



Smart Heating Control Solutions for Your Building



# **About Genius Hub**

Genius Hub is a UK based smart heating system used by 1000's of customers across the UK: Product design, manufacturing, customer support & software engineering are all located in Birmingham and we provide project management for all commercial installations. Genius Hub is an award winning company - winning the 'Energy Project of The Year: Commercial and Industrial' at The Energy Awards in 2022 for saving 64% on energy bills at The Belfry Hotel and Resort.

Genius Hub systems cost around one third of the price of a standard building management system whilst providing a comparable amount of control: Genius Hub is also the most user-friendly system on the market owed to it's usability in domestic settings. Genius Hub helps you reduce your property's energy consumption by only heating the parts of the building that are being used: By controlling the heating in each individual room and learning the best schedule automatically, it helps save money and energy whilst keeping the building occupiers comfortable.



# We can control:

#### **RADIATORS**



Genius Hub can control each radiator independently, giving you maximum control of your heating.

#### **ELECTRIC HEATING**



Genius Hub can control most types of electric heating, using the Smart Plugs, Electric Relays or Electric Switches.

#### **UNDERFLOOR HEATING**



Genius Hub can control each room or zone of your wet or electric underfloor heating independently and remotely.

#### **AIR CONDITIONING**



Genius Hub can offer solutions for Air Conditioning, MVHR and Fan Convector Units.



## Advanced heating control without the complexity



#### **Weather Compensation**

The weather outside has a huge impact on the demand for heating inside. The Genius Hub takes into account the external temperature to optimise your heating control. Weather compensation provides more heat on a cold day and less in the Spring and Autumn.



#### **Zoned Heating**

Only heat the rooms you need to the right temperature at the times you choose giving you total control.



#### **Heating History**

The Genius Hub remembers your heating patterns and temperatures, so you can see changes in use and potential energy savings for each room.



#### **Window Open Detection**

The Genius Radiator Valve detects when someone has opened a window and turns off the radiator automatically.



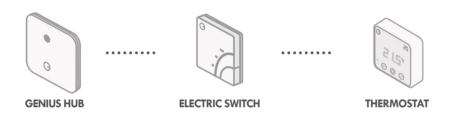
#### Wireless Communication

Devices talk wirelessly around the building, reducing the need for extra cables and making installation a breeze.



# The basics

We have everything you need to start saving energy and money. All you need to start saving is 3 components: The **Genius Hub, Electric Switch** and **Wireless Room Thermostat**. The whole system is wireless and easy to install, but if you prefer you can get an electrically competent engineer that you trust to fit it for you.



# We can control



Boiler: Genius Hub can control any number of boilers or plumbed zones.



Hot Water ON/OFF: Genius Hub can control the timing of your hot water so it is only on when you need it.



Hot Water Temperature: Genius Hub can also show you the temperature of your hot water on the app, so you can schedule the temperature and time of the hot water tank.

# **Customise your system**

Thanks to our innovative technology, you are free to add a number of additional devices to create your perfect heating control system...



arrive and off when you leave.





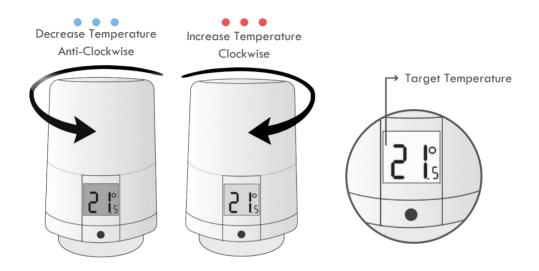






Shows the temperature on the display and gives you the option for a manual override.

# **Optimal Comfort in Every Room**

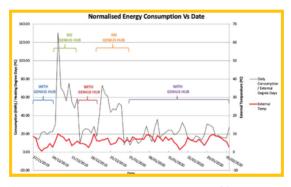


With Genius Radiator Valves, rather than multiple rooms of radiators heating up at the same time, each room becomes its own individual zone. The Genius Hub calls on the boiler when the Radiator Valves require heat and stops the call for heat when all rooms are satisfied. This means instead of 1 or 2 zones of heating, the property has the same number of zones as the number of rooms, increasing comfort as well as energy efficiency.

Similar to manual TRVs, the Genius Radiator Valves can be manually adjusted to override the schedule, giving control to the user in the respective room. As they are all linked to the Genius Hub, this gives them an automatic link to any other Genius Radiator Valves in the same room, and the ability to call on/off the boiler.

# Benefits from using Genius Hub

Conveniently customise the temperature settings through our user-friendly Radiator Valves, Room Thermostats, or the mobile app and feel assured as you approach your work space, the system will automatically ramp up the heating to welcome you. With Genius Smart Occupancy Detection, rooms are pre-warmed to a cosy temperature before you even step foot inside. Our system ensures that unoccupied spaces maintain a lower temperature, conserving energy without sacrificing comfort.



Total average savings = 64%

We have proven, through robust statistical analysis of ten weeks heat energy data, a saving of 64% when comparing the original heating schedule with an occupancy schedule at The Belfry Hotel & Resort. During the period of the trial it was reported that the number of complaints regarding the heating reduced compared to before the Genius Hub was installed. The results have been presented on above to show a timeline of energy usage, both 'With Genius Hub' and 'No Genius Hub'.

# **Offices**

Genius Hub is a valuable asset for businesses and office spaces, enabling you to significantly cut down on energy usage by efficiently heating only the occupied areas within your property. Through precise control of room-by-room heating and intelligent learning of optimal schedules, it not only leads to cost and energy savings but also contributes to a substantial reduction in carbon emissions, aiding organisations in fulfilling their CRC (Carbon Reduction Commitment) obligations.

