

### GEMiSYS<sup>2</sup> Access Control System

The highly flexible GEMiSYS<sup>2</sup> Access Control System has been designed with a rich feature set which makes it suitable for a multitude of applications.

By combining the various components of the system, almost any access control application can be satisfied without the need for bespoke development or custom solutions.

The system can operate almost any electronic lock available today without the need for special software, connectors or adaptors making it suitable for almost all applications.

The unique GEMiSYS<sup>2</sup> system operates via a unique encrypted RFID card system ensuring integrity and security whilst maximising the card read range.

The card access system can be managed on site or remotely by your GEMiSYS<sup>2</sup> supplier. At the customer's discretion, all systems configurations can be securely logged on our servers allowing fast and efficient remote support if required.



### Applications

- Retail Display Cabinets
- Retail Storage Cabinets
- Medical Cabinets
- Office Furniture
- Lockers
- Drop /Collection Boxes
- Architectural doors
- Portable carry cases
- Storage Canisters
- Drugs trollies
- Food Trollies
- Server racks
- Gun cabinets
- Tool cabinets
- Self-storage units
- IT equipment charging stations
- IT equipment transportation systems
- Forensic /evidence storage

### Product Features

- Miniature Design
- Low power consumption
- Simple Plug & Play Architecture
  - Simple to Specify
  - Simple to Install
  - Simple to Use
- Self-managed or remotely managed access control permissions.
- Built in RFID card reader
- Can operate any type of electronic lock
  - Motor Lock
  - Solenoid Lock
  - Mag Lock
- Supports door and lock status monitors
- Optional audit trail collection module
- Optional secure Bluetooth control / backup opening.
- Single or multiple door opening

## GEMiSYS<sup>2</sup> System Components

The GEMiSYS<sup>2</sup> system is a flexible modular system which through smart configuration of its component parts, can support almost any locking / access control application.

Although selection of the required components is very simple, your GEMiSYS<sup>2</sup> system representative can help you configure the most efficient and cost effective solution for your exact needs if required.

Each component is colour coded to enable easy identification. This unique colour coded system approach supports the simple to install, simple to specify, simple to diagnose architecture.

