
# evohome WiFi
## multi-zone system

**evohome** is a sophisticated heating system that ensures you can create and individually control up to 12 heating zones in domestic properties. **evohome** will also control domestic hot water.

**evohome** is suitable for any home with a hydronic (wet) central heating system. Zoning solutions can be designed for even the simplest of property layouts. **evohome** is ideal when looking to control temperatures in larger properties such as: luxury apartments; large family homes; homes with business use; multiple occupancy apartments and light commercial spaces such as doctors surgeries and small offices.

**evohome** allows the installation of multiple temperature sensing devices around the property without altering existing pipework, disrupting décor or damaging fixtures and fittings.

With touchscreen control, the user can quickly gain control of exactly where and when the property should be heated.

Remote access is provided via a tablet or smart phone.

Wireless Radiator Controllers provide an easy way of installing heating zones without draining down or disturbing pipes or décor.

**evohome** really is the brain of the heating system.


# evohome WiFi controller

The multi-zone **evohome** controller controls the time and temperature of up to 12 heating zones plus a domestic hot water supply if required. Each zone has independent time and temperature control.

It has a backlit colour LCD screen. The unit can either be wall mounted with an external power supply or table mounted on the table stand. This is powered by a DC power supply plug. The **evohome** controller can be removed from the stand for easy programming for up to 2 hours before returning to the stand for charging.

The colour of the surround can be changed to either grey; graphite and black (using the accessory pack). A choice of idle screens, analogue or digital clock displays and a choice of day or night mode increases the aesthetic properties of the most visible part of the **evohome** system. When controlling the heating system the **evohome** controller has a number of features that make operation easy.

The **evohome** controller can act as a room thermostat on its own. Zone names can be input to match the actual property and the zones can be controlled as multi-room or as single-room zones. Zones can be configured to give individual local override of a room or rooms within the zone.

The programming in the unit is split between in-use and installation sections with a wide variety of control choices for the property owner. There is a guided scheduling wizard for the property owner to help them set up time and temperature profiles in each zone and a guided configuration facility for installers.

The screen will show energy efficiency messages to the homeowner as each zone's temperature will be colour coded to show potential over or under set point temperatures.

There are a number of quick actions available to make it easy to change the heating requirements for a short period.

- Day Off mode changes the schedule for all the zones to a pre-set day (i.e. change a week day to a weekend day)
- The Heating Off button will turn all the zones off unless the frost protection temperature level is reached

Inbuilt optimisation features allow the system to work more efficiently:

- 'Delayed Start' and 'Optimum Stop' allow evohome to intelligently optimise start and stop times
- A learning TPI algorithm ensures each zone adapts to the weather and the seasons

The **evohome** controller provides access for the installer to fully control the heating system. It is suitable for radiators, hydronic under floor and a mixture of both types of heating. Cycle rates, minimum on times and fail safe parameters can be set.

OpenTherm® capability is built-in to work with OpenTherm® boilers. Boilers can be controlled by either a boiler relay or an OpenTherm® bridge. This OpenTherm® Symbol functionality is suitable for BOTH heating and hot water. You can programme a temperature offset for the **evohome** controller screen when used as a temperature sensor in its own right.

Hot water cylinder overrun and temperature offset levels can be programmed as can the hot water temperature itself. You can carry out a wireless Radio Frequency (RF) check using the **evohome** controller screen. Wireless binding of the system components is carried out via the touchscreen and additional sensors can be easily bound in post application if the zoning requirements change.

Your **evohome** connects to the internet via built-in WiFi and will appear as a device on the home network – once it is on your network and you have registered your device with the Total Connect Comfort (TCC) website (full details in the user guide), the **evohome** controller is able to display external temperatures.

# **evohome WiFi** controls


DT92 Digital Room Thermostat

### Digital room thermostats

Where there is a requirement to use a wireless room thermostat as a temperature sensor, both Honeywell's DT92 Digital Room Thermostat and the Y87 Single Zone Room Thermostat can be included into the **evohome** system.

Easy to set up with two way wireless communication (30m range) and a signal strength indicator. Simple to operate with up and down buttons (DT92) or by a turn of the Dial (Y87). Individual zone temperature override.


Y87 Digital Room Thermostat

5 to 35°C set point range offers a wide range of comfort levels. The DT92 digital thermostat can be wall mounted or free standing to ensure best possible positioning. Y87 Single zone thermostat is wall mounted.

### Wireless cylinder thermostat

Control domestic hot water via the **evohome** controller screen by installing an externally-mounted wireless cylinder thermostat onto the hot water cylinder; Sensors are provided for vented and unvented cylinders.

Honeywell's externally-mounted wireless cylinder thermostat is a combination of a temperature sensor that is mounted against the metal of the hot water cylinder and a wireless battery powered transceiver that communicates the water temperature to the evotouch controller.

### Wireless relay

The remote relay is wired into either a motorised zone valve or the boiler and provides the wireless interface between these devices and the **evohome** system. The relay box requires a permanent 230V~ supply.

