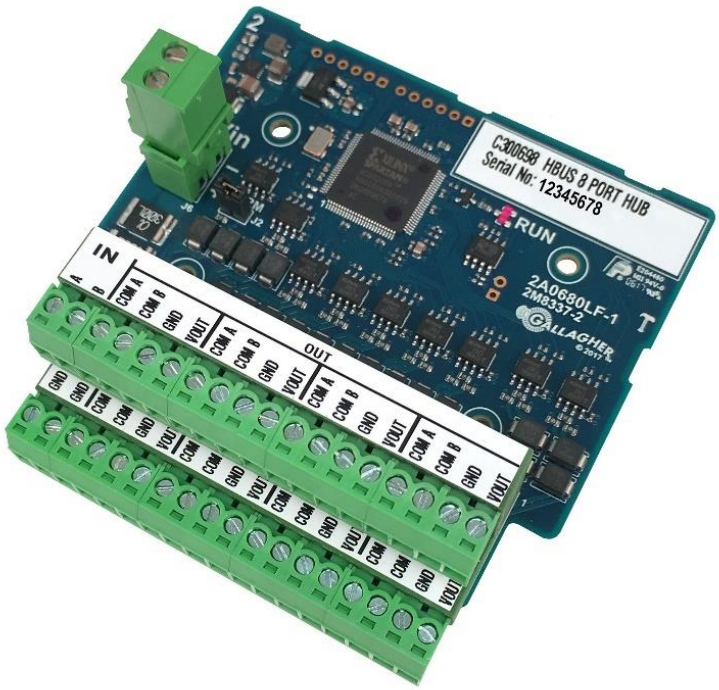
Gallagher

HBUS 8 Port Hub

Installation Note

Gallagher HBUS 8 Port Hub: C300698



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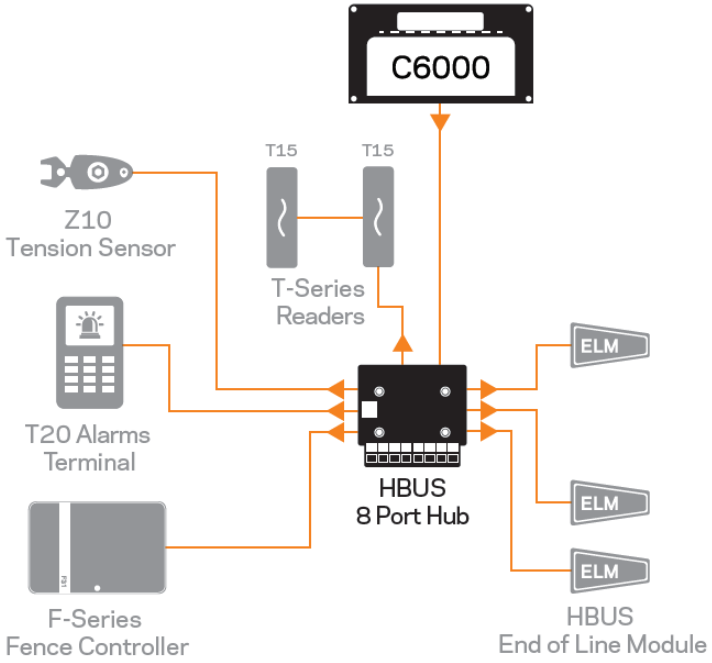
1 Introduction

The Gallagher HBUS 8 Port Hub provides installers with the flexibility to re-use existing wiring on site, allowing combinations of star/home run and daisy chain wiring to be used when connecting HBUS devices back to a Gallagher Controller 6000. It utilises a FPGA (field programmable gate array) to allow for the star wiring of devices. The HBUS 8 Port Hub is not a monitored device and therefore is transparent to the Controller.



Note: UL have evaluated the 8 Port Hub with readers and alarm terminals only. Tension sensor and Fence Controller equipment have not been evaluated as they are not subject to the UL294 listing.

