

evohome 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 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 13amp power cable. 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 black or silver. 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

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 (not hot water systems). Boilers can be controlled by either a boiler relay or an OpenTherm® bridge. 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.

In-built optimisation features such as '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.



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.

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

These 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 silver or black, the set of covers also comes with a replacement white cover to ensure that any superficial damage to the surround can easily be replaced. You can buy a replacement **evohome** controller table stand and also obtain a wall mounting kit. Individual **evohome** components will also be available as spares.



Smartphone or tablet app

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

evohome controls









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Wireless room thermostat

Where there is a requirement to use a wireless room thermostat as a temperature sensor, Honeywell's DT92 wireless 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 button individual zone temperature override.

5 to 35°C set point range offers a wide range of comfort levels. Can be wall mounted or free standing to ensure best possible positioning.



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 transceiver that communicates water temperature to the evotouch controller.

The transceiver unit is battery powered.



Wireless relay box

The remote relay box 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.



Remote access gateway

To enable the **evohome** system to be controlled remotely by either a wifi-enabled tablet or smartphone, a remote access gateway needs to be connected to the internet network within the property.

LED lights are provided on the gateway for feedback during binding and operation. This is achieved by connecting the supplied ethernet cable into the remote access gateway and a spare ethernet port on the home broadband router.

The remote access gateway is powered by a supplied 13 amp power supply and there is one button binding of the gateway to the **evohome** system via the **evohome** controller.

Once bound, the homeowner is then able to visit the total connect website to register their **evohome** system, uniquely identify their **evohome** remote access gateway (MAC ID & CRC code) and receive instructions on how to download the smartphone or tablet app that suits their Apple or Android system.



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.

evohome 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	IP30
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	5°C – 30°C
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
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

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 Box		
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 Ratings	IP30	
Mechanical		
Dimensions	(WxHxD): 92 x 90 x 31.6mm	

Technical Data - Remote Access Gateway		
Electrical		
Input voltage	230VAC *10%	
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 48°C	
Humidity	5 to 90% relative humidity non condensing	
IP Protection Class	IP30	
Mechanical		
Dimensions	(HxWxD): 100 x 175 x 38mm	

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 Base Pack consists of an evohome controller, power lead and stand plus a wireless relay box. A zoning pack is available so that you can create additional heating zones and a Remote Access gateway to provide remote control of the heating is available separately.

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 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
- 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
ATP921G2080	evohome Base Pack: 1 x evohome controller with white fascia, power lead and table stand, Wireless Relay box plus 2 x Front Covers Silver & Black
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	The evohome Radiator Multi Zone Kit 4 wireless thermostatic radiator controller
RFG100	evohome Mobile Access Kit 1 x Remote Access Gateway and power lead
HR92UK	1 x evohome Radiator Controller
CS92	Wireless Cylinder Thermostat, Transceiver, vented and unvented sensor
BDR91	Wireless Relay Box
DTS92	Wireless Room Thermostat
ATC928G2000	1 x evohome controller
Accessories	
ATF200	evohome desk stand
ATF300	evohome wall mounting pack
ATF400	evohome optional front covers
HCC80R	Underfloor Heating Controller
EVA1	Adaptor to fit Danfoss valve body
HU01	Adaptor to fit Oventrop valve body
HU02	Adaptor to fit Herz valve body

Honeywell

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EN3H- 3162 UK01 R1013