### OpenTherm® Bridge

Allows the boiler to be modulated via this bridge between OpenTherm® capabilities built into the **evohome** controller and the OpenTherm® capable boiler. Only required when controlling an OpenTherm® capable boiler.


### Turning evohome into a connected device

Once the **evohome** WiFi system is installed and commissioned, the homeowner can register the system on the Total Connect comfort website using the MAC ID & CRC code provided and receive instructions on how to download the smartphone or tablet app that suits their Apple or Android system.


### Smartphone or tablet app

The smartphone or tablet app that enables remote control of the **evohome** system is available for download from the iTunes Store and the Google Play Store.

### Total Connect Comfort (Europe)

https://infoeu.mytotalconnectcomfort.com/gb

This is the web portal that is used to register the **evohome** device – it also has information on how to connect and register the **evohome** product (please make sure you are registering on the European version of this site and not the US version).

## **ErP** Energy Efficiency Ratings

The ErP energy efficiency ratings shown in this brochure will provide installers and end users with the information required to both complete the ErP energy label and assess the benefits of the heating controls to the overall heating system in the property. These ratings apply to room thermostats (including programmable thermostats).

# **evohome WiFi** technical data

| Technical Data – evohome Controller | |
|---|---|
| **Electrical** | |
| Input voltage | 230VAC ± 10% |
| Battery type (supplied) | Rechargeable Type AA 1.2V NiMH 2000-2400mAh |
| RF Communication | |
| RF operation band | ISM (868.0 – 870.0) MHz, RX class 2 1% Duty Cycle |
| RF communication range | 30m in a residential building environment |
| **Environmental and Standards** | |
| Operating temperature | O to 40°C |
| Storage temperature | -20 to +50°C |
| Humidity | 10 to 90% relative humidity non condensing |
| IP Protection Class | IP3O |
| **Mechanical** | |
| Dimensions | (WxHxD): 139 x 101 x 21mm |

| Technical Data – Radiator Controllers | |
|---|---|
| **Electrical – Power module** | |
| Power Supply | (Battery) 2 x AA alkaline batteries |
| Temperature Setting Range | 5ºC – 30ºC |
| Humidity | 10 to 90% relative humidity non condensing |
| **RF Communication** | |
| RF operation band | ISM (868.0 – 870.0) MHz, RX class 2 1% Duty Cycle |
| RF communication range | 30m in a residential building environment |
| **Environmental and Standards** | |
| Operating temperature | 0 to 50°C |
| IP Protection Class | IP30 |
| Standards | CE marked |
| **Mechanical** | The radiator controller fits on the most common radiator valves of the type M30x1.5. Other adaptors are available |

**For full technical details please refer to the installation instructions.**

| Technical Data – Wireless Cylinder Thermostat | |
|---|---|
| **Electrical** | |
| Power supply | Two AA size, 1.5V alkaline batteries |
| Temperature Setting Range | SPD30°C to 85°C |
| Cable Length | 1.5m between cylinder thermostat and transceiver |
| **RF Communication** | |
| RF operation band | ISM (868.0 – 870.0) MHz, RX class 2 1% Duty Cycle |
| RF communication range | 30m in a building environment |

| Technical Data – Wireless Relay | |
|---|---|
| **Electrical** | |
| Input voltage | 230VAC ± 10% |
| Switch Rating | 24V~240V~50Hz, 5A resistive, 3A inductive |
| Switch Type | SPDT relay |
| **RF Communication** | |
| RF operation band | ISM (868.0 – 870.0) MHz, RX class 2 1% Duty Cycle |
| RF communication range | 30m in a residential building environment |
| **Environmental and Standards** | |
| Humidity | 0 to 90% |
| Standards | IDIN ENISO9001/14001, CE, EN60730-1 (2001), EN55014-2(1996), ETSIEN300220-3(2000) |
| IP Protection Class | IP30 |
| **Mechanical** | |
| Dimensions | (WxHxD): 92 x 90 x 31.6mm |

| Technical Data – DT92E & Y87 | |
|---|---|
| **Electrical** | |
| Power supply | 2 x 1.5V IEC LR6 (AA) Alkaline cells (supplied) |
| Temperature setting range | 5°C to 35°C setpoint range in 0.5°C increments |
| **RF Communication** | |
| Operation band | ISM (868.0-868.6) MHz, 1% duty cycle |
| Communication Range | 30m in a residential building environment |
| **Environmental and Standards** | |
| Operating temperature | 0 to 40°C |
| IP Protection Class | IP30 |
| Standards | CE marked. WEEE & RoHS compliant |
| Thermostat | 90 x 92 x 27mm (DT92) 820mm diameter (Y87) |
| Weight | 154g (thermostat with batteries) |

# **evohome** controls

**evohome** consists of a number of quality components manufactured by the UK's leading manufacturer of home heating controls.