BLACK – All In One Controller

GREEN – Inline Lock Controller

RED – Power Hub

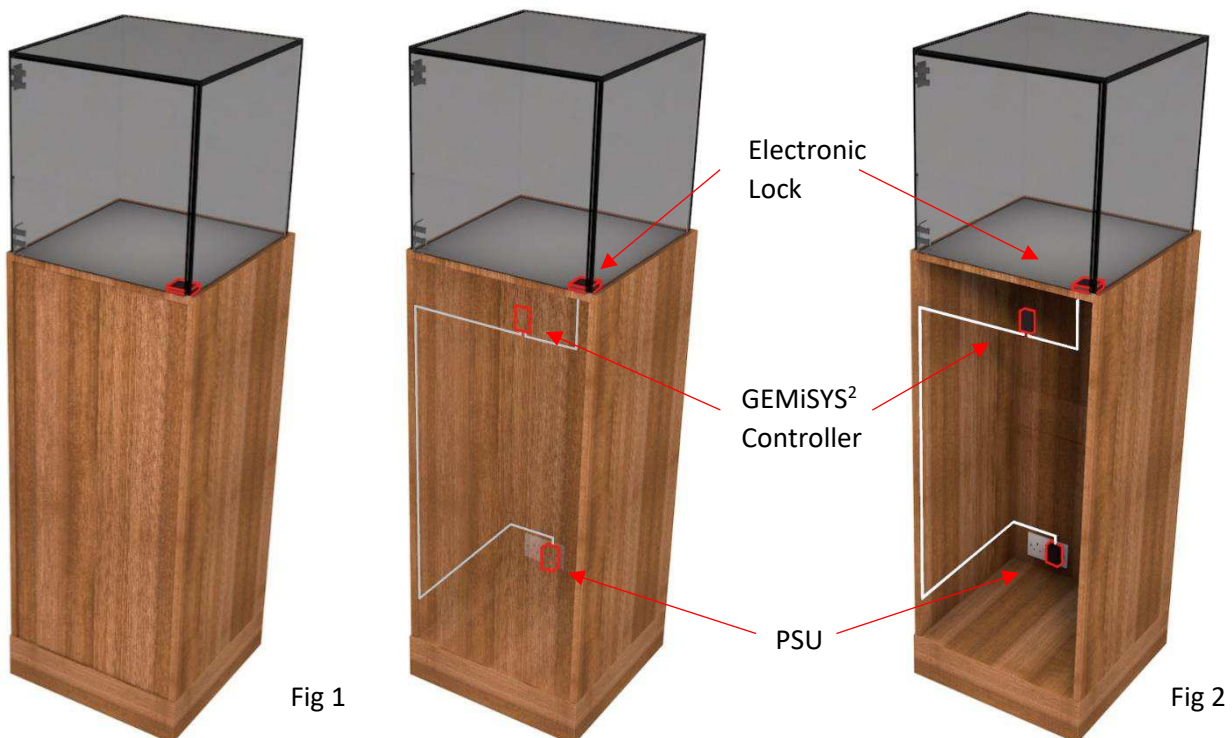
BLUE – Bluetooth All In One Controller

The miniature system components allow the GEMiSYS<sup>2</sup> system to be fitted discreetly, often entirely invisible in its presence to the end user.

The illustration below, shows a typical installation of the ALL In One controller in a single cabinet.

As can be seen in Fig1, the GEMiSYS<sup>2</sup> controller is not visible and is securely hidden inside the cabinet.

With the cabinet front cover removed, the GEMiSYS<sup>2</sup> controller can be easily accessed.



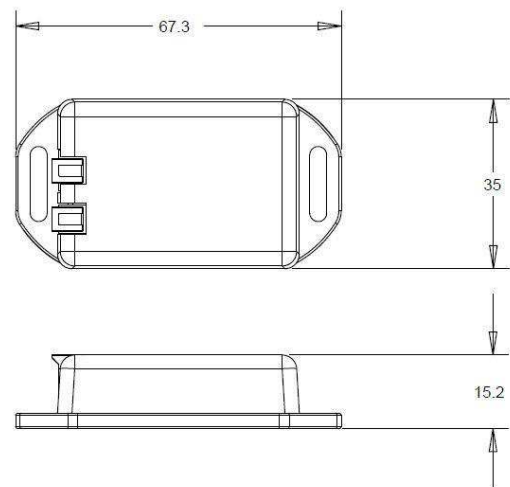
### GEMiSYS<sup>2</sup> All-In-One Controller

The All-In-One controller is exactly what the name suggests. Simply connect a power supply and a lock and you have a complete access control system ready to go.

The All-In-One controller is designed to be discretely mounted on the inside of the cabinet or cavity wall so it cannot be seen or attached from outside.

To operate the system, simply present the user card / fob to the All-In-One controller through the 'wall'.

- Occupies minimal 'in cabinet' or 'in wall' space
- Incorporates all access control functions
- Built in Non-Volatile Memory
- Built in RFID reader
- GEMiSYS2 Network ready
- Lightweight, discrete black plastic housing
- Incorporates mounting flanges
- Built in sounder / alarm
- Can operate solenoid or motor locks
- Accepts door sensor input
- Only 35mm x 67mm x 15mm (including mounting)
- Low power consumption
- Configurable operation
- 300 User capacity (User and Shadow cards)
- 4 way power connector
- 6 way lock connector
- Poke-Yoke wiring – Cannot plug the wrong lead into the wrong connector.

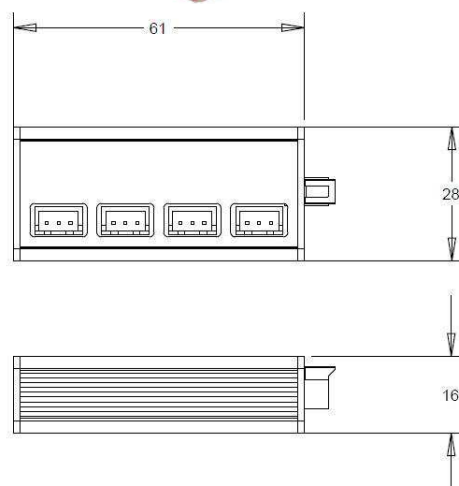


### GEMiSYS<sup>2</sup> Power Hub

The Power Hub is a miniature GEMiSYS<sup>2</sup> Network hub which enables more than one lock to be connected to an All-In-One controller to allow multiple doors to be opened at once.

The intelligent system can be configured to allow multiple doors to open together, just one particular door per user or just one door by 'first open selection'.

- Occupies minimal 'in cabinet' space
- Distributes power to all GEMiSYS<sup>2</sup> components
- Distributes GEMiSYS<sup>2</sup> network signals
- Lightweight Aluminium extruded housing
- Anodised red for clear and easy identification
- Clearly printed connector labels
- Only 61mm x 28mm x 16mm
- Zero power consumption
- 4 way power input connector
- 4 x 3 way power output and network connectors
- Poke-Yoke wiring – Cannot plug the wrong lead into the wrong connector.

