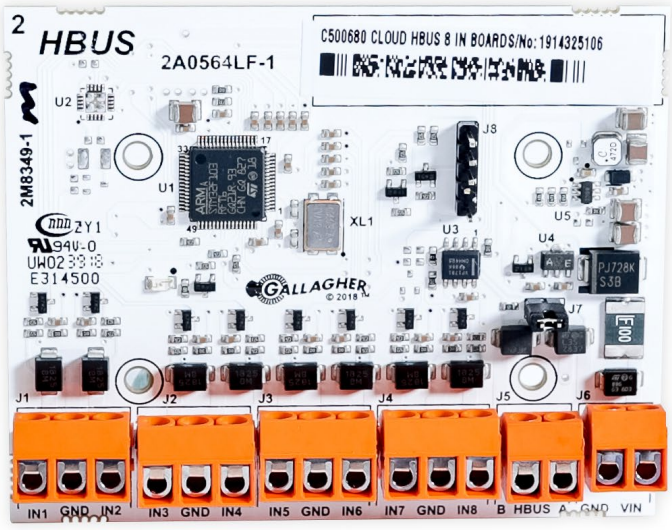
Gallagher
SMB 8In Board

Installation Note

Gallagher SMB 8In Board: C500680



Introduction

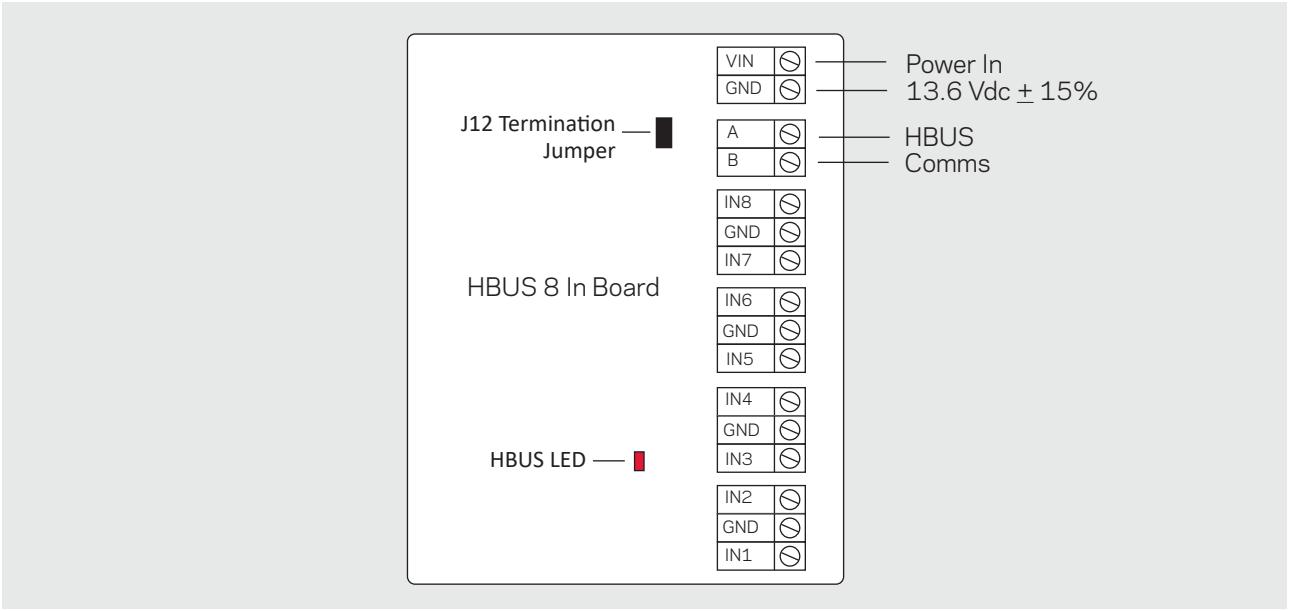
The Gallagher SMB 8In Board extends the connectivity of the Gallagher Controller via the HBUS communications protocol. The board provides connection for 8 inputs.

Check the carton contains the following items:

- 1 x 8In Board
- 4 x 1/4" pan pozi screws
- 16 x 4k7 ohm resistors

Connections

Component layout



Power supply

The 8In Board requires a 13.6 Vdc ± 15% power supply. This is connected through the terminals labelled Vin and GND. An onboard 1 A resettable polyfuse provides over current protection.