**Radiator controllers**

The radiator controllers use two-way communication with the **evohome** controller to ensure that commands are received and valves opened while maintaining boiler interlock.

**Under floor heating controller**

By controlling the hydronic under floor heating via the Honeywell under floor heating controller, the time and temperature of the under floor heating can be achieved via the **evohome** controller screen.

The under floor heating controller provides for up to 5 zones of under floor heating and the optional extension controls a further 3 zones. It operates on the same 868 MHz frequency as the rest of the **evohome** components and has an internal antenna.

## Attractively designed

These slim, ergonomically-designed radiator controllers will fit on most standard TRV bodies. They are battery powered with a two-year battery life and a battery low reminder visible on both the radiator controller screen and the **evohome** controller screen. The flip-up screen is backlit and can be positioned so that it can be easily viewed or folded away flat.

## Full of features

The backlit LCD screen displays the zone name, and local set point temperature. The local set point temperature can easily be overridden by turning the dial at the top of the radiator controller. Override temperatures can be set in half degree increments and are effective until the next scheduled temperature change. There is an open window feature that recognises sudden temperature drop and shuts off the local radiator.

The zone temperature changes made at either the **evohome** controller's screen or via the remote app will change in real time on the screen on the radiator controller.

## Simple to install

Radiator controllers provide the optimum solution for installers when considering installing heating zones as there are no additional zone valves required which makes installation a lot quicker and cleaner. With existing TRV bodies already in place there is no need to drain down the system and they will fit on most compact radiators.

They are easily bound into the system using the guided configuration feature in the **evohome** controller; binding confirmation is displayed on the screen. Controllers are available either individually or as a pack of 4.

## Accessories

You can also buy additional screen covers that allow the screen surround to be either grey anthracite or black. A replacement **evohome** controller table stand and a wall mounting kit are also available. Individual **evohome** WiFi screens without a power cable and table stand are available as spares.

If you wish to replace existing TRV bodies, a Honeywell valve kit (VHL120) is available.

Visit www.honeywelluk.com/products/Thermostats/Thermostatic-Radiator-Valves/ for more information

# how you can buy **evohome**

**evohome** is available from any good supplier of plumbing and heating products. It comes in a number of different packs dependent on what sort of job you need to do.

**The evohome Pack** consists of an **evohome** controller, power lead and stand plus a wireless relay box.

**The evohome Radiator Multi Zone Kit** provides 4 wireless radiator controller heads allowing you to create up to 5 zones – one head per zone plus the **evohome** controller as a temperature-sensing device in a zone. Individual radiator controllers are also available.

**The evohome Hot Water Kit** consisting of a wireless cylinder thermostat, transceiver, optional unvented cylinder insertion sensor and an additional wireless relay box for control of the hot water zone valve.

- Wireless room thermostats are also available
- Wireless under floor heating controls and an extension module are available
- OpenTherm® control capability is possible by installing the evohome OpenTherm® Bridge
- Single additional radiator controllers are available as are additional wireless relay boxes
- Replacement **evohome** controllers can be purchased
- Extra covers, a replacement table mount and a wall mounting kit are also available

From this list of options you can see that you can build up a sophisticated zoning control system that will suit most properties.

| Ordering Specification | |
|---|---|
| **Order Code** | **Item** |
| ATP921R3100 | **evohome WiFi Connected Thermostat Pack:** 1 x evohome controller with white fascia, power lead and table stand, Wireless Relay box |
| ATF500DHW | **evohome Hot Water Kit:** Wireless cylinder thermostat: transceiver, vented and unvented cylinder insertion sensor and a Wireless Relay box for control of the hot water zone valve |
| HR924UK | **evohome Radiator Multi Zone Kit:** 4 wireless thermostatic radiator controller |
| HR92UK | 1 x evohome Radiator Controller |
| BDR91T1004 | Wireless Relay |
| DTS92E1020 | DT92 Digital Room Thermostat |
| Y87RF2024 | Single Zone Thermostat |
| ATC928G3000 | 1 x evohome controller (table stand not included) |
| R8810A1018 | OpenTherm® Bridge to link evohome with OpenTherm® capable boilers |
| **Accessories** | |
| ATF800 | evohome WiFi desk stand |
| ATF600 | evohome WiFi wall mounting pack |
| ATF700 | evohome WiFi grey; graphite & black optional front covers |
| HCC80R | Underfloor heating controller |
| VHL120 | Valve body kit for radiator |
| EVA1 | Adaptor to fit Danfoss valve body (supplied as standard with HR92UK) |
| AOV30 | Adaptor to fit Oventrop valve body |
| ACH28 | Adaptor to fit Herz valve body |
| HCF82 | Remote room temperature sensor |
| HCW82 | Remote room temperature sensor / setpoint adjuster |
| AVS90 | HR92 vandal protection |
| APS90 | HR92 power supply PCB |
| AFA90 | Pack of 3 chromed caps for HR92 |
| MT4-230-NC | Standard Actuator |

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