

## Complexity made simple

Honeywell Home HCC100  
Underfloor Multi-Zone Controller



## The next generation in underfloor multi-zone controllers.

The HCC100 is a multi-zone controller for heating and cooling that can individually manage up to eight zones/rooms in a home or office. It integrates into both new and existing installations with ease, supported by the Resideo Pro app to make installations and configuration faster and simpler.

The HCC100 helps to control and balance a whole home system for efficient energy consumption, and this all-in-one solution can be fitted with either wired or wireless Honeywell Home thermostats. In combination with evohome with WiFi, the HCC100 offers even more control options.

The HCC100 receives information of room temperature and setpoint temperature from the zone thermostats. The controller then operates the actuators effectively and efficiently to heat the zones.

Instead of having multiple floor sensors there is only a need for controlling the actual supply water temperature entering the system. This will protect the floor in all zones from excessive temperatures. It saves installing floor sensors in each zone, which eliminates the chance of overshooting and runs the appliance more efficiently because of the lower supply water temperature.

With tightened energy efficiency standards aimed at reducing CO<sub>2</sub> emissions, the HCC100 is a smart choice in installations with different, renewable sources and heat and cooling devices, such as:



**HEAT PUMPS**



**CENTRAL HEATING/  
COOLING SYSTEM**



**EFFICIENT  
HEAT GENERATORS**

This all-in-one solution is suitable for virtually any household and any application:



**WIRED &  
WIRELESS**



**HEATING &  
COOLING**



**BOILERS &  
HEAT PUMPS**



**FLEXIBLE  
MULTI-ZONE**

## MAIN FEATURES

- Every home and every heating system is different, the HCC100 is compatible with several Honeywell Home products, making it applicable in virtually any installation. It adapts to the needs of your customers, both during installation and in daily use
- 20 selectable outputs for controlling thermal actuators
- Up to 8 individually controlled temperature zones with Honeywell Home thermostats, up to 6 of which can be wired
- Easy to configure via the Resideo Pro app
- LEDs on cover plate for controller status
- Quick installation with easily accessible connections
- Integrated 230V pump relay
- Bluetooth® enabled
- Built-in self-learning (adaptive and optimising) algorithm for precise zone temperature control
- The antenna module with its 2m cable provides optimal signal strength and flexible installation positions

# A WIDE RANGE OF FUNCTIONS

## ZONE CONTROL

The HCC100 controls up to 8 zones individually. These zones can be controlled via wired or wireless Honeywell Home thermostats of which 6 can be wired.

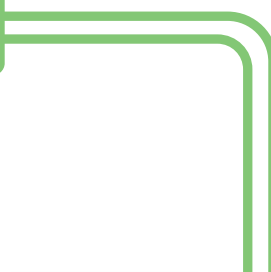
Maximum comfort in any weather. If the installation has a heat source that can also cool, such as a heat pump, then you can use the HCC100 to switch between heating and cooling per zone.



## PUMP CONTROL

An integrated pump relay ensures the pump runs only when there's a demand from one of the zones.

Thanks to the app, the pump overrun time is set to maximum efficiency. This way, the pump remains on after a heat/cool demand, so the appliance can finish its demand cycle.

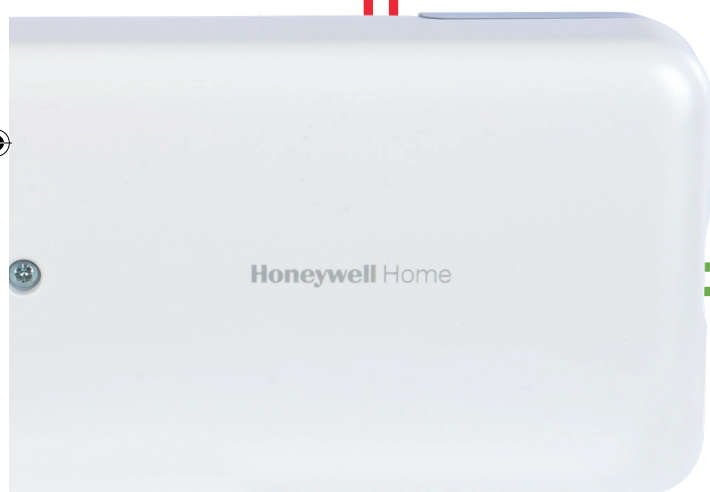


## HEATING OR COOLING MODE

As the cooling control comes as a standard integrated function, there are many ways to change the heating and cooling mode of the system, and it can be configured through the app during set-up.

