RS422

Customer Equipment		X1A Models			X1B Models		Customer Equipment
Data Out (+)	→	RS422 T+			RS422 R+	→	Data In (+)
Data Out (-)	→	RS422 T-			RS422 R-	→	Data In (-)
Data In (+)	←	RS422 R+	Multimode or Singlemode Fiber		RS422 T+	←	Data Out (+)
Data In (-)	←	RS422 R-			RS422 T-	←	Data Out (-)

Bi-Phase

Customer Equipment		X1A Models			X1B Models		Customer Equipment
Data In (+)	↔	RS422 R+			RS422 T+	↔	Data Out (+)
Data In (-)	↔	RS422 R-	Multimode or Singlemode Fiber		RS422 T-	↔	Data Out (-)

RS485

Customer Equipment		X1A Models			X1B Models		Customer Equipment
Data A (+)	↔	RS485A			RS485A	↔	Data A (+)
Data B (-)	↔	RS485B	Multimode or Singlemode Fiber		RS485B	↔	Data B (-)

Serial Data Specifications.

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

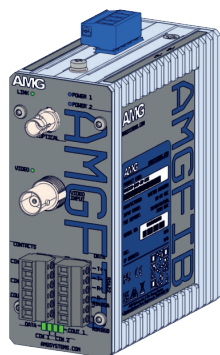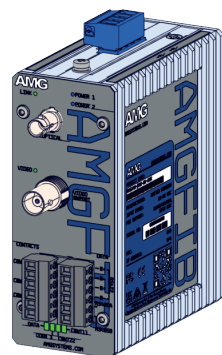# AMGFIB-1/2V-1SD-3CC Series
Industrial Video, Data
& Contact Closure

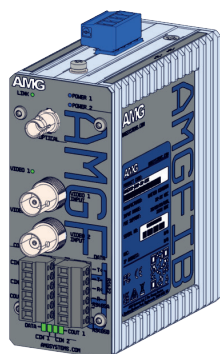## Installation Manual - Hardware

amgsystems.com
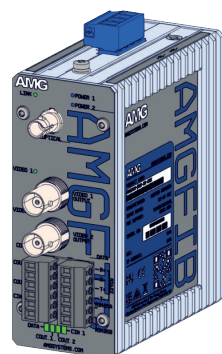
/ AVAILABLE MODELS

AMGFIB-1VT-1SD-3CC-M1A
AMGFIB-1VT-1SD-3CC-S1A

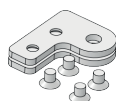AMGFIB-1VR-1SD-3CC-M1B
AMGFIB-1VR-1SD-3CC-S1B

AMGFIB-2VT-1SD-3CC-M1A
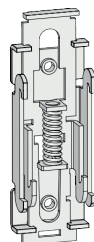AMGFIB-2VT-1SD-3CC-S1A

AMGFIB-2VR-1SD-3CC-M1B
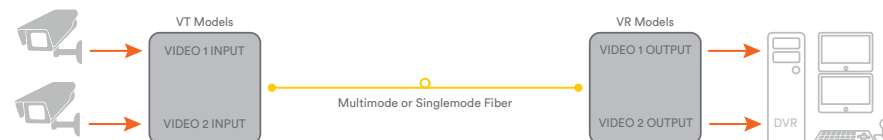AMGFIB-2VR-1SD-3CC-S1B

/ INCLUDED ACCESSORIES

2 x Wall Mounting Brackets

DIN Rail Bracket

/ VIDEO CONNECTIONS

Video Specifications.

|	
Video Channels	1 or 2 (depending on the model ordered)
Compression	None, Uncompressed
In/Out Impedance	75Ω (Unbalanced)
Video Input Level	>500mV pk-pk
Video Output Level	1V pk-pk
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 CONNECTIONS
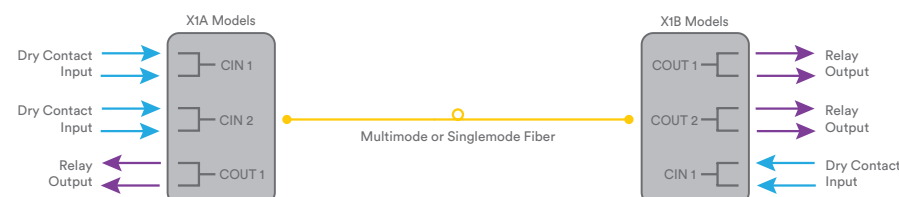
Contact Closure Specifications.

