23 x 3.15 in

## Environmental.

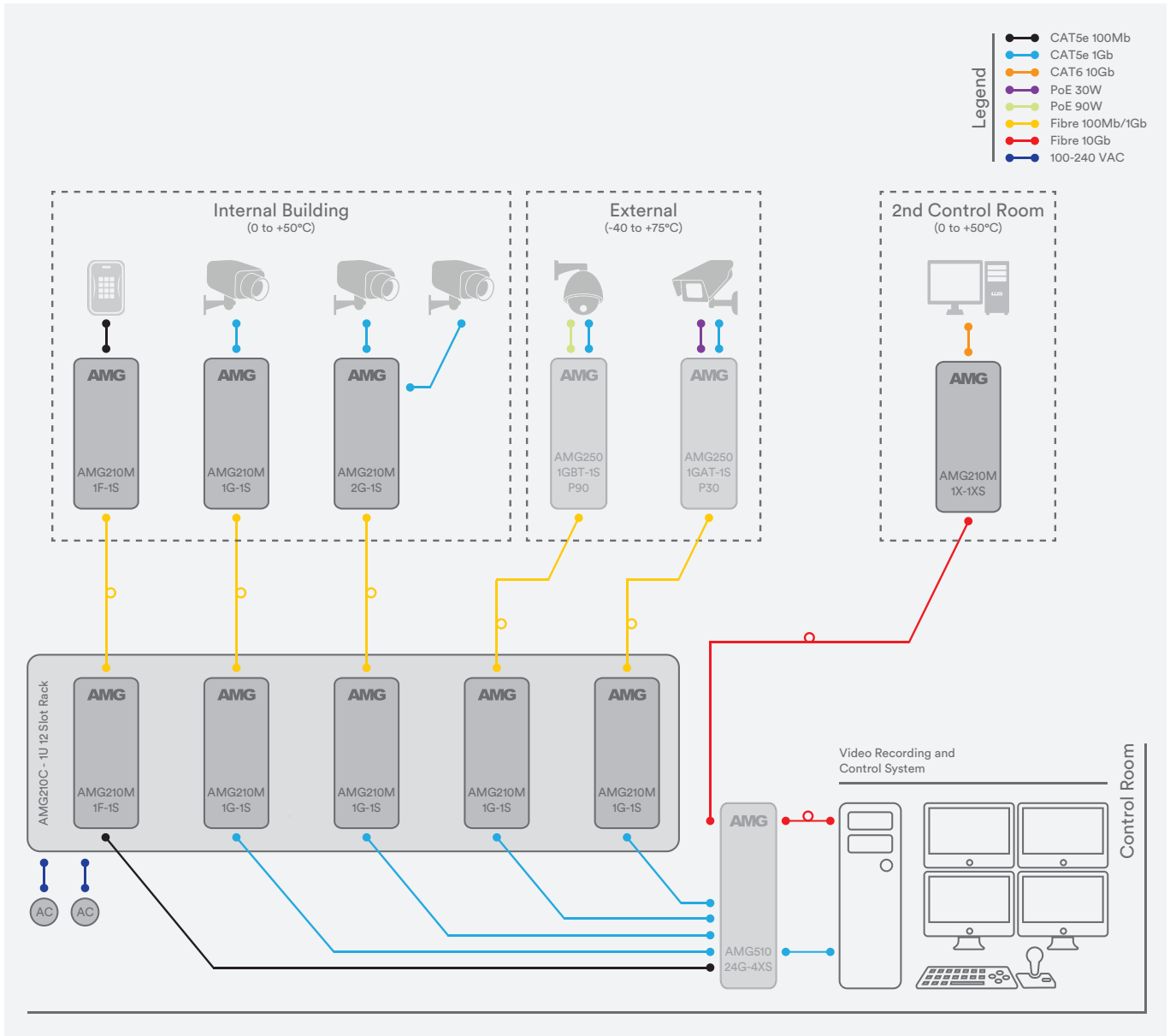
Operating Temp.	0°C to 50°C
Storage Temp.	-20°C to 70°C
Humidity	5% to 90% (non-condensing)
MTBF	>100,000 Hours
MTBF Standard	Telcordia (Bellcore) GB
Heat Dissipation	10 BTU/h (100M/1Gb Models No SFP) 17 BTU/h (10Gb Models No SFP+)
Cooling	Passive Cooling
Noise Level	0 dBA

## Regulatory.

Electrical Safety	IEC/EN 62368-1
EMI	EN55022 Class A EN55024 FCC Part 15B Class A
EMS	EN61000-3-2 EN61000-3-3
Environmental	Reach, RoHS and WEEE