## INTELLIGENT THERMAL ACTUATOR OUTPUT CONTROL

The temperature of zones is intelligently controlled via opening and closing of the thermal actuators, which creates a hydronic balancing effect resulting in a longer constant flow to improve efficiency.



## AUTO-DETECT FUNCTION

During power-up, the controller automatically checks the wired zone thermostat inputs, sensor inputs, thermal actuator outputs, OpenTherm® input and Link connection. This will be shown on the app at the start of the configuration and can be used to check if the wiring is correct.

## APPLIANCE CONTROL

The self-learning (fuzzy logic) control algorithm converts the individual zone demands into a single heat or cool demand for the appliance. The appliance type can be configured via the app, which automatically adjusts the parameters for optimal control. The appliance can be controlled via an OpenTherm® communication output or on/off with a separate heating and cooling relay contact.

Outdoor temperature compensation can also be enabled, when outdoor and supply water temperature sensors are connected to the controller. The sensor information can also come directly from a connected OpenTherm® appliance.

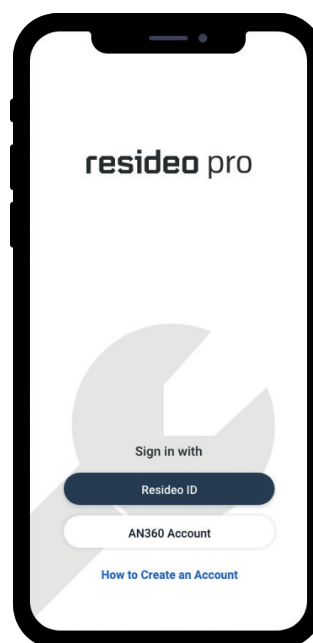


## EASY CONFIGURATION THROUGH THE RESIDEO PRO APP

Installers can set up the HCC100 quickly and easily via the Resideo Pro app. This app guides you step-by-step through configuration and commissioning, and is connected to the HCC100 via Bluetooth®.

The Resideo Pro app configuration menu guides you through the application settings, control, and zone control. The system test menu enables you to test signal strength and you also have the option to individually control the different outputs. This enables you to quickly and easily go through a fully tested complete installation.

The Resideo Pro app is exclusively for installers and is available for both iOS and Android.



# SUITABLE FOR ALMOST ANY INSTALLATION AND APPLICATION

The HCC100 is compatible with several Honeywell Home products, making it applicable in virtually any installation for residential homes and offices, from luxury studios and single-family homes to doctor's offices and small offices, to give you and your customers full comfort control.



T3M

T4M

DT4M



DT4R

## Wired OpenTherm® thermostats

The HCC100 offers the ability to connect up to 6 wired Honeywell Home OpenTherm® thermostats to be connected, including the T3M, T4M and DT4M.

## Wireless thermostats

The HCC100 offers the possibility of connecting up to 8 wireless Honeywell Home thermostats including the DT4R with two-way RF communication on 868MHz and range of 30m in residential buildings.



## evohome

evohome is a smart zone control system that supports up to 12 zones in the home, all from one place. Customers can easily control individual comfort zones for appliances, radiators and underfloor heating, either locally or remotely via the Total Connect app.

The HCC100 connects to the evohome via the Resideo Pro app, to control up to 8 zones from a central control panel and extend up to 12 zones with additional HCC100 or radiator thermostats.



R8810



BDR91T

## Appliance control

The HCC100 has integrated wired outputs for OpenTherm® and on/off control of the heat and cold generator. In addition, the HCC100 offers the possibility for wireless control, both via OpenTherm® and on/off. The HCC100 controls the heat and cold appliance depending on the heat or cold demand from one or more zones. Appliances the HCC100 can work with are:

- Boiler or zone valve
- Heat pump (hybrid system)
- District heating
- Pellet stoves