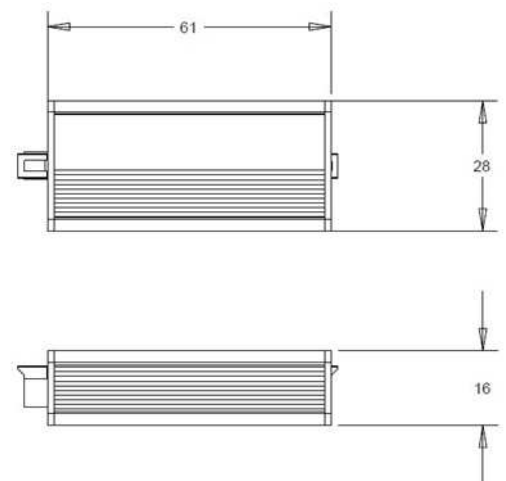
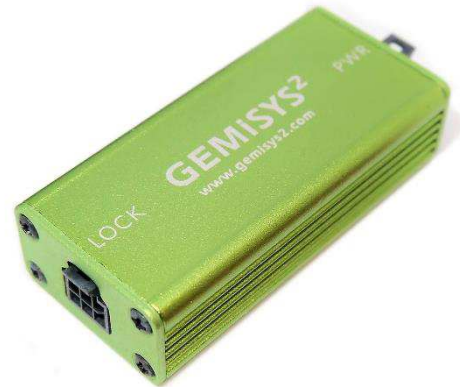


### GEMiSYS<sup>2</sup> Inline-Lock-Controller

The Inline-Lock-Controller is a small device which connects to the lock to the control network.

The Inline-Lock-Controller converts a GEMiSYS<sup>2</sup> network request to the appropriate lock drive and is capable of driving Solenoid, Motor or Mag locks. It also features a door status monitor switch input

- Occupies minimal 'in cabinet' space
- GEMiSYS<sup>2</sup> Network ready
- Acts as a 'slave' lock driver to a connected All In One Controller
- Can operate solenoid or motor locks
- Accepts door sensor input
- Lightweight Aluminium extruded housing
- Anodised green for clear and easy identification
- Clearly printed connector labels
- Only 61mm x 28mm x 16mm
- Low power consumption
- 4 way power input connector
- 6 way lock connector
- Poke-Yoke wiring – Cannot plug the wrong lead into the wrong connector.



### GEMiSYS<sup>2</sup> Bluetooth Audit Controller

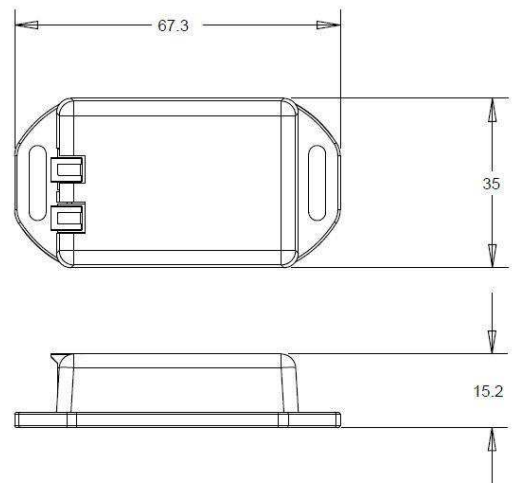
The Bluetooth Audit Controller is a small device which connects to the lock to the control network or can be added to any part of the network to 'snoop' on the data and provide audit trail collection and reporting.

The Bluetooth Audit Controller can be used in place of an All-In-One controller to provide an access card reader point.

The Bluetooth functionality is primarily designed to transmit audit trail data to the GEMiSYS<sup>2</sup> App which collates the data into a variety of configurable reports.

The controller can also use be operated securely via the App when access cards are not available.

- Occupies minimal 'in cabinet' or 'in wall' space
- Connects to the GEMiSYS<sup>2</sup> Network
- Incorporates all access control functions
- Built in Non-Volatile Memory
- Lightweight, easily identifiable blue plastic housing
- Available in discrete black plastic housing if require
- Incorporates mounting flanges
- 'Snoops' in on the network to collect Audit trail data.
- Can be used as the card access configuration point.
- Only 35mm x 67mm x 15mm (including mounting)
- Low power consumption
- 4 way power / network connector



## GEMiSYS<sup>2</sup> Example Configurations

Using the components of the GEMiSYS<sup>2</sup> system in a variety of configurations, will allow the opening of single or multiple doors in almost any configuration.

