

# NETATMO

BY  
**S+ARCK**®

smart radiator valves



TRAINING BOOK



**IFTTT**

## 3 reasons to sell Smart Radiator Valves



Heating costs account for approximately **a third of overall household expenses.**



**1 in 3 people** would like to be able to control their heating remotely.\*



Many people would like to have the option of programming **varying temperatures for different rooms** in their home.

## 5 benefits for your customers



### Save 37% on energy consumption\*

A schedule adapted to the family's routine, to heat each room at the right temperature and at the right time.

**Open Window Detection:** effectively avoids energy waste.

Estimate savings: [www.netatmo.com/economy](http://www.netatmo.com/economy)



### Control the heating remotely

Using a smartphone, tablet or computer.  
Control all the radiators with a single smartphone App.  
Heating can be scheduled to ensure that householders return from holiday to a warm home.



### Benefit from room-by-room comfort

**Smart Regulation:** the Smart Radiator Valves analyse the room environment in real time and adjust heating according to sunshine level and room use.

**Manual Boost:** temporarily raise the temperature in a specific room.

### Install the Valves in less than 10 minutes

Easy replacement of current thermostatic valves.

No specific knowledge required.

No need to turn off the heating, the Valves can be installed even during wintertime.



Check the current radiator compatibility: [check.netatmo.com](http://check.netatmo.com)

### Enjoy a unique design

The Netatmo Smart Radiator Valves have been designed by Philippe Starck.

Valves can be personalised with 1 of 4 available colours, to match the home.



## 37% less energy to heat the home

Thanks to a combination of 3 features:



### TAILORED SCHEDULE

for individual rooms  
based on your lifestyle



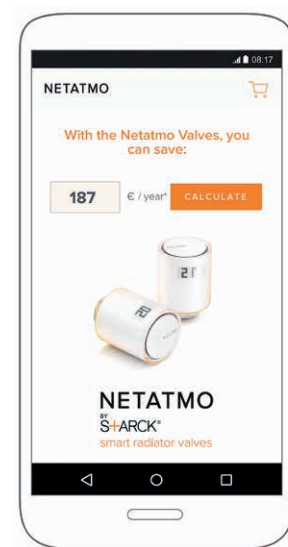
### REMOTE CONTROL

using your smartphone



### OPEN WINDOW DETECTION and SMART REGULATION

## Estimate savings on energy bills



187€\*  
average  
savings

Savings estimation depends  
on the home's characteristics  
(type of heating, floor space of the residence...)

Calculate potential savings:

[www.netatmo.com/economy](http://www.netatmo.com/economy)

# Advantages of using Netatmo Valves

## 100% smart

### Open Window Detection:

When the Smart Radiator Valves detect a window is open, they temporarily switch off the heating in the room to prevent energy waste.

### Smart Regulation:

The Smart Radiator Valves analyse the room environment in real time and adjust heating according to sunshine levels and room use.

### Manual Boost:

The temperature of an individual room can be temporarily raised as required.

## 100% accurate

The Valves regulate room temperature without the need for additional sensors thanks to:

- two built-in sensors that continuously monitor room temperature,
- a stepper motor which precisely regulates the hot water flow,
- PID (advanced algorithm) for precise temperature regulation.

## 100% voice control

Voice control of the Smart Radiator Valves is straightforward with Siri on iPhone and iPad, or Alexa on Amazon Echo devices.



## 100% peace of mind

The Valves are compatible with 90% of hot water radiators.

6 adaptors are included in the pack to suit most hot water radiators such as Danfoss, Heimeir, Honeywell and more.

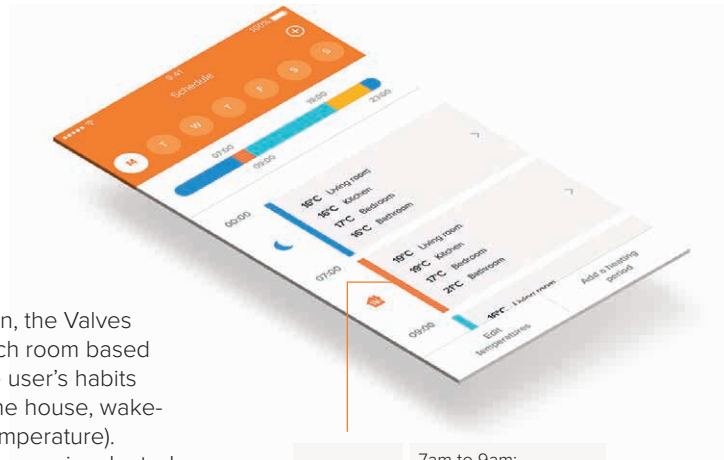
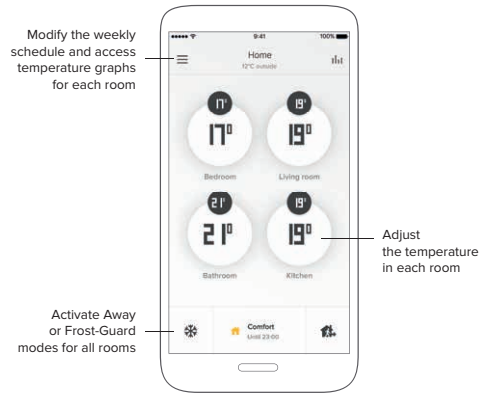
The Valves can be positioned on radiators either vertically or horizontally.