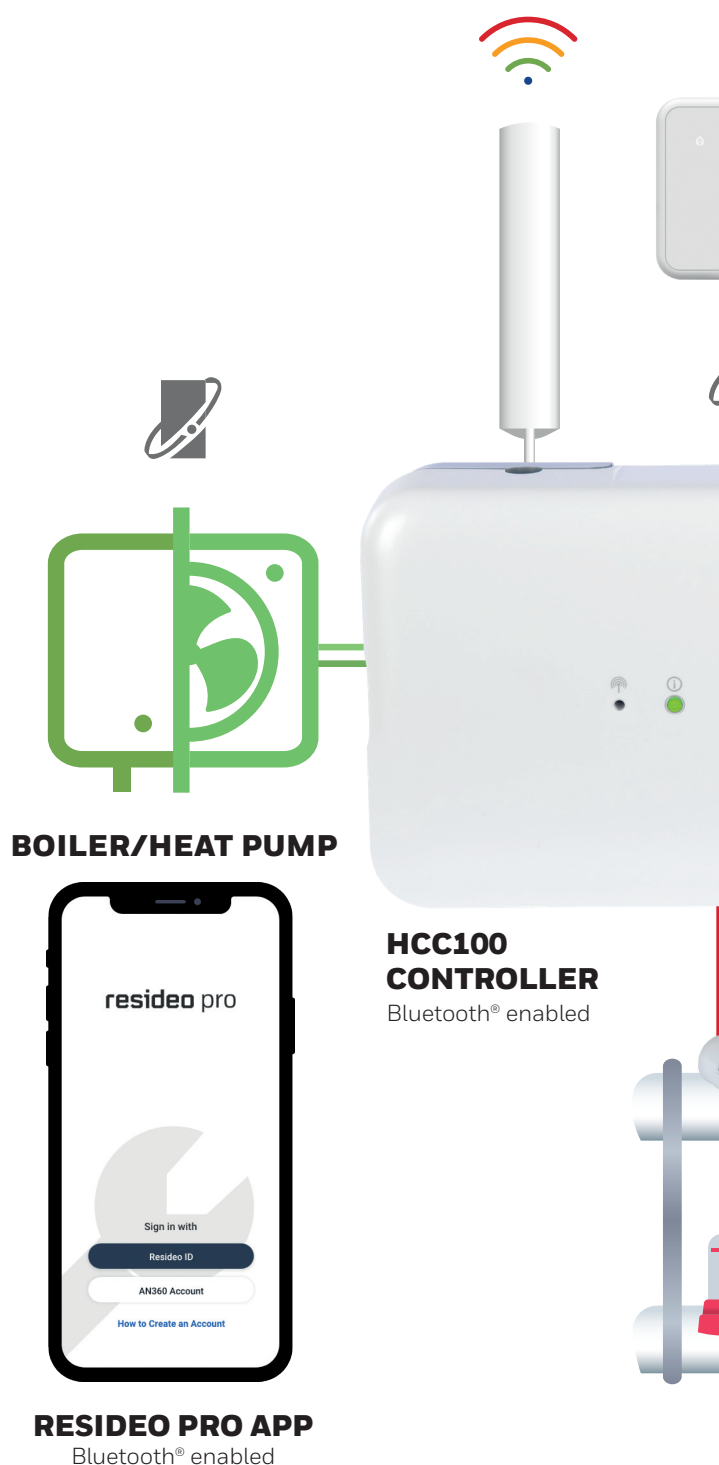


## Thermal actuators

The MT4-HCC thermal motors provide optimum control performance in combination with the HCC100. The MT4 has been extensively tested and can be applied in almost all manifolds.