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

Warning
Applying a voltage to the Dry Contact
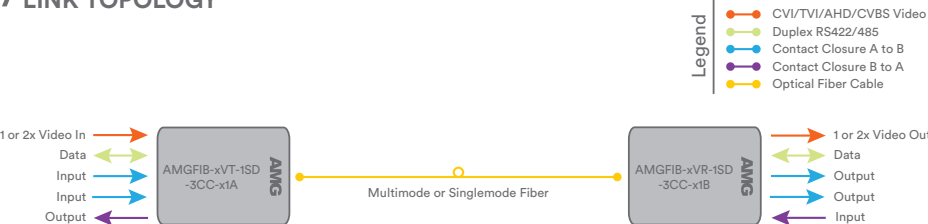Inputs will damage the unit
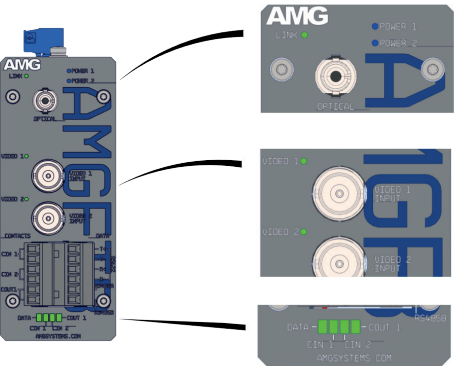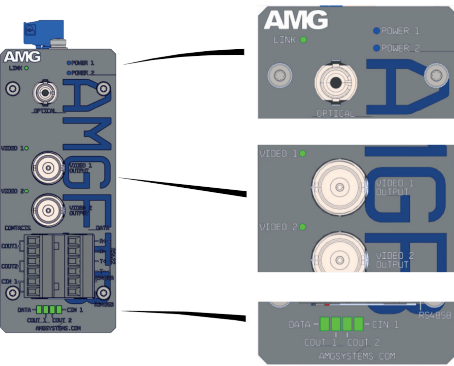
x1A Models

LED	Colour	Description
POWER 1	Blue	Power 1 Active
POWER 2	Blue	Power 2 Active
LINK	Off	No Optical Link
	Green	Good Optical Link
VIDEO 1 VIDEO 2	Off	No Video Signal
	Green	Good Video Signal
CIN1 CIN2	Off	Contact Input Open
	Green	Contact Input Closed
COUT1	Off	Relay Output Open
	Green	Relay Output Closed
DATA	Off	No Data Signal
	Green	Good Data Signal

LED	Colour	Description
POWER 1	Blue	Power 1 Active
POWER 2	Blue	Power 2 Active
LINK	Off	No Optical Link
	Green	Good Optical Link
VIDEO 1 VIDEO 2	Off	No Video Signal
	Green	Good Video Signal
CIN1	Off	Contact Input Open
	Green	Contact Input Closed
COUT1 COUT2	Off	Relay Output Open
	Green	Relay Output Closed
DATA	Off	No Data Signal
	Green	Good Data Signal

x1B Models

/ LINK TOPOLOGY

Legend
- CVI/TVI/AHD/CVBS Video
- Duplex RS422/485
- Contact Closure A to B
- Contact Closure B to A
- Optical Fiber Cable

