Class 5
Intruder Alarm System

The Gallagher Class 5 Intruder Alarm System (IAS) provides you with a fully encrypted, authenticated, and compliant Class 5 level Alarm System, the highest level of the AS/NZS 2201 intruder alarm system standard.

High level security

Gallagher's Class 5 Intruder Alarm System protects high value assets and information from emergent threats to successful intruder detection and alarms transmission.

Secure system

The Gallagher Class 5 IAS has been designed from inception to be a highly secure system, features include:

- Class 5 compliant secure enclosure, with a bi-lock system, and vibration sensor for tamper protection

- Monitored battery health and discharge times ensure mains power is restored before security is compromised

- End of line modules (ELMs) constantly monitor alarm sensor communications with regular heartbeats, ensuring alarms are raised if communications with the ELMs are severed

- Dual factor authentication for disarming the Class 5 System is provided by our T20 Mifare or MultiTech Terminal

High Sec End of Line Module (ELM)

Where AS/NZS 2201 Class 5 intruder alarm compliance is required, Gallagher Command Centre combined with the Gallagher High Sec ELM form part of a compliant installation.

Class 5 Cabinet, C6000 & PSU
C306105

Core components

A Class 5 Cabinet, Controller 6000 and 100W PSU comprise the base elements of a Class 5 compliant alarm system installation. The system ships with the following elements:

- 1 x Class 5 Dual Cabinet
- 1 x Class 5 PSU, 100W
- 1 x High Sec Controller 6000
- 1 x Vibration sensor
- 2 x Cabinet bi-lock keys
- 1 x Installation guide

GALLAGHER
Security

Why do I need a Class 5 IAS?

Sophisticated attacks on traditional alarm systems can render alarm sensors blind to intruder activity, leaving high value assets and intellectual property vulnerable.

Gallagher's Class 5 system uses the latest digital encryption security standards to protect against this type of vulnerability, ensuring alarms are always reported should your sensors come under attack.

The Class 5 Intruder Alarm System Architecture

The Class 5 IAS delivers full end-to-end authentication and encryption for a site's security system, monitoring a network of ELM's (located inside sensors) that send regular heartbeats to the Gallagher Controller, ensuring that alarms are raised if communications with the ELM are cut.
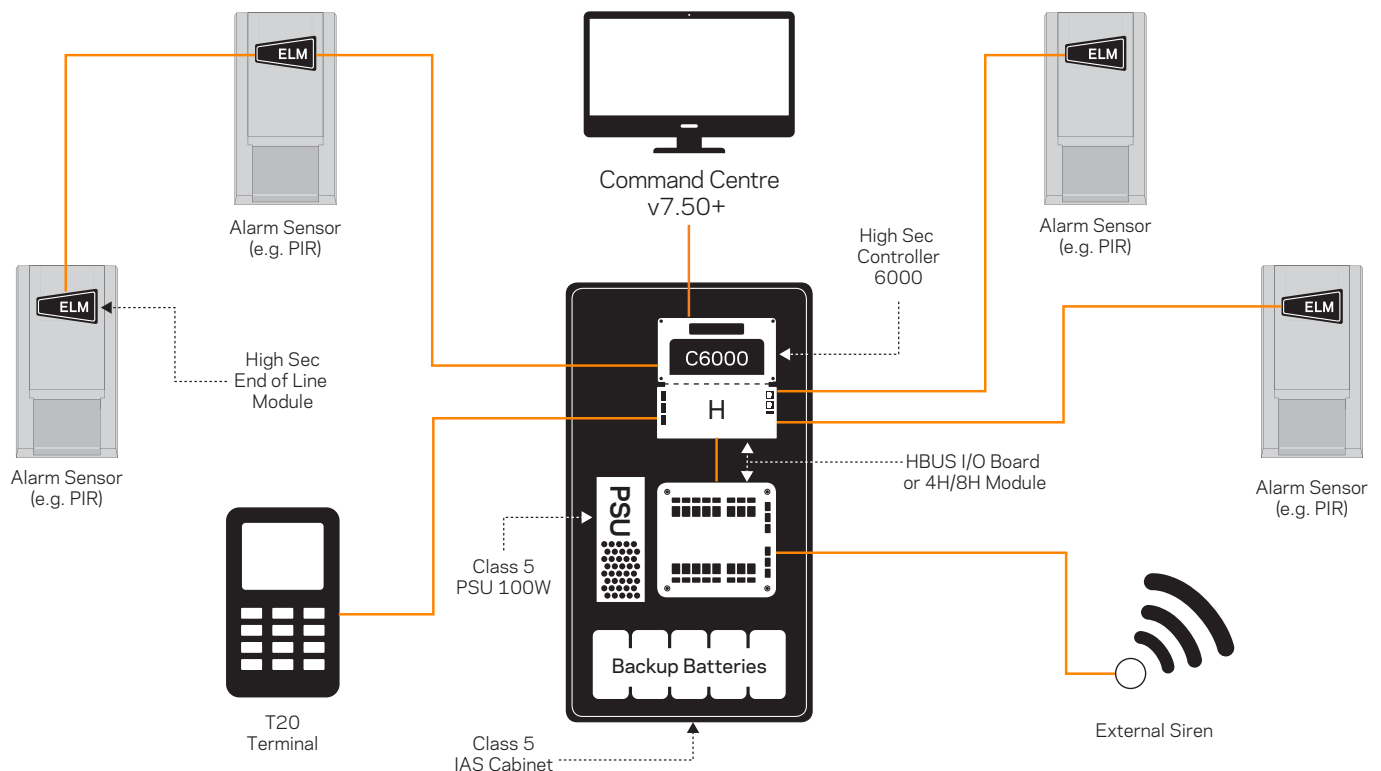

