

AMGFIB-1SD-3CC SERIES

1CH SERIAL DATA + 3CH CONTACT CLOSURE



Industrial Transmission Solutions

AMG's industrial serial data & contact closure converters provide transmission of 1 serial data channel and 3 contact closure channels for remote relay control and alarm input detection over a single optical fiber.



Singlemode Multimode	Data 1x 485/422	Contacts 2 Tx / 1 Rx	Temp -40°C--75°C	Mounting DIN/Surface	PSU x2 Dual	Protection IP40	NDAA/TAA Compliant

[AMGFIB-1SD-3CC Series]

/ OVERVIEW

Designed in a compact DIN rail or wall mount housing, the AMGFIB series provide digital transmission of one serial data and three contact closure channels for remote input detection and relay control.

The serial data channel supports one RS422 or RS485 data channel in 2-wire and 4-wire mode in both directions. The three contact closure channels support two channels in the forward 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 wide range of models are available to suit all design requirements.

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
- LED indicators provide for easy status of operation
- 2-Wire & 4-Wire RS422/485 data channel
- 3 contact closure channels provided
- Designed in the USA & UK. Manufactured in the United Kingdom
- AMG Lifetime Support Warranty

Specifications.

Serial Data.

Data Channels	1x RS422 1x RS485
Data Rate:	115kb/s Max
Termination:	External Resistor

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 _{AC} @ 0.25A Max

Optical.

Wavelength	1310nm / 1550nm
Fiber Type	Singlemode or Multimode
No. Of Fibers	1
Fiber Distance:	
Multimode OM2 ¹	1.5Km / 0.9 Miles
Multimode OM3 ¹	2Km / 1.2 Miles
Singlemode ²	20Km / 12.4 Miles
Optical Budget	12dB @ 1310nm

Interface.

LED Indicators	2x Power 1x Optical Link 1x Data 3x Contact Closure
Optical Port	1x ST or FC Type Connector
Serial Data	1x 6-Way Screw Terminal
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} *
Power Consumption	*AC Available On Power Input 1 Only 3.5W Max
Protection	Reverse Polarity Overload Current

Packaging.

Shipping Weight	0.80kg / 1.76lb
Dimensions:	(W x D x H) 220 x 170 x 80 mm 8.66 x 6.69 x 3.15 in

Mechanical.

Housing	Anodised Aluminium
Dimensions:	(W x D x H) 44 x 88 x 107 mm 1.73 x 3.46 x 4.21 in
(Excluding Wall Brackets)	
IP Rating	IP40
Installation	Wall Mount or DIN-Rail Rack Mount using AMG2034
(Max 8 Units Per AMG2034)	
Weight	0.7kg / 1.54lb

Environmental.

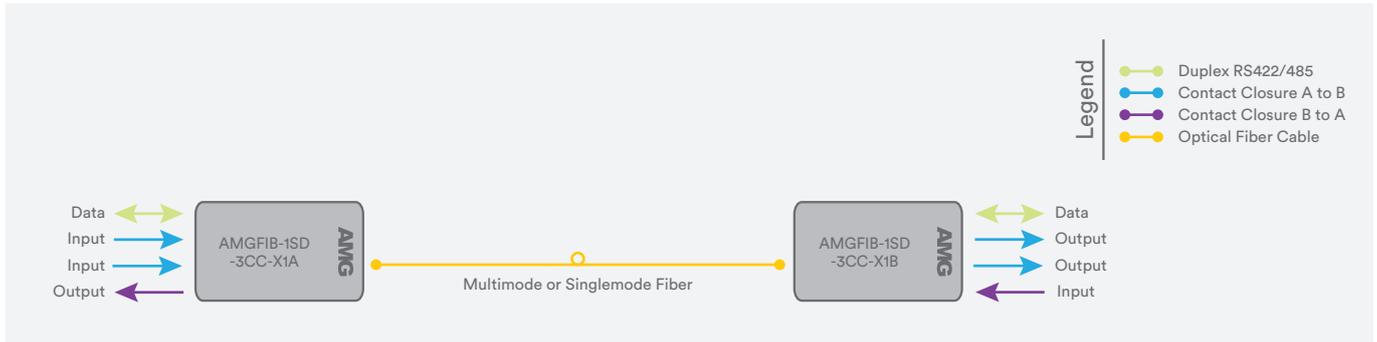
Operating Temp.	-40 to +75°C / -40 to +167°F
Storage Temp.	-40 to +85°C / -40 to +185°F
Humidity	5% to 95% (non-condensing)
MTBF	>250,000 hours
MTBF Standard	Telcordia SR-332 GF 30°C
Heat Dissipation	12 BTU/h
Cooling	Passive Cooling
Noise Level	0 dBA

Regulatory.

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

Designed to meet NEMA TS2 & EN 50121-4

Application Diagram.



Part Numbers.

Industrial 1Ch Serial Data + 3Ch Contact Closure

AMGFIB-1SD-3CC-M1A	1x RS422/485 Serial Data, 2x Contacts Tx + 1x Contact Rx, Multimode 1 Fiber ST Port A Type
AMGFIB-1SD-3CC-M1B	1x RS422/485 Serial Data, 1x Contact Tx + 2x Contacts Rx, Multimode 1 Fiber ST Port B Type
AMGFIB-1SD-3CC-S1A	1x RS422/485 Serial Data, 2x Contacts Tx + 1x Contact Rx, Singlemode 1 Fiber ST Port A Type
AMGFIB-1SD-3CC-S1B	1x RS422/485 Serial Data, 1x Contact Tx + 2x Contacts Rx, Singlemode 1 Fiber ST Port B Type

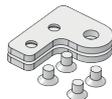
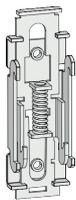
¹ Multimode fiber distance may be limited by the optical cable bandwidth. High bandwidth 50/125μ OM3 or higher fiber is recommended to achieve the maximum distance. For further information and support please contact the AMG Systems Technical Services team.

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.

Included Accessories.

DIN Rail Adapter Rear Mounted Metal DIN Rail Clip & Screws For DIN Rail Mounting AMG FIB Series Products
 Wall Mounting Brackets 2x Wall Mounting Brackets & Screws For Wall / Surface Mounting AMG FIB Series Products



Recommended PSUs.

AMGPSU-W12-P25 Plug Top Mounting Lite Industrial Grade PSU, 0 to +70°C, 12VDC, 25W, UK/EU/US Plug Heads Included
 AMGPSU-I12-P24 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 AMG FIB 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.amgsystems.com for the latest product specifications.

Proud to be a British
 Manufacturer 

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