# Application Diagram.



# Part Numbers.

## 100Mb Mini Media Converters

AMG210M-1F-1S	1 × 10/100BaseT(x) RJ45, 1 × 100BaseFx SFP (SFP purchased separately)
AMG210M-1F-1SM2	1 × 10/100BaseT(x) RJ45, 1 × 100BaseFx Multimode 2 Fibres 1310nm 2Km LC Connectors
AMG210M-1F-1SM1A	1 × 10/100BaseT(x) RJ45, 1 × 100BaseFx Multimode 1 Fibre 1310nm 2Km LC Connector
AMG210M-1F-1SM1B	1 × 10/100BaseT(x) RJ45, 1 × 100BaseFx Multimode 1 Fibre 1550nm 2Km LC Connector
AMG210M-1F-1SS2	1 × 10/100BaseT(x) RJ45, 1 × 100BaseFx Singlemode 2 Fibres 1310nm 20Km LC Connectors
AMG210M-1F-1SS1A	1 × 10/100BaseT(x) RJ45, 1 × 100BaseFx Singlemode 1 Fibre 1310nm 20Km LC Connector
AMG210M-1F-1SS1B	1 × 10/100BaseT(x) RJ45, 1 × 100BaseFx Singlemode 1 Fibre 1550nm 20Km LC Connector

## 1Gb Multirate Mini Media Converters

AMG210M-1G-1S	1 × 10/100/1000BaseT(x) RJ45, 1 × 100/1000BaseFx SFP (SFP purchased separately)
AMG210M-1G-1SM2	1 × 10/100/1000BaseT(x) RJ45, 1 × 1000BaseFx Multimode 2 Fibres 850nm 550M LC Con.
AMG210M-1G-1SM1A	1 × 10/100/1000BaseT(x) RJ45, 1 × 1000BaseFx Multimode 1 Fibre 1310nm 1Km LC Connector
AMG210M-1G-1SM1B	1 × 10/100/1000BaseT(x) RJ45, 1 × 1000BaseFx Multimode 1 Fibre 1550nm 1Km LC Connector
AMG210M-1G-1SS2	1 × 10/100/1000BaseT(x) RJ45, 1 × 1000BaseFx Singlemode 2 Fibres 1310nm 20Km LC Con.
AMG210M-1G-1SS1A	1 × 10/100/1000BaseT(x) RJ45, 1 × 1000BaseFx Singlemode 1 Fibre 1310nm 20Km LC Connector
AMG210M-1G-1SS1B	1 × 10/100/1000BaseT(x) RJ45, 1 × 1000BaseFx Singlemode 1 Fibre 1550nm 20Km LC Connector

## 1Gb Dual Port Multirate Mini Media Converters

AMG210M-2G-1S	2 × 10/100/1000BaseT(x) RJ45, 1 × 100/1000BaseFx SFP (SFP purchased separately)
AMG210M-2G-1SM2	2 × 10/100/1000BaseT(x) RJ45, 1 × 1000BaseFx Multimode 2 Fibres 850nm 550M LC Con.
AMG210M-2G-1SM1A	2 × 10/100/1000BaseT(x) RJ45, 1 × 1000BaseFx Multimode 1 Fibre 1310nm 1Km LC Connector
AMG210M-2G-1SM1B	2 × 10/100/1000BaseT(x) RJ45, 1 × 1000BaseFx Multimode 1 Fibre 1550nm 1Km LC Connector
AMG210M-2G-1SS2	2 × 10/100/1000BaseT(x) RJ45, 1 × 1000BaseFx Singlemode 2 Fibres 1310nm 20Km LC Con.
AMG210M-2G-1SS1A	2 × 10/100/1000BaseT(x) RJ45, 1 × 1000BaseFx Singlemode 1 Fibre 1310nm 20Km LC Con.
AMG210M-2G-1SS1B	2 × 10/100/1000BaseT(x) RJ45, 1 × 1000BaseFx Singlemode 1 Fibre 1550nm 20Km LC Con.

## 10Gb Multirate Mini Media Converters

AMG210M-1X-1XS	1 × 100/1000/2.5G/5G/10GBaseT RJ45, 1 × 1000Fx/2.5GFx/10GBaseR SFP+ (SFP purchased separately)
----------------	--

# Recommended Rack.

AMG210C Series

1U 19inch Rack with 12 slots for AMG210M non-PoE series media converters, Dual redundant 60W PSU's



# Notes.

Included Accessories

Wall mount bracket and region specific DC in-line power supply (UK / EU / US plug type, depending on region)

*In a continuing effort to improve and advance technology, product specifications are subject to change without notice. Please visit [www.amgsystems.com](http://www.amgsystems.com) for the latest product specifications.*