

# HBUS Modules

Gallagher 8H and 4H modules support star wiring of secure high-speed HBUS devices including T Series Readers and the F22 Fence Controller to a secure Gallagher Cabinet. I/O connectivity is also provided for door and equipment monitoring.

## Speed

The HBUS protocol runs at speeds up to 1Mb/s, substantially faster than most other RS-485 based communications protocols. This increased communications speed improves the response times of HBUS devices.

## Connectivity

Gallagher 8H and 4H modules allow HBUS devices to be star-wired back to a secure controller cabinet. Star-wiring can remove the risk of one faulty connection taking down all downstream devices as on a daisy-chained run, and each HBUS port can also support multiple HBUS devices.

Gallagher 8H and 4H modules have on-board inputs and outputs that can be used for door monitoring and control, or for general I/O functions. Gallagher 8H and 4H modules monitor and report the state of balanced inputs, and enforce decisions to switch output relays, if required.

Four input states are monitored (using the default two 4k7 ohm resistors or optional configurable end-of-line resistances), including:

- Open
- Closed
- Short Circuit (Tamper)
- Open Circuit (Tamper)

Inputs on the Gallagher HBUS Modules can be used to monitor:

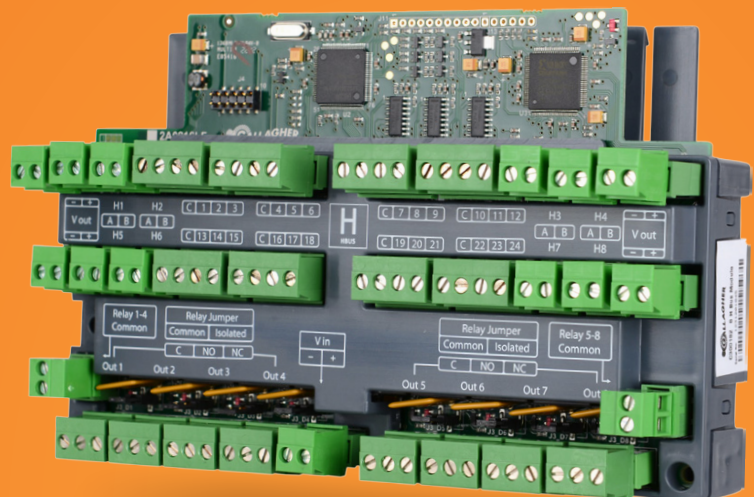
- Access controlled doors
- Intruder detection (i.e. passive, infra-red detectors, glass break detectors)
- Monitored doors
- Equipment alarms
- Any devices providing a clean switch contact

The on-board relays can be used for:

- Access controlled doors
- Alarm outputs, e.g. to activate sirens
- Control outputs, e.g. to switch on air conditioning
- Time activated outputs, e.g. to switch on lighting

## Data protection

All communications between the Gallagher Controller and its connected Gallagher HBUS devices are secured using industry leading authentication and encryption techniques. All HBUS devices maintain a heartbeat to alert the system should any device be taken offline and to protect against a wide range of potential attack methods.



Easy retrofit

HBUS Modules are designed to run on all existing Controller 6000s, allowing an easy retrofit of previous expansion modules.

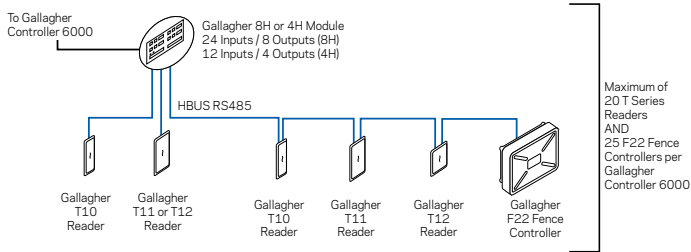
Gallagher cabinets

Two Gallagher Cabinets are available to accommodate the Gallagher controllers and the Gallagher HBUS Module:




- Gallagher Single Cabinet C200100
- Gallagher Dual Cabinet C200104

Refer to the Gallagher Cabinets data sheet for further information.

Connectivity - Gallagher HBUS Modules



Technical Specifications

GALLAGHER HBUS MODULES			
Compatibility		Gallagher Command Centre v7.05 or later	
Power Supply	Voltage	13.6 v DC±15%	
Current	Via Gallagher Controller 6000 connector		40mA
	Via HBUS Module power in	No relays	30mA
		4 relays	175mA
		8 relays	315mA
If HBUS devices are connected, a maximum of 0.5 A per “V out” port is available. This additional current should be added to the Power In currents specified above.			
Temperature Range	Operating Temperature	-10° to +70° C	
Humidity		95% Noncondensing	
Inputs	8H Module	24	
	4H Module	12	
Outputs	8H Module	8 SPDT relays	
	4H Module	4 SPDT relays	
	Relay circuit rating	24 V DC/AC	
		3 A resistive, 1 A inductive	
Compliance Standards	All equipment complies with FCC, CE, C-Tick and RoHS approvals. Please contact Gallagher for the latest list of approvals.		RoHS COMPLIANT    ACN 002132943
Part Numbers	Gallagher 4H Module	C300142	
	Gallagher 8H Module	C300182	

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