# **Benefits**



#### **Heating History**

Genius Hub monitors as well as controls. Measured temperatures are recorded for every room.



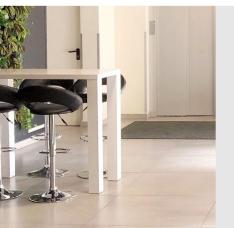
#### Remote Access

Monitor and control the heating from a central office or wherever you are.



#### Local Manual Control

The temperature of each room can be controlled by interacting with the devices.



"Other building control companies offer a one-off bespoke system making them really expensive and needing to have engineers on-site to program them. The Genius Hub setup was done off-site and then the installation was really fast and easy. I particularly like Genius Hub's user-friendly app keeping things simple. We also did an energy report on the system and found an average saving of 21% over the course of one year. That's excellent for us and we'd highly recommend them."

Jack Caldwell, Energy & Buildings Officer
Scottish Borders Council

# **Hotels**

Heating unoccupied rooms unnecessarily is a thing of the past. Reduce your heating costs, and improve guest comfort. Automatic detection of occupancy can help to increase savings even further, requiring minimal effort to set up. Great customer service is the priority for every hotel or guest house owner and with the Genius Hub system, rooms can be monitored to see if they are at a comfortable temperature or whether guests have checked out.



### Staying In Control

Reception can manage the heating system in response to quests requests.





#### **Guest Comfort**

Turn heating down after checkout, and pre-heat rooms for when quests check-in.



#### Save Energy In Unoccupied Rooms

Remotely switch off rooms which aren't being used.



"We were extremely pleased to calculate that the Genius Hub has saved us 64% off our heating costs meaning that the system has about a two year payback on the cost of installation. The system significantly reduces confrontation at the reception desk and the number of refunds we have to give out for rooms too."

Mick Goodreid - Chief Engineer
The Belfry Hotel & Resort

# **Rented Accommondation**

As these types of properties tend to have very irregular usage, the 'footprint' mode of the Genius Hub can ensure that rooms get turned off when the tenants' rooms are not in use, and automatically ensure a preset temperature when they return. The 'window' open feature of the Genius Valve can also help to avoid situations where the radiator is heating the room, whilst the window is open – no more heating the streets!



# Open Window Detection The Genius Radiator Valve detects when a window is opened and turns off the radiator automatically.





Holiday Period
Turning heating down during
holidays where students are
expected to be away.



Control The Bills
Genius Hub offers a great solution
for managing a property's
energy consumption.



"I love the fact that it has an app, so I don't have to go on my laptop, or even visit the property in some cases. I love how I can set it up and forget about it. After it was first installed there were a few comments from the tenants, as one would expect, but after a few weeks they had all forgotten about it."

Paul Million, HMO Owner Real Property UK

# **Care Homes**

Given the unpredictable patterns of room occupancy in care homes, the 'footprint' feature of the Genius Hub can effectively manage energy usage by automatically turning off room heating or cooling systems when residents' rooms are unoccupied. It also ensures that a pre-set comfortable temperature is maintained for them when they return to their rooms.



#### **Personalised Resident Comfort**

Genius Hub can contribute to customised resident comfort in your care home.

## **Benefits**



#### **Override**

Precise control, at the touch of a button from inside the room if allowed by manager or team.



#### **Smart Heating**

Through its integration with Room Sensors, the system can adapt in response to occupancy.



"I am very pleased with all of the information we now get from the system. Like being able to look back over the real temperatures on a chart from the past weeks means I can be sure that residents are always at the right temperature should anyone ask. I also like being able to see when the rooms are being used - this is really useful for the nursing side of things."

Richard Condie, Estate Manager
Belvedere Care Home

## Other

Haven't yet seen the type of property you're looking to control? Genius Hub is flexible and works in any residential/commercial space. We also have experience designing and commissioning our system in the following types of buildings:



**Educational Facilities** 



Retail & Hospitality



**Local Government** 



**Churches** 



**Community Centres** 



Hospitals

Find even more buildings we've controlled on our website at: geniushub.co.uk/case-studies

# Road to Genius Hub

We understand that the process of upgrading to a smart heating system can be quite daunting. We have broken down the steps you need to take into this roadmap to give you an idea of the process from start to finish.

# 1. The First Enquiry

Here is where you can supply us with information including floor plans (if you have them), gas/electric usage and building nuances you may wish us to know about.

# 2. Site Survey & Proposal

Genius Hub provide you with an initial quote, including devices, additional services, potential cost savings (if applicable).

## 3. Queries & Alterations

Modify design, confirm component compatibility, or book in a site-visit to confirm design if required, to make sure the system works best for you.

# 4. Building & Configuration

Once purchased and design confirmed, your order will be passed over to the building team to assemble your system.

## 5. Installation

Whether you use our recommended installers, or your own in-house maintenance team which have been trained by us, installing your system is fast, efficient and simple.

# 6. Training

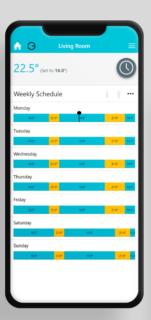
We offer many opportunities for you and your team to learn how to get the most from Genius Hub, including on-site training of the new controls by our commissioning engineers, to ensure the installation is correct and you know exactly how to use the system.

# 7. All in your hands!

We will run post-installation tweaking sessions to ensure you're happy with how the system works and remove any possible installation snags. However, we're always here to help and offer top up end-user training to get the optimal comfort and energy saving potential going forward.









# Smart made simple.

