AMGFIB-1V-3CC[-D] SERIES 1CH VIDEO + 3CH CONTACT CLOSURE



Industrial Transmission Solutions

AMG's industrial video & contact closure converters provide transmission of 1 SD or HD video channel and 3 contact closure channels for remote relay control and alarm input detection over a single optical fiber. A dual module receiver unit is also available.



















[AMGFIB-1V-3CC[-D] Series]

/ OVERVIEW

Designed in a compact DIN rail or wall mount housing, the AMGFIB series provide digital uncompressed transmission of the latest standard definition and high definition camera signals coupled with three contact closure channels for remote input detection and relay control.

The units support all modern SD & HD video formats including CVBS (PAL, NTSC, SECAM), CVI, TVI & AHD and camera resolutions up to 1960p with SD, HD, 2 megapixel, 3 megapixel, 4 megapixel and 5 megapixel camera types supported from all major brands.

The three contact closure channels support two channels in the video direction (A to B) and one channel in the reverse direction (B to A).

Fitted with dual redundant power inputs supporting both DC and AC low voltage inputs ensures maximum operating reliability and the highest levels of performance.

A dual module receiver is also available which can receive the signals from 2 x independant Tx modules.

PSUs need to be ordered separately.

/ FEATURES

- Compact size ideal for confined spaces, including camera poles and roadside cabinets
- -40°C to +75°C temperature maintains performance in extreme conditions
- Plug & Play no need for any user configuration
- DIN rail mountable quick to install and remove for maintenance
- Dual redundant power inputs with DC & AC support
- Supports all the latest SD & HD video formats including CVI, TVI, AHD & CVBS composite
- SD, HD, 2MP, 3MP, 4MP & 5MP cameras supported
- 3 contact closure channels provided
- Dual module receiver for high density installations
- Designed in the USA & UK. Manufactured in the United Kingdom
- AMG Lifetime Support Warranty



Specifications.

Video.

Video Channels 1

Compression None, Uncompressed 1n/Out Impedance 75Ω (Unbalanced) >500mV pk-pk Video Output Level 1V pk-pk

ideo Output Levei Tv pk-pi

Bandwidth 30MHz (720p), 60MHz (1080p),

150MHz (1960p)

Video Format CVBS (PAL/NTSC/SECAM),

SD, HD, 2MP, 3MP, 4MP, 5MP

Signal To Noise >60dB (Weighted 8-Bit)

Contact Closure.

Contact Channels 2x Simplex In A to B Direction

1x Simplex In B to A Direction

Inputs Dry

Outputs Form A Relays
Output Rating 30V_{DC} @ 1A Max

240V @ 0.25A Max

Optical.

Wavelength 1310nm / 1550nm

Fiber Type Singlemode or Multimode

No. Of Fibers 1

Fiber Distance:

Multimode OM2¹ 1.5Km / 0.9 Miles
Multimode OM3¹ 2Km / 1.2 Miles
Singlemode² 20Km / 12.4 Miles
Optical Budget 12dB @ 1310nm

Interface.

LED Indicators 2x Power

1x Optical Link
1x Video Present
3x Contact Closure

Optical Port³ 1x ST or FC Type Connector

Video 1x BNC Connector
Contact Closure 1x 6-Way Screw Terminal
Power 1x 4-Way Screw Terminal

Power.

Power Inputs 2

Operating Voltage 9-36V_{DC} or 18-36V_{AC*}

*AC Available On Power Input 1 Only

Power Consumption 3.5W Max (Single Models)

7W Max (Dual Models)

Protection Reverse Polarity

Overload Current

Packaging.

Shipping Weight:

 (Single Models)
 0.60kg / 1.32lb

 (Dual Models)
 0.85kg / 1.87lb

 Dimensions:
 (W x D x H)

(Single Models) $220 \times 170 \times 40 \text{ mm}$

8.66 × 6.69 × 1.57 in 220 × 170 × 80 mm 8.66 × 6.69 × 3.15 in

Mechanical.

(Dual Models)

Housing Anodised Aluminium

Dimensions: (W x D x H) (Excluding Wall Brackets)

(Single Models) 36 × 88 × 107 mm

1.42 × 3.46 × 4.21 in 54 × 88 × 107 mm

2.13 × 3.46 × 4.21 in

IP Rating IP40

Installation Wall Mount or DIN-Rail

Rack Mount using AMG2034

(Max 10 Single Units Per AMG2034)

(Max 7 Dual Units Per AMG2034)

Weight:

(Dual Models)

(Single Models) 0.45kg / 0.99lb (Dual Models) 0.70kg / 1.54lb

Environmental.