Below, are 4 popular example configurations;

### Single Door Control

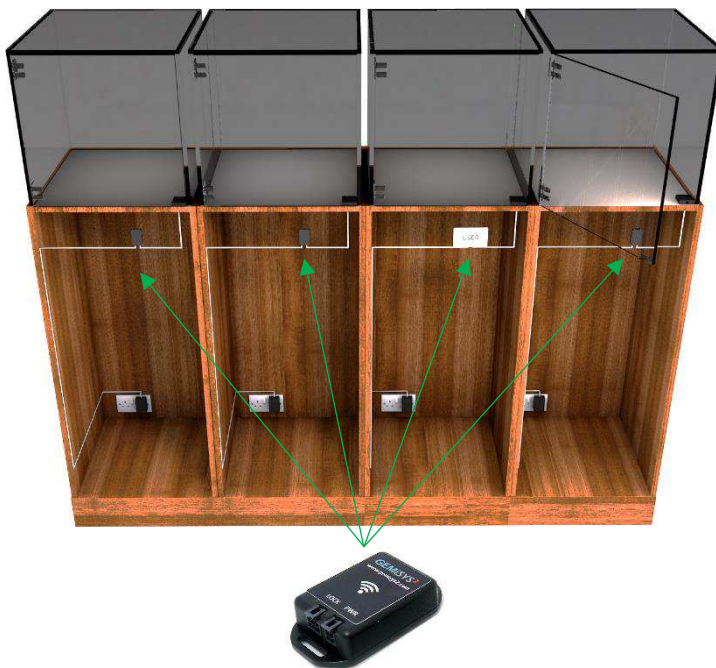
The simplest of all configurations is the single door control solution.

By using an All-In-One controller connected to a power source and a single lock, the presentation of an authorised access card, will open only the door attached to that controller

This simplest of configurations can be applied to a single door cabinet or in multiple instances on a multiple door cabinet.

For example, in the picture below, the four doors in the multi door cabinet are individually opened using four single door controllers (4 x All-In-One).

This provides full individual door access control. Simply present an authorised user card to the All-In-One controller associated with the door you wish to open (in this example, just below the door) and that particular door will open.



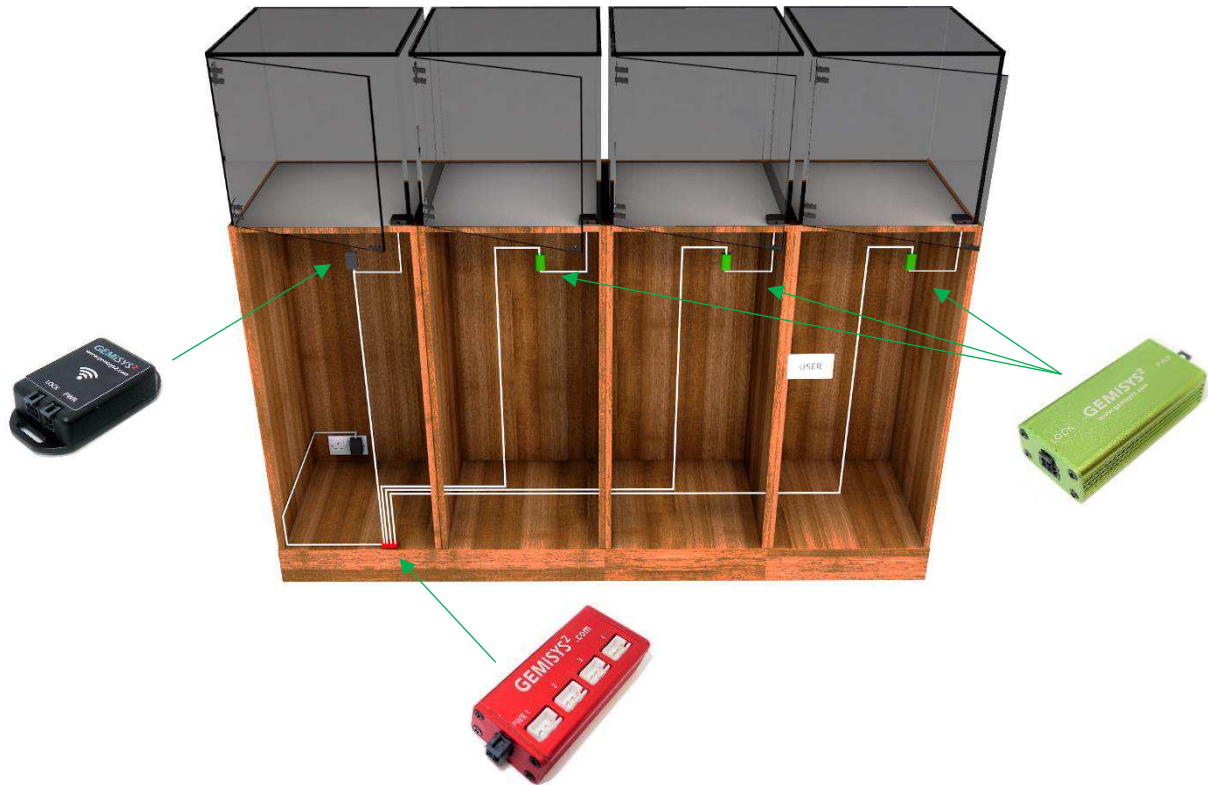
In this configuration, multiple doors can be open at the same time by one, or multiple users, by presenting an authorised card to each door in turn.