Communications

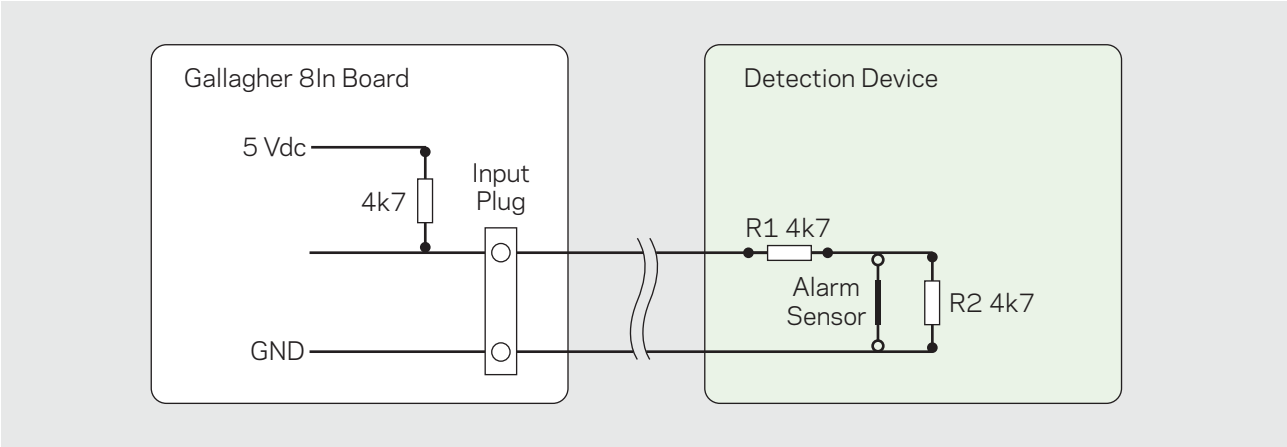
The HBUS communications protocol allows a single board to communicate over a distance of up to 500 m (1640 ft) from the controller, when using data only in a single CAT5E cable. Cabling should be a minimum size of 24 AWG (0.2 mm^2). Run a common ground (-ve) from the controller for all RS485 devices.

The cabling between HBUS devices should be done in a "daisy chain" wiring. Do not wire HBUS devices using "T" or "Star" wiring. If the board is the start or end device on an HBUS circuit, terminate the board by connecting the supplied on-board termination jumper (J12) to the board.

Balanced inputs

Cabling should be a minimum size of 24 AWG (0.2 mm^2) for all balanced inputs.

For tamper detection, the balanced inputs require resistors to be connected as close as possible to the device being monitored. When the monitored device incorporates a normally-closed tamper switch, it can be wired in series with resistor R1.



Condition	Resistance	Voltage at 'X'
Short circuit tamper	0	0 V
Normal	1 (4k7)	2.5 V
Alarm	2 (4k7 + 4k7 = 9k4)	3.3 V
Open circuit tamper	0 (no resistance)	5 V

All devices connected to a single board must share the same physical resistor value, (i.e. individual devices cannot have different resistors, unless assigned to different boards). You can change the resistance value for a board within the installer app. Additional boards can be added to the system.

Installation

The installation of this board must be carried out by a Gallagher Install Partner. Complete the instructions in this document to install the board. For further information, refer to the Gallagher SMB Technical Reference Guide.

ATTENTION: This equipment contains components that can be damaged by electrostatic discharge. Ensure both you and the equipment are earthed before beginning any servicing.

Using the screws supplied, mount the board to a Gallagher Mounting Plate within a Gallagher cabinet. Ensure the board remains isolated from conductive surfaces. Connect the low voltage wiring to the orange terminal blocks.

Tip: If replacing an existing board, remove the orange terminal blocks from the old board. Uninstall the old board then install the new board. Reconnect the terminal blocks to the new board.

LED indications

LED	Indication
3 Flash (Red)	No communications with the controller
2 Flash (Red)	Communications with the controller, but board is not configured
1 Flash (Red)	Fully configured and functioning normally

Technical specifications

Measurement	Value
Voltage	9 Vdc - 16 Vdc
Fuse	Onboard 1 A resettable polyfuse
Operating current	50 mA DC (all inputs terminated with 4k7 resistors)
Power rating	0.68 W
Temperature range	-10 °C to 50 °C (14 °F to 122 °F)
Humidity	0 - 95% non-condensing
Unit dimensions	Height with orange connectors 30 mm (1.2 inches) Width 87 mm (3.4 inches) Depth 70 mm (2.8 inches)
Standards and compliance	FCC, RCM, CE, RoHS