Operating Temp. -40 to +75°C / -40 to +167°F Storage Temp. -40 to +85°C / -40 to +185°F Humidity 5% to 95% (non-condensing)

MTBF >250,000 hours

MTBF Standard Telcordia SR-332 GF 30°C

Heat Dissipation 12 BTU/h (Single Models)

24 BTU/h (Dual Models)

Cooling Passive Cooling

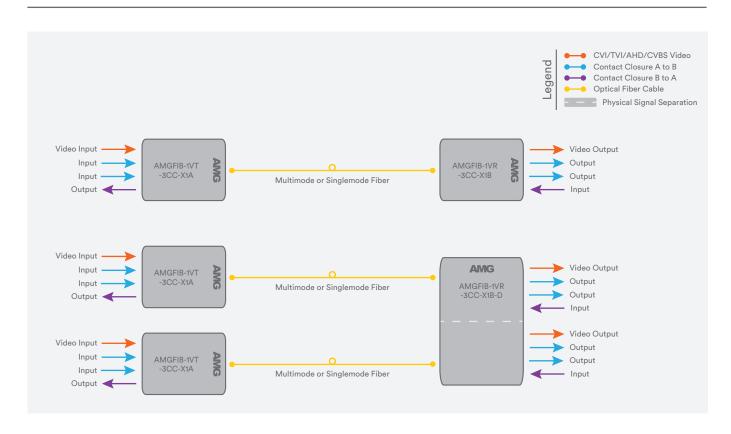
Noise Level 0 dBA



Specifications.

Regulatory.			
Safety	IEC/EN 62368-1	Shock	IEC 60068-2-27
EMI	EN 55032 Class A	Free Fall	IEC 60068-2-32
	CISPR 32	Vibration	IEC 60068-2-6
	FCC Part 15B Class A	Environmental	Reach
EMS	EN 61000-4-2 (ESD)		RoHS
	EN 61000-4-3 (RS)		WEEE
	EN 61000-4-4 (EFT)	Supply Chain	NDAA & TAA Complian
	EN 61000-4-5 (Surge)	,	·
	EN 61000-4-6 (CS)	Designed to meet NEMA TS2 & EN 50121-4	
	EN 61000-4-8 (PFMF)		

Application Diagram.





Part Numbers.

Industrial Single 1Ch CVI/TVI/AHD/CVBS Video + 3Ch Contact Closure

AMGFIB-1VT-3CC-M1A	1x CVI/TVI/AHD/CVBS Video Tx, 2x Contacts Tx + 1x Contact Rx, Multimode 1 Fiber ST Port A Type
AMGFIB-1VR-3CC-M1B	1x CVI/TVI/AHD/CVBS Video Rx, 1x Contact Tx + 2x Contacts Rx, Multimode 1 Fiber ST Port B Type
AMGFIB-1VT-3CC-S1A	1x CVI/TVI/AHD/CVBS Video Tx, 2x Contacts Tx + 1x Contact Rx, Singlemode 1 Fiber ST Port A Type
AMGFIB-1VR-3CC-S1B	1x CVI/TVI/AHD/CVBS Video Rx, 1x Contact Tx + 2x Contacts Rx, Singlemode 1 Fiber ST Port B Type

Industrial Dual 1Ch CVI/TVI/AHD/CVBS Video + 3Ch Contact Closure Receivers

AMGFIB-1VR-3CC-M1B-D	1x CVI/TVI/AHD/CVBS Video Rx, 1x Contact Tx + 2x Contacts Rx, Multimode 1 Fiber ST Port A Type, Dual Receiver Unit
AMGFIB-1VR-3CC-S1B-D	1x CVI/TVI/AHD/CVBS Video Rx, 1x Contact Tx + 2x Contacts Rx, Singlemode 1 Fiber ST Port B Type, Dual Receiver Unit

¹ Multimode fiber distance may be limited by the optical cable bandwidth. High bandwidth 50/125µ OM3 or higher fiber is recommended to achieve the maximum distance. For further information and support please contact the AMG Systems Technical Services team.

Included Accessories.

DIN Rail Adapter Wall Mounting Brackets

Rear Mounted Metal DIN Rail Clip & Screws For DIN Rail Mounting AMGFIB Series Products 2x Wall Mouting Brackets & Screws For Wall / Surface Mouting AMGFIB Series Products





Recommended PSUs.

AMGPSU-W12-P25 AMGPSU-I12-P24

Plug Top Mounting Lite Industrial Grade PSU, 0 to +70°C, 12VDC, 25W, UK/EU/US Plug Heads Included DIN-Rail Mounting Industrial Grade PSU, -40 to +70°C, 12VDC, 24W

Optional Accessories.

AMG2034 Series

Industrial Retractable Rack Chassis For AMG DIN Rail Units, 4U 19inch Rack Mount, -40 to +70°C, Integrated Cable Management & Optional Single Or Dual Redundant Integrated Power Supplies

AMG2035

Side Mounted Wall Bracket Adapter Kit For DIN Rail Mounting AMGFIB Series Products In Depth Restricted Installations. Adapter Kit Can Be Extended Using The Included Extension Kit To Also Mount A DIN Rail Power Supply.

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

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² Singlemode units are available with longer distance optics as an option. For availability please contact your local AMG Systems sales representative.

³ ST type optical connectors are fitted as standard. FC/PC type connectors are available on request. Add /FC at the end of the part code. Additional lead times will apply as /FC models are manufactured to order only.