Each door will maintain its own door open reminder and forced entry alarm functionality.

NOTE: A power hub and a single power supply can be used to power all 4 controllers in this configuration if preferred.

## Multiple Door, Single Point Control

In this configuration, a single All-In-One controller is connected to four locks via a power hub and three lock controllers.



Upon presentation of an authorised access card to the All-In-One controller (under the far left door in this example), all four doors will unlock simultaneously.

Once unlocked, the required door can be opened and access gained. The amount of time that the doors remain unlocked is configurable but is set to 5 seconds by default.

Once 5 seconds has passed since the access card was presented, all closed doors will relock. Any doors that remain open at this point will re-lock when the door(s) is(are) closed.

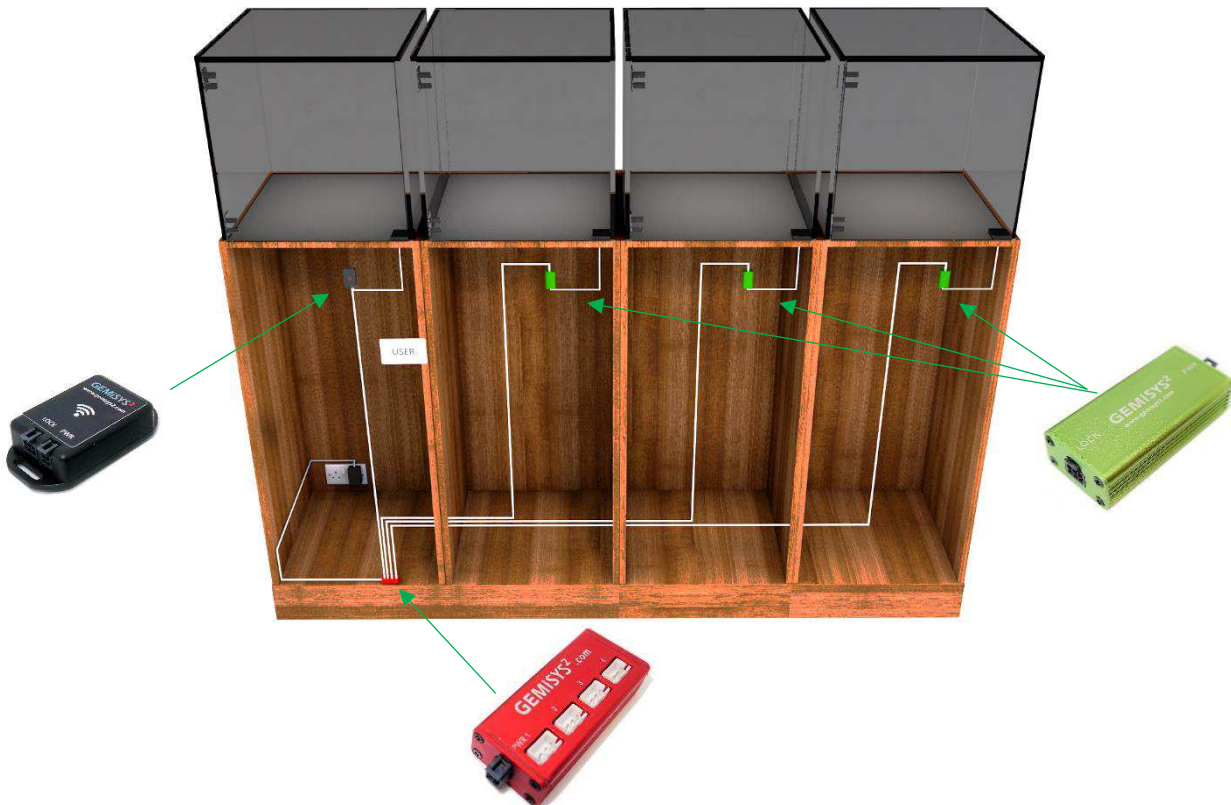
In this configuration, any door left open beyond the reminder time limit, will cause the door open reminder alarm to sound.