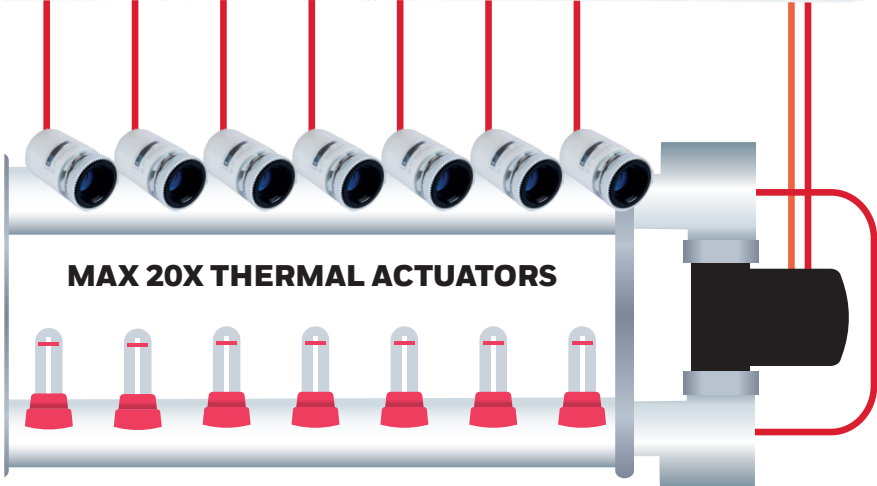
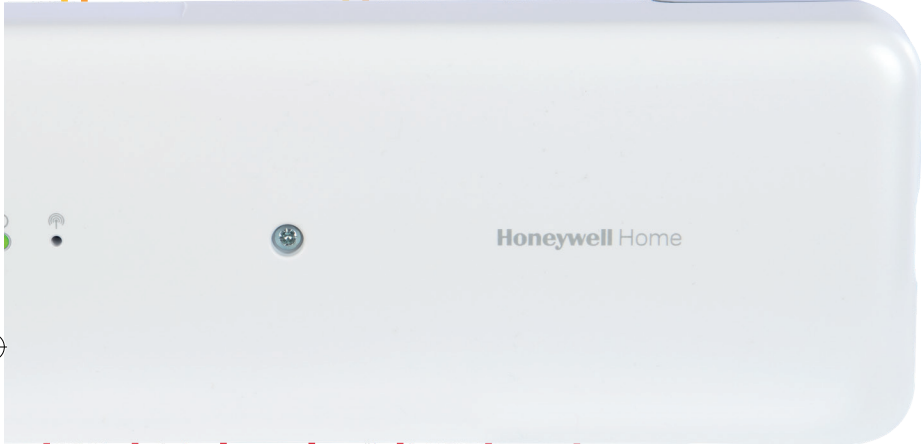
# SYSTEM OVERVIEW

Controls up to 8 zones, of which 6 can be wired
Up to 20 wired MT4 actuators (free configurable)
Heating and/or cooling control
External or internal H/C change-over
OpenTherm® appliance output
Heat and cool demand relay outputs
Condensation protection (input)
Self-learning algorithm (fuzzy logic)
Optimised zone demand heat pump control
Outdoor compensation function (on/off)
Heat/cool dump zone(s) configurable
Heat only zone(s) selection (no cooling)
Cascade option possible (wired and RF) <ul style="list-style-type: none"> <li>- Integrated radio module</li> <li>- 2m antenna for optimal RF communication</li> <li>- RF communication</li> </ul>
Bluetooth® link
Optional connection with evohome
Easy set-up with Resideo Pro app, compatible with iOS and Android