HBUS benefits

Leveraging the benefits of Gallagher's HBUS protocol, the Class 5 IAS can auto-upgrade system devices, has plug and play authentication for quick and secure installation, end-to-end encryption, and can support up to 30 ELM modules per C6000 controller.

AS/NZS Intruder Alarms Standard

AS/NZS 2201 comprises a series of Intruder Alarms standards which include mandatory, optional and advisory specifications applicable to all elements of an intruder alarm system.

The objective of the standard is to assist insurers, alarm companies, equipment manufacturers, clients and the police in achieving a complete and accurate statement for an intruder alarm system required in particular premises.

The standard classifies alarm system equipment functionality and performance, from Class 1 (lowest security level) to Class 5 (highest security level). Gallagher complies to all equipment requirements specified for Class 5 compliant alarm system installations.
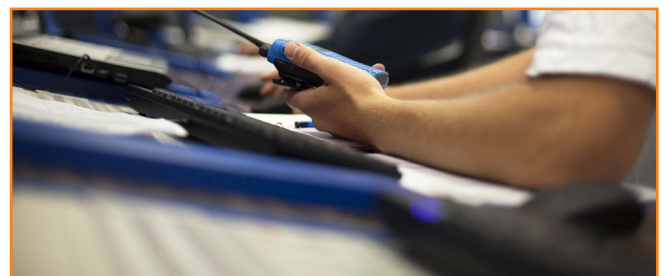
Note: Gallagher Command Centre

Command Centre v7.50.530 (and later) is required for the Class 5 IAS, allowing the Gallagher system to be used in AS/NZS 2201 Class 5 compliant intruder alarm installations. The Class 5 IAS can be used as part of a regular Command Centre solution, there is no need for two separate systems.

Everything you need

Gallagher provides a complete Class 5 solution. With the Class 5 Cabinet, PSU and Controller, High Sec ELM, Command Centre, and HBUS devices we have everything you need to deploy a fully compliant system. Each of the parts have a range of outstanding merits and can be purchased individually.

High Sec End of Line Module C300636

The Gallagher High Sec End of Line Module (ELM) is a small PCB encapsulated in a protective potting resin and plastic casing, with a unique HBUS device serial number.
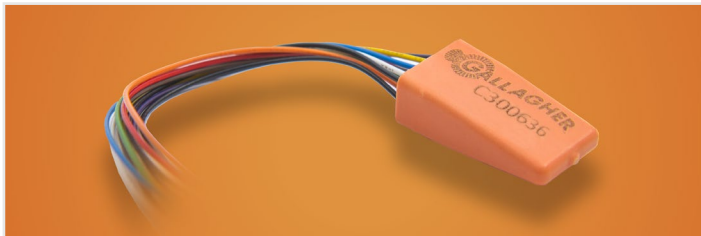
The plastic module measures 32mm x 17mm x 10mm, and is designed to fit inside the tamper-proofed housing of a high grade alarm sensing device (i.e. PIR, contact sensor), or in a tamper-proofed junction box. Benefits of the Gallagher High Sec ELM are shown below:

Secure

The ELM operates as a configurable HBUS device, allowing the module to authenticate with the controller and establish encrypted communications. The ELM sends regular heartbeats, ensuring that alarms are raised if communications are severed.

Easy install

With a small form factor the ELM is easy to install into an existing sensor device or tamper-proofed junction box. Integrated support for sensor walk-test functionality also removes the need to run extra wiring.