## 100% suitable for every type of home

Netatmo Smart Valves work just as well in houses with individual heating already equipped with a Netatmo Thermostat, as in flats that have collective heating.


# Extremely user friendly

Heating can be regulated both remotely using the Netatmo App and manually.



## Automatic scheduling

In the set-up configuration, the Valves create a schedule for each room based on 5 questions about the user's habits (e.g. hours when out of the house, wake-up time, ideal ambient temperature). The temperature of each room is adapted depending on how and when it is used.

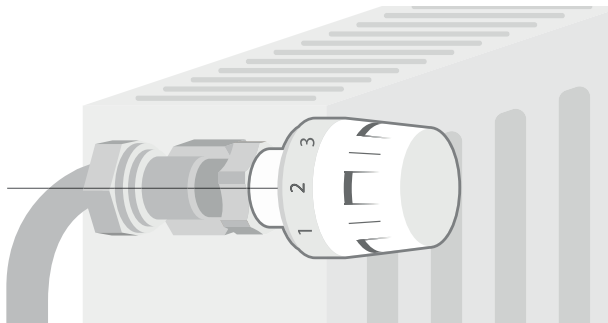
 <b>COMFORT MODE</b>	7am to 9am:	
	Living room	19°C
	Kitchen	19°C
	Bedroom	17°C
	Bathroom	21°C

## Easily replace current radiator valves

### How to replace a thermostatic valve:

- 1/ Unscrew the current thermostatic radiator valve,
- 2/ Screw on the new Netatmo Smart Radiator Valve.

Thermostatic valves have numbered graduation marks (usually from 1 to 5).

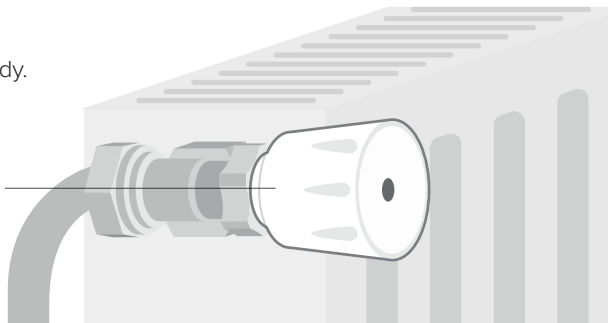


Check the compatibility online:  
<http://check.netatmo.com>

### How to replace a manual valve:

- To replace a manual valve, contact a professional to:
- 1/ Drain the radiator,
  - 2/ Change the radiator valve body.

Manual radiator valves simply switch the heating on or off and do not have numbered graduation marks.



Check the compatibility online:  
<http://check.netatmo.com>

## A solution for every home



### FOR INDIVIDUAL BOILER OR HEAT PUMP

For more details on this configuration, please see **pages 16 – 21.**



Netatmo  
Smart Thermostat



Netatmo Additional  
Smart Radiator Valves



### FOR COLLECTIVE OR DISTRICT HEATING

For more details on this configuration, please see **pages 22 – 27.**



Netatmo  
Smart Radiator Valves  
Starter Pack



Netatmo Additional  
Smart Radiator Valves





## Requirements

The Netatmo Smart Radiator Valves are suitable for houses or flats with individual boilers, provided the boiler is controlled by a Netatmo Smart Thermostat.