1 or 2x Video In
Data
Input
Input
Output

AMGFIB-xVT-1SD
-3CC-x1A

Multimode or Singlemode Fiber

AMGFIB-xVR-1SD
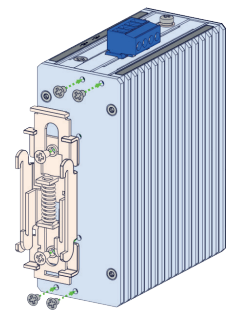-3CC-x1B

1 or 2x Video Out
Data
Output
Output
Input

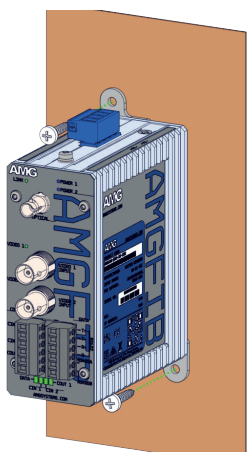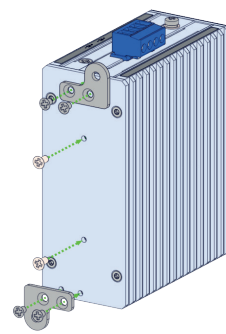/ DIN RAIL MOUNT INSTALLATION

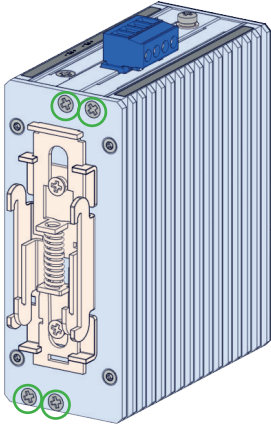
ON

OFF

/ SURFACE/WALL MOUNT INSTALLATION

① Remove the DIN rail clip by unscrewing the two fixing screws as shown.

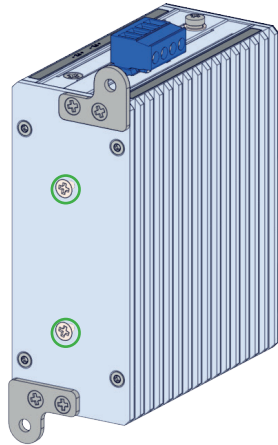② Attach the included wall mount brackets with the provided 4 x M3 screws as shown.

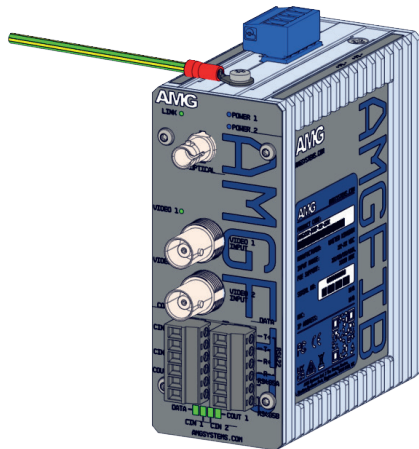③ Fix the unit to the surface using two appropriate screws (screws not provided)

/ IP RATING

To maintain the units IP40 rating any screw holes that are not used should still have their screws installed as shown in green below.
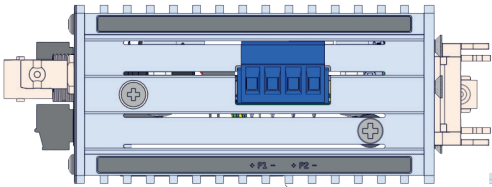

/ EARTH PROTECTION

To provide correct protection from ESD and Surge events ensure that the unit is correctly earthed using the provided earth connection point in accordance with local electrical codes & standards. (cable not provided)
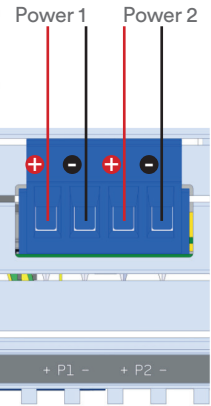
/ POWER

Warning
Do not exceed the rated voltage
Observe correct voltage polarity

Power 1   Power 2

Power Input	Voltage
P1	9-36VDC or 18-36VAC
P2	9-36 VDC

Power	3.5W Max

/ INTERFACE CONNECTIONS

① Insert the optical patch cable into the optical connector.

② Connect BNC video cable(s) to the one or two BNC connectors (depending on model).

③ Connect cables to the 3x contact closure channels as required.

④ Connect cables to the RS422 or RS485 data channel as required.