If any door in this system is forced open, the forced entry alarm will sound.



## Specific Door, Single Point Control

In this configuration, a single All-In-One controller is connected to four locks via a power hub and three lock controllers.



Upon presentation of an authorised access card to the All-In-One controller (under the far left door in this example), ONLY the door authorised to open by that card will open. This allows users to have independent door access to their designated door(s) only.

This is useful in situations where personal belongings may be stored in cabinets, hot desks or lockers.

In the example shown above, four access cards would be issued, one for access to each door. A SuperUser card can also be configured to allow access to all doors in the system.

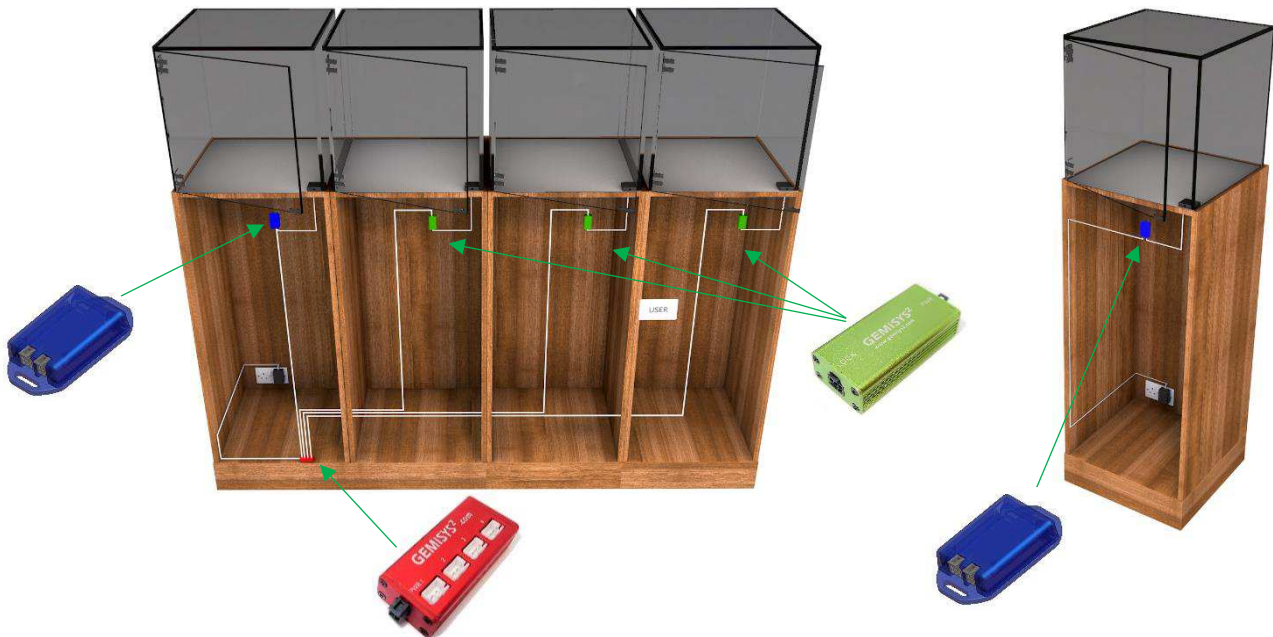
Once unlocked, the required door can be opened and access gained. The amount of time that the doors remain unlocked is configurable but is set to 5 seconds by default.

Once 5 seconds has passed since the access card was presented, any door that remains open at this point will re-lock when it is closed.

In this configuration, if the door left open beyond the reminder time limit, will cause the door open reminder alarm to sound.

If any door in this system is forced open, the forced entry alarm will sound.

## Variants with Bluetooth Audit Trail / Bluetooth Door Control



As all of the GEMiSYS<sup>2</sup> system configurations use at least one All-In-One controller, this can be easily replaced by a Bluetooth Audit Controller.