Physical input connections

The High Sec ELM supports the following physical input connections with the sensor:

- Alarm contact – alerts the system that the sensor has detected a potential alarm condition (e.g. a PIR detecting someone walking in front of it)

- Tamper contact - alerts the system that the sensor has been tampered (e.g. someone has removed the sensor tamper-proof cover to gain access to the sensor or end-of-line module)

- Anti-masking contact - Alerts the system that an attempt has been made to mask the sensor (e.g. someone covering a PIR when the area is disarmed). This is available for sensor devices that have an anti-mask output that can be directly wired into the ELM.

Walk-test output

The High Sec ELM supports a dedicated walk-test output, eliminating the need for separate cabling. The walk-test output is integrated into standard Command Centre test mode functionality, is supported on the T20 Terminal, and is compatible with specific requirements of high grade alarm sensors, including SCEC approved sensors.

Class 5 Cabinet, Cool Grey C306104

In addition to front and rear optical tamper support, removable door for easy installation, DIN rail mount, and side cable entry knock-outs, the cabinet also provides:

- Installed bi-lock (2 keys provided)

- Vibration sensor

- Room for additional battery storage (batteries sold separately)

Class 5 PSU, 100W C306440

The 100W PSU meets Class 5 requirements for battery charging and monitoring and supports several features:

- IEC mains power connection

- Battery connectors for battery health monitoring and recharging

- Battery temperature sensor for optimized PSU battery management

- Alarm outputs for mains fail, battery low and no battery alarms

- Supported input voltage: 180-264 VAC

High Sec Controller 6000 C305101

The High Sec Controller 6000 retains all of the functionality of the standard C6000 while providing specific support for the High Sec ELM via an onboard, dedicated encryption chip.
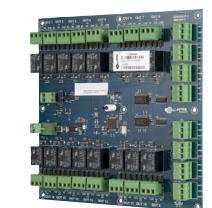
Class 5 Cabinet, Controller & PSU C306105

All-in-one Class 5 Cabinet, High Sec Controller C6000, and pre-mounted Class 5 PSU, 100W.
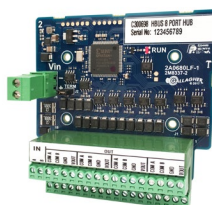
HBUS 8 Port Hub C300698

- 8 downstream HBUS ports

T20 Alarms Terminal C300463

Easy alarm system management

HBUS 16 In 16 Out Board C300688

- 16 inputs
- 16 outputs

HBUS 8 In 4 Out Board C300684

- 8 inputs
- 4 outputs

Technical Specifications

Product numbers

C306105	Class 5 Cabinet, Controller and PSU	C306104	Class 5 Cabinet, Cool Grey	C300698	HBUS 8 Port Hub
C300636	High Sec End Of Line Module	C306440	Class 5 PSU, 100W	C300688	HBUS 16 In 16 Out Board
C305101	High Sec Controller 6000	C300463	T20 Alarms Terminal	C300684	HBUS 8 In 4 Out Board

Class 5 Cabinet

Product detail	Construction:	Approx 1mm (0.03in) thick steel
	Gallagher footprints:	2
Standards compliance	AS/NZS 2201	
Dimensions	Height x Width x Depth:	620 x 375 x 185mm (24.4 x 14.8 x 7.3in)
	Weight:	6.8 kg (14.99lb)

Class 5 Power Supply Unit

Product detail	Construction:	100W no break 13.8V DC battery backup power supply
	Built in Protection:	Current limits and battery fuse
	Monitoring:	Relay outputs, battery temperature, mains fail battery low, battery fault, battery charge voltage compensation
	Mains Lead:	*Note: A standard IEC mains lead to fit the power supply is NOT provided, and will need to be sourced locally*
Power	Input voltage:	180-264VAC
	Primary output voltage:	13.8VDC
	Total output current:	7A including battery charging
Environmental limits	Operating temperature:	-10° to +50° C (14°F to 122°F)
Standards compliance	CE, RCM, AS/NZS 2201 Class 5 (as part of a Class 5 system)	

High Sec Controller 6000

Product detail	For information on the High Sec Controller 6000 variant, please refer to the Controller 6000 Datasheet

High Sec End of Line Module

Product detail	Maximum # of ELM's per HBUS circuit: 50	
	Maximum # of ELM's per High Sec Controller 6000: 50	
Power	Current:	15mA
Environmental limits	Operating temperature:	-10°C to +70°C
	Humidity:	95% non-condensing
Communications	RS485 at 1Mb/s	
Standards compliance	CE, RCM, AS/NZS 2201	
Dimensions	Height x Width x Depth:	32 x 17 x 10mm (1.26 x 0.67 x 0.4in)

Backup batteries

Product detail	*Note: Batteries are NOT provided. 12V batteries MUST be used. We recommend 12V 7AH Sealed Acid batteries, (e.g. Yuasa NP7-12, CSB Battery Company GP1270). A maximum of five batteries can fit in the space in the Cabinet.*

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