2 Before you begin

2.1 Shipment contents

Check the shipment contains the following items:

- 1 x Gallagher HBUS 8 Port Hub
- 1 x Gallagher HBUS 8 Port Hub Installation Note (this note)
- 4 x 4G X 1/4" pan pozi screws

2.2 Power supply

The Gallagher HBUS 8 Port Hub requires a 13.6 Vdc ± 15% power supply. This is connected through the 2 pin connector labelled **Vin**. The 2 pins are labelled **-** and **+**. The terminals VOUT and GND provide a 13.6 Vdc ± 15% output suitable for HBUS connections, rated at 4A total from all outputs.

2.3 Cabling

The end devices on the HBUS cable should be terminated using 120 Ω resistance. Termination is already included at the HBUS Module out ports, (i.e. each HBUS out port is permanently terminated at the module).

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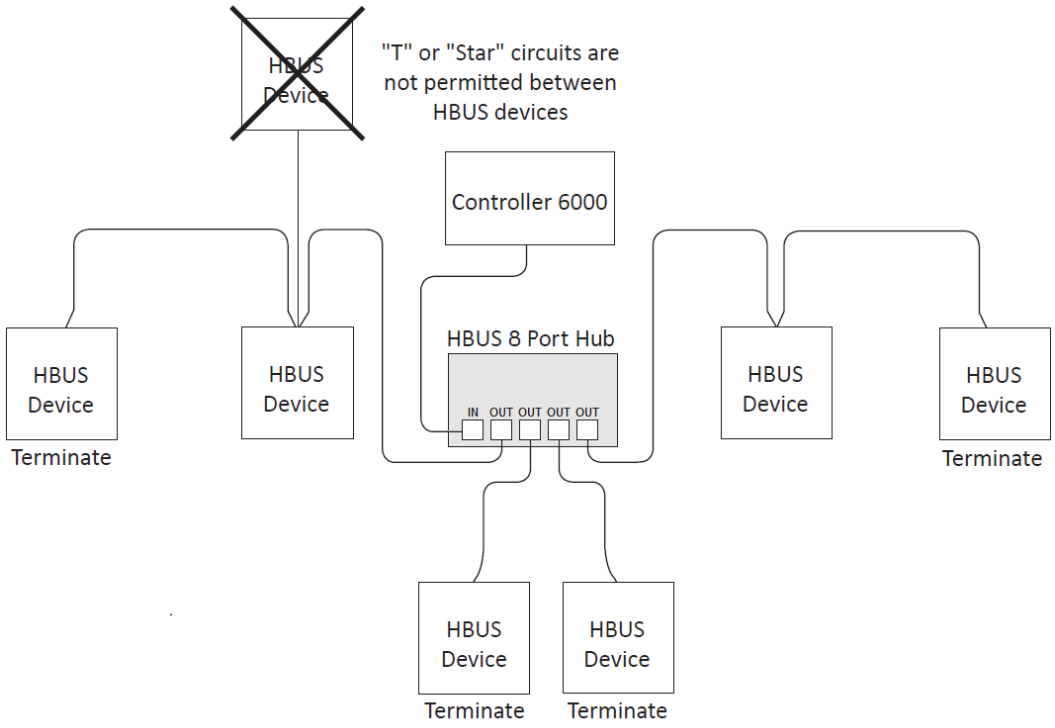
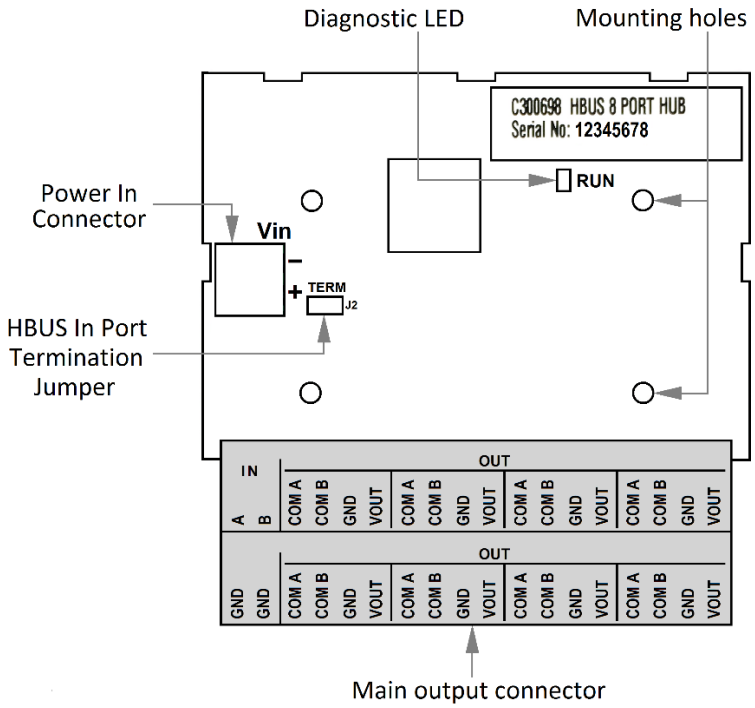
The In port has an optional termination jumper J2 TERM. Whether this jumper is used or not should be based on the In port to Controller wiring.