The GEMiSYS<sup>2</sup> Bluetooth Audit Controller has all the functionality of the standard All-In-One controller but has the additional ability to collect an audit trail of all actions occurring on that controller or network.

To the normal user, the use of the Bluetooth Audit Controller is exactly the same as that of the All-In-One. Present your user card and the door(s) opens. However, as the controller is silently recording each event, as system administrator or Super User has the ability to download this audit trail via the GEMiSYS<sup>2</sup> App on their Android Device or the provided GEMiSYS<sup>2</sup> Android Tablet.

Once downloaded, the Audit Trail includes the following data;

- Cabinet Opening Records (viewed by cabinet, user, time, store etc)
- Activity Monitor (by store, by user, by time or by cabinet)

The GEMiSYS<sup>2</sup> App can also compile reports and retail analytics for management such as;

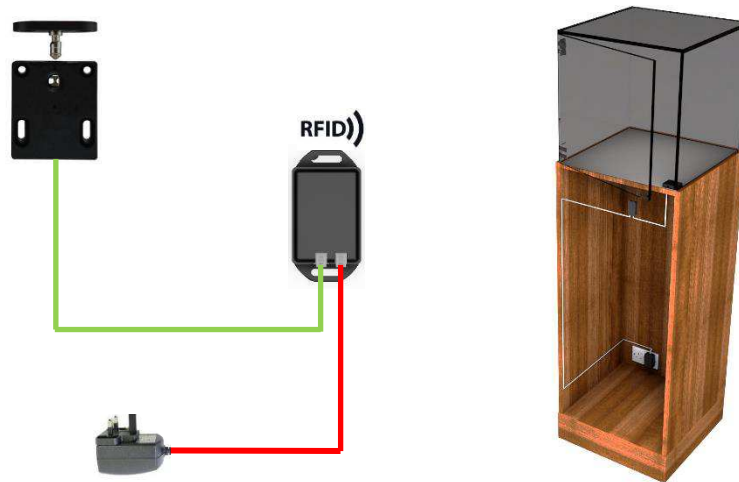
- High / Low usage periods
- Staff activity level
- Merchandise interest levels (by cabinet)
- Brand popularity etc.

The App can also be used to configure system alarms, change access rights, configure timed access, set door open times and door open limits.

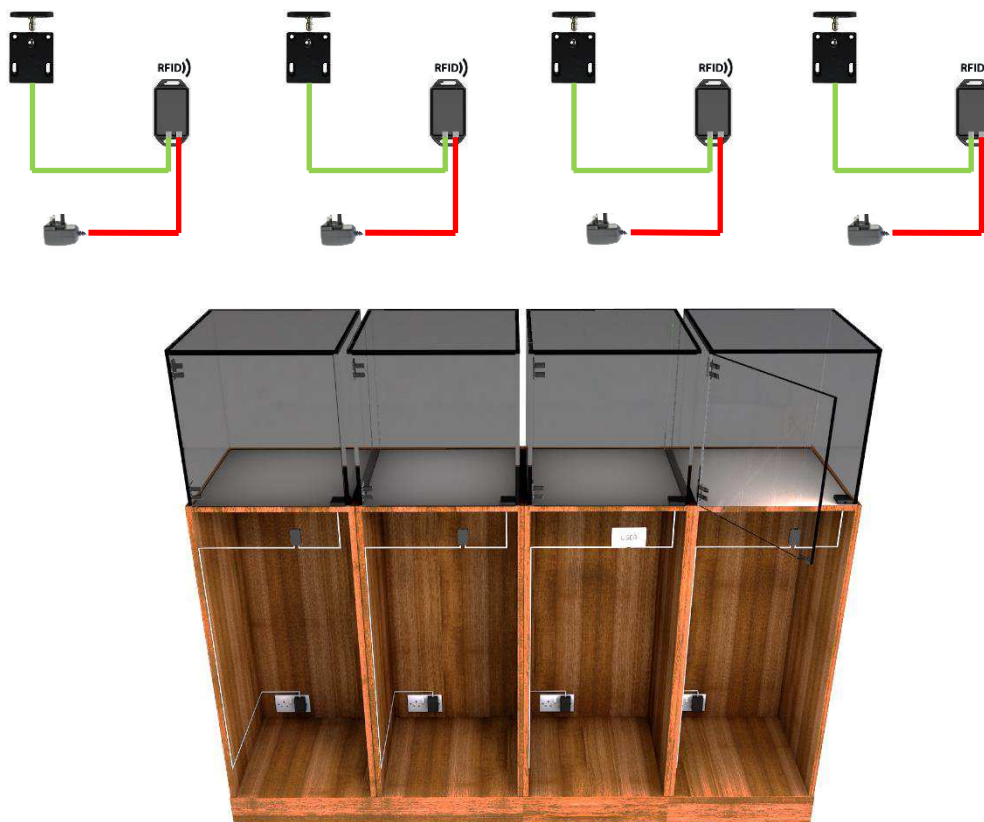
In situations where an authorised user card is not available, the passcode controlled app can also be used to unlock the system.