CONTROLS UP TO 8 ZONES, OF WHICH 6 CAN BE WIRED

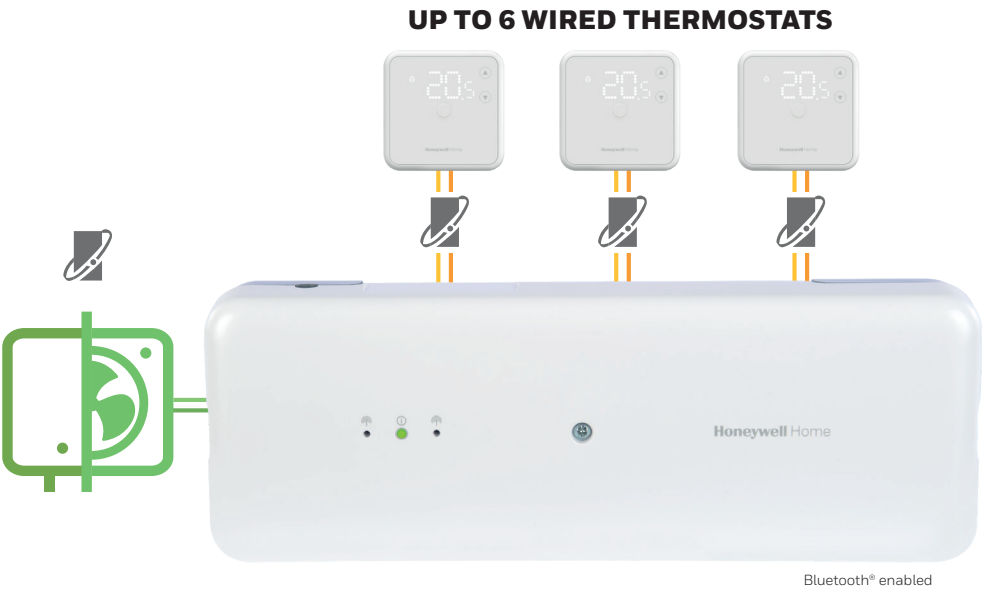


EVOHOME

# APPLICATIONS

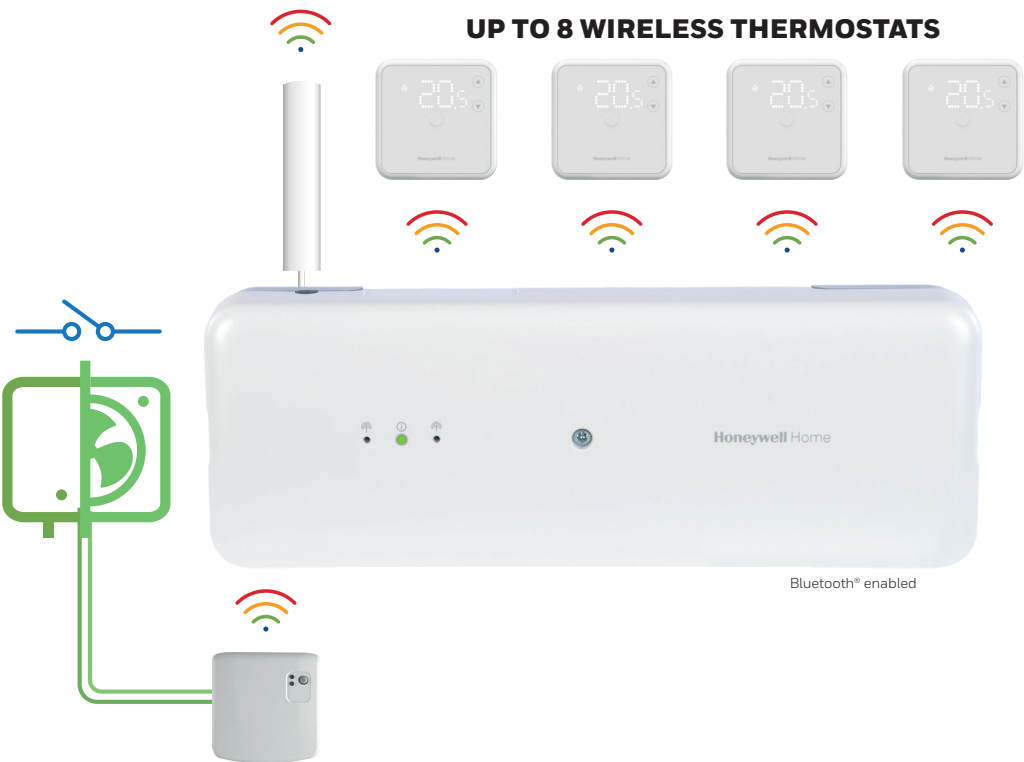
## WIRED

A cost-effective solution for those who prefer wired thermostats or need to replace an existing system. The HCC100 controller supports up to 6 wired zones and the room thermostat makes it even easier to use.