2.4 Connections

Note: Run a common ground (-ve) from the HBUS 8 Port Hub for all RS485 devices.



2.5 Component layout



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2.6 HBUS device limits

The RS485 device limits of the Controller 6000 must still be met.

2.7 HBUS LED diagnostic indications

The diagnostic LED is labelled “RUN” on the HBUS 8 Port Hub.

1 Flash (Red) indicates that it is functioning normally.

3 Installation

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

The Gallagher HBUS 8 Port Hub can be mounted in a Gallagher Starter Kit Cabinet (C300120), Gallagher Cabinet (C200100) or Gallagher Dual Cabinet (C200104 or C200105).

Notes:

- The HBUS Hub should be located within an enclosure that has Tamper Detection.
- The wiring from the Controller HBUS Port to the HBUS Hub should comply with the cable requirements of HBUS.
- The Power for the HBUS Hub should be provided from a fused source, and sufficient to supply the 8 outgoing Power Connections.

1. Refer to the appropriate Gallagher Cabinet installation note below for details regarding the procedures involved when mounting the Gallagher Cabinet.
   - Gallagher Starter Kit Cabinet Installation Note (3E3723)
   - Gallagher Two Door Controller Cabinet Installation Note (3E3721)
   - Gallagher Cabinet Installation Note (3C4513)
   - Gallagher Dual Cabinet Installation Note (3E0694)
2. Install a Gallagher Mounting Plate (C200001, C200002 or C200003) directly into the cabinet.
3. Using the 4 pan pozi screws supplied, fit the HBUS 8 Port Hub to the installed Gallagher Mounting Plate.
4. Connect the RS485 IN/OUT, inputs and outputs as detailed in the topic *“Connections”* earlier in this note.

4 Command Centre configuration

There is no Command Centre Configuration for the HBUS 8 Port Hub, if inserted into the wiring it is invisible to the Controller and to the HBUS devices connected to that HBUS.

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5 Approvals and standards

FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

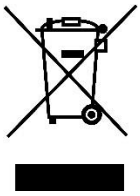
Note: Changes or modifications not expressly approved by Gallagher Limited could void the user's authority to operate this equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

RoHS
COMPLIANT

This product complies with the environmental regulations for the Restriction of Hazardous Substances in electrical and electronic equipment (RoHS). The RoHS directive prohibits the use of electronic equipment containing certain hazardous substances in the European Union.



This symbol on the product or its packaging indicates that this product must not be disposed of with other waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.

UL Installations

For a guide to configuring the Gallagher system to the UL Standard, please refer to the document appropriate to your location:
- *"3E2793 Gallagher Command Centre UL Configuration Requirements"* (for USA), or
- *"3E5960 Gallagher Command Centre ULC Configuration Requirements"* (for Canada).