## GEMiSYS<sup>2</sup> Example Configuration Schematics

### Single Door Control

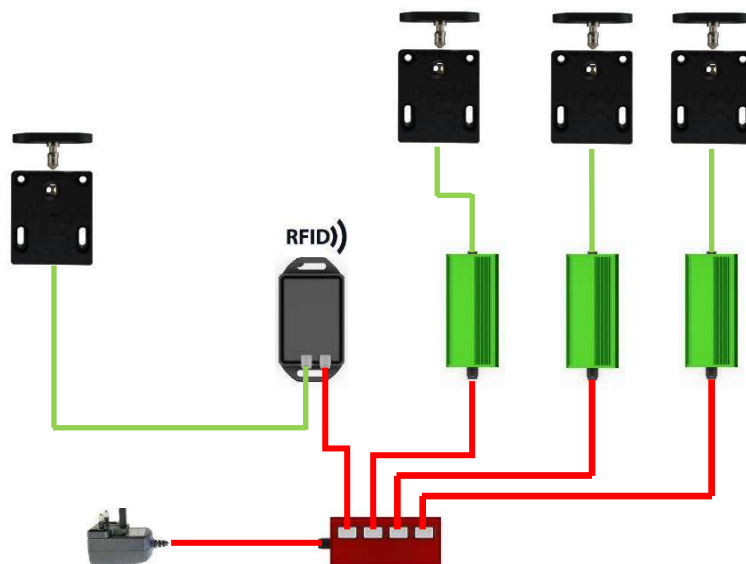


### Multiple Door, Single Door Control

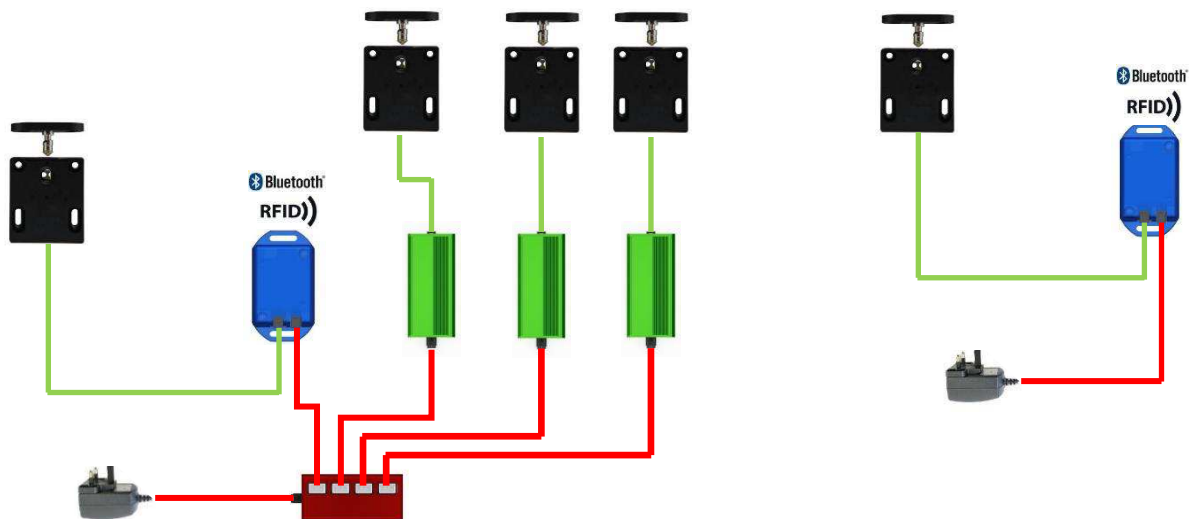


Multiple Door, Single Point Control / Specific Door, Single Point Control

Only software / settings differences determine the two different operating modes



## Variants with Bluetooth Audit Trail / Bluetooth Door Control









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