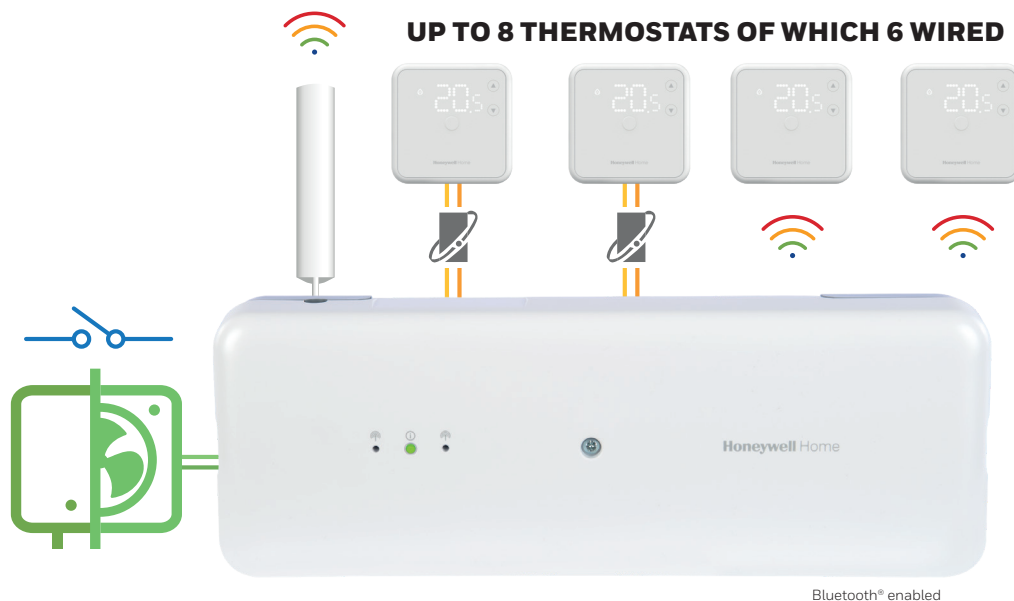
## WIRELESS

A wireless option is available for those who want to avoid complicated wiring. The HCC100 supports up to 8 wireless temperature zones. Configuration is fast and intuitive by simply selecting the preferred wireless thermostat through the Resideo Pro app.



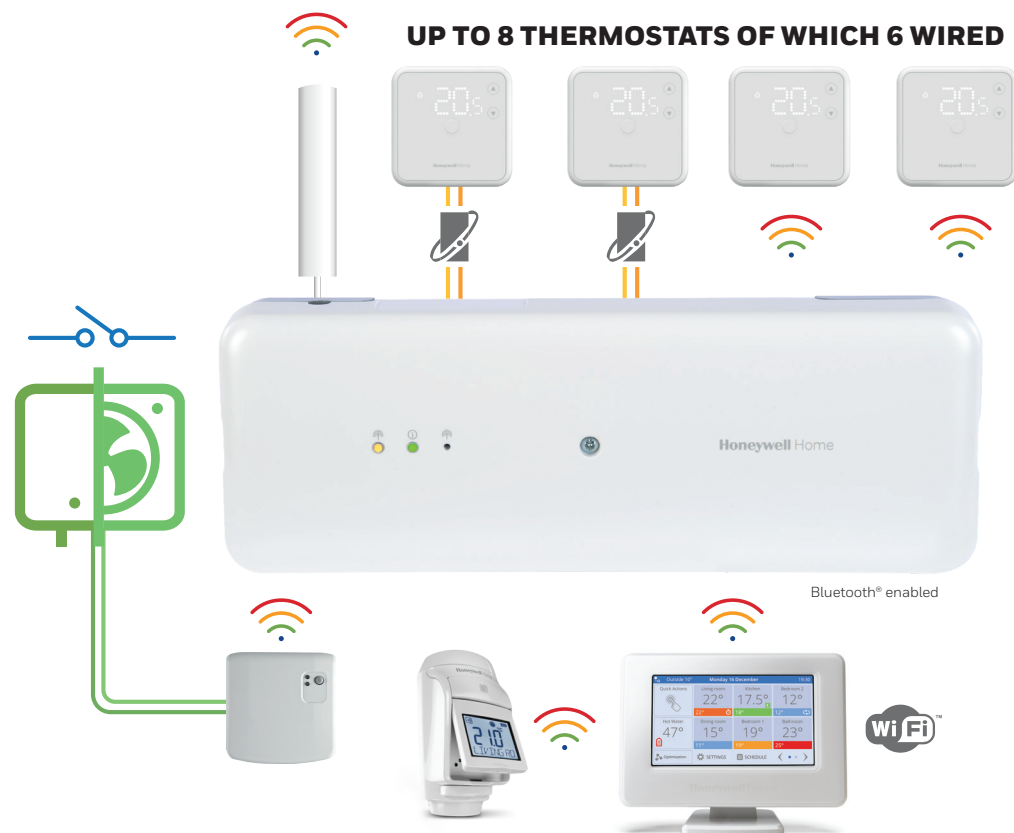
## HYBRID

A combination of wired and wireless adds flexibility to the system. The room thermostat will cover both needs, without compromising on quality or benefits.



## EVOHOME

evohome gives control of all rooms through one device, with touchscreen and remote control via the app. Its smart features provide perfect comfort, while reducing energy consumption.