Installers must ensure these instructions are followed to ensure the installed system is UL compliant.

UL294 - Access Control
UL2610 - Commercial Burglary
CAN/ULC-S304- Commercial Burglary
CAN/ULC 60839-11-1- Access Control

AS/NZS IEC 60839.11.1:2019 Grade 4, Class II

EN50130-4
EN55022

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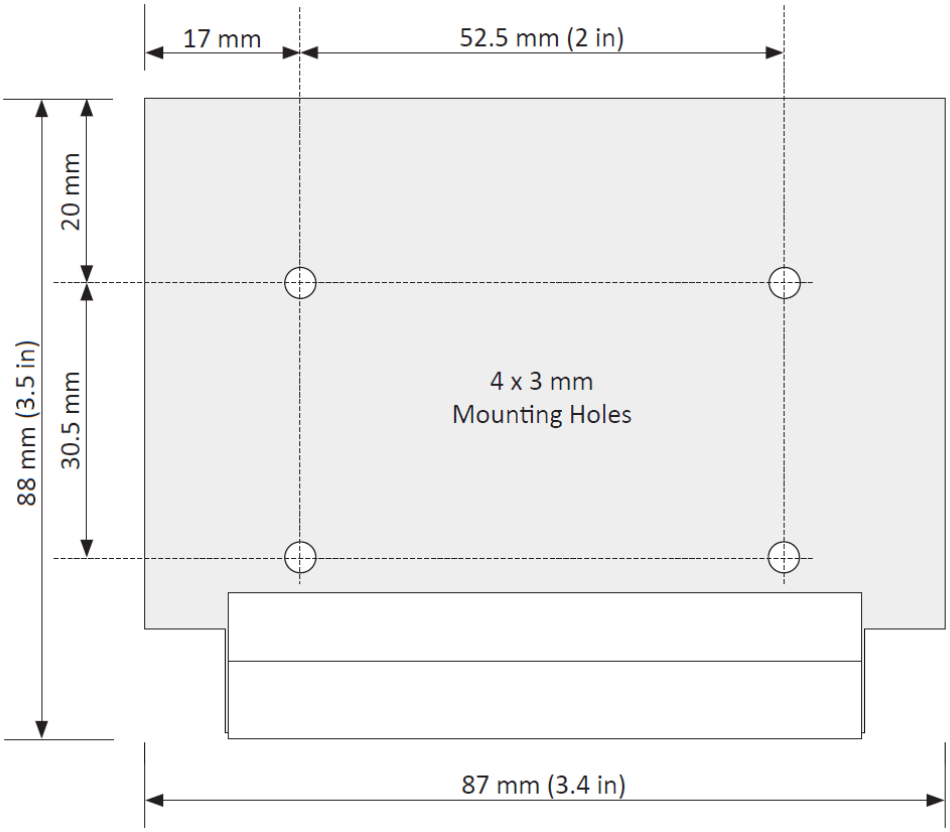
6 Technical specifications

Operating voltage (Vin):	13.6 Vdc ± 15%	
Operating current at 13.6 Volts:	20 mA	
Available current from each HBUS outgoing port:	1 x 4A resettable fuse supplying all output power ports	
Temperature range:	-10 °C to 50 °C (14 °F to 122 °F) 0 °C to 49 °C (32 °F to 120 °F)	(Independently verified) (UL certified)
Humidity:	95% non-condensing 85% non-condensing	(Independently verified) (UL certified)
Power and Comms cable length:	Depends on power requirements of end devices	
Comms only cable length:	up to 500m	
Cable length using Gallagher HBUS Cable:	up to 500m	
Height: Width: Depth:	30 mm (1.2 in) with connectors 87 mm (3.4 in) 88 mm (3.5 in)	

7 Unit dimensions



IMPORTANT
This picture is not to scale, therefore use the measurements provided.

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