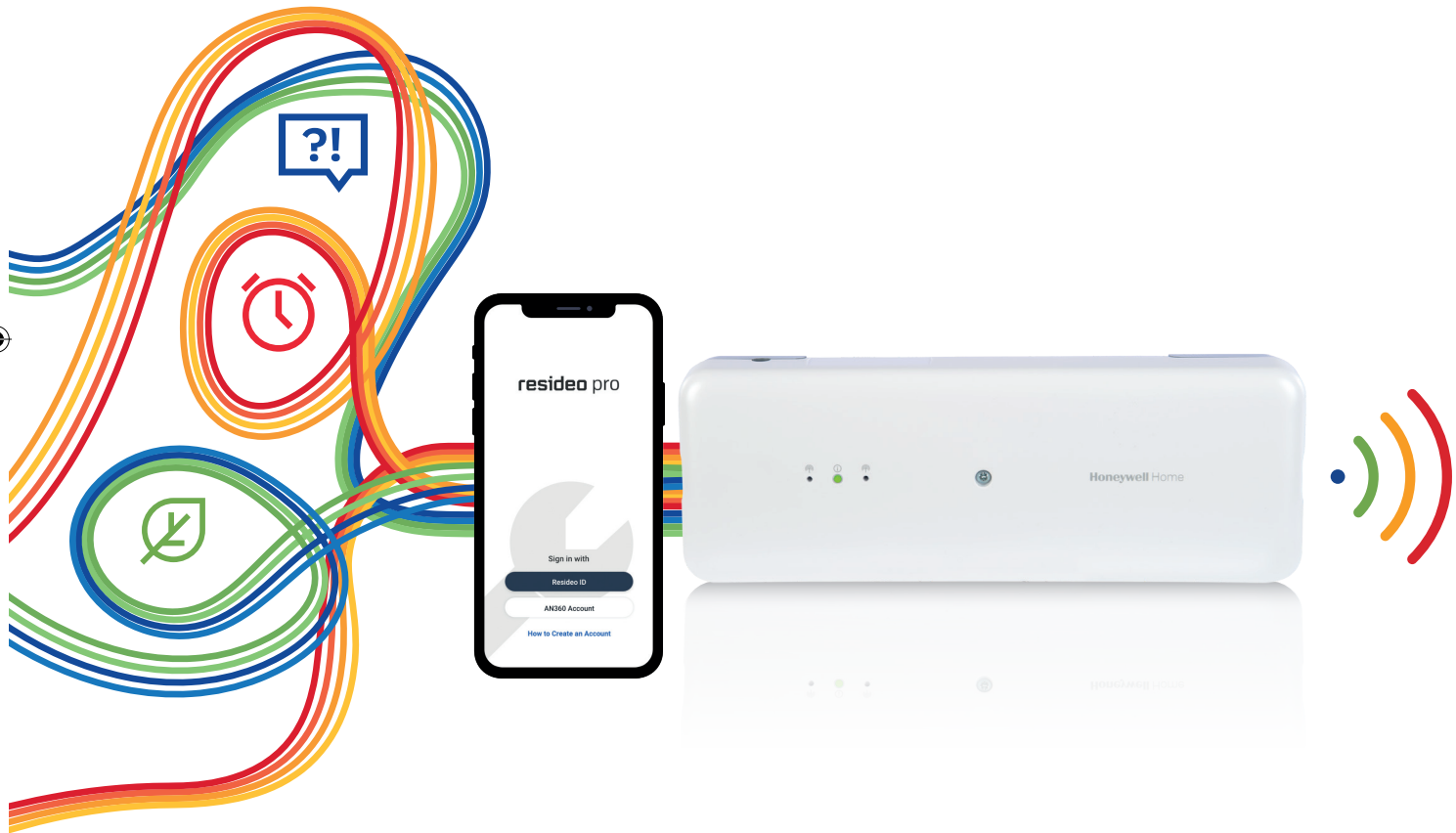
## The HCC100 introduces a new generation of multi-zone controllers that puts control in the hands of the installer.

The HCC100 is simple to install and easy to maintain.

We offer a full range of support, from helpful online hints and tips, to e-learning modules to full training courses. Update your skills and join the smart revolution.

Designed and manufactured in Europe, bringing together 130 years of engineering heritage, with the latest smart technology.

To learn more about the HCC100 Underfloor Multi-Zone Controller, visit **resideo.com**



# resideo

**For more information**  
resideo.com

200 Berkshire Place  
Winnersh Triangle  
Berkshire RG41 5RD

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