A private  
Wi-Fi network

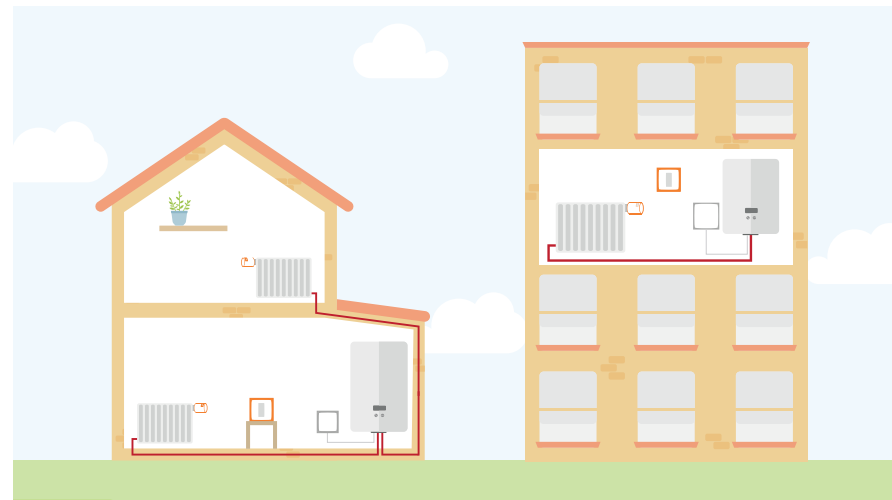


A Netatmo  
Smart Thermostat



A compatible  
system

Check the compatibility online:  
<http://check.netatmo.com>



House with individual boiler

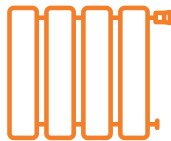
Flat with individual boiler



## How it works

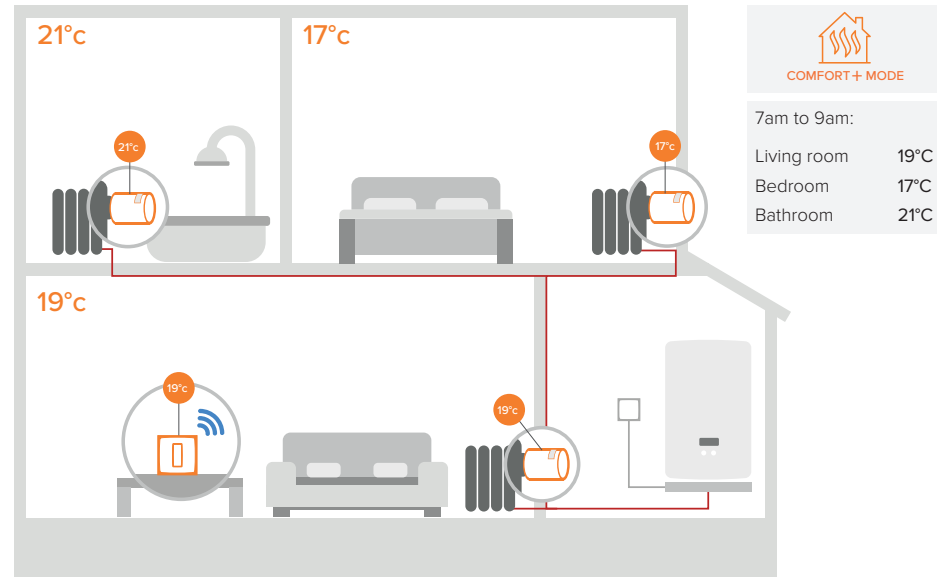


Netatmo Smart Thermostat controls the boiler.



Netatmo Smart Radiator Valves control the radiators.

The Thermostat's and Valves' heating schedules are synchronized.





## Installation

Once a Netatmo Thermostat has been installed, Additional Valves can be added at any time.

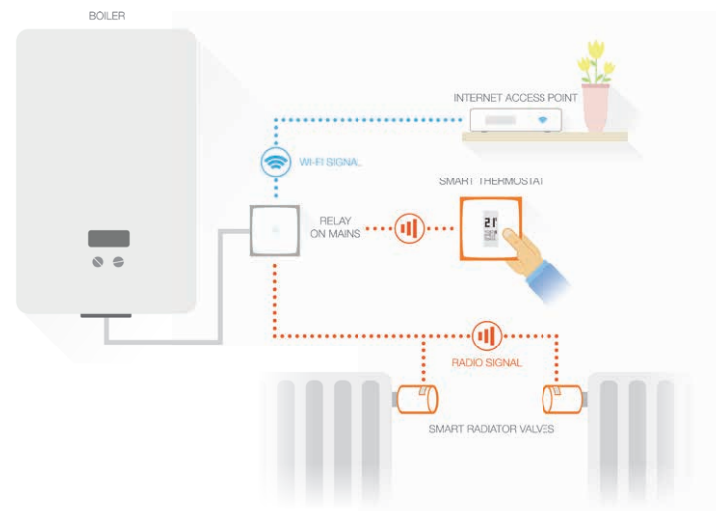
**For more details about how to install a Netatmo Thermostat, please refer to the Thermostat training book.**

The Thermostat's Relay connects Additional Smart Radiator Valves to the house's Wi-Fi network.

### Installing the Valves

1. Open the Netatmo Energy App on the user's smartphone. Select "Install a new product" in the App menu. Follow instructions in the App.
2. Insert the batteries into the Valves. The Valves connect to the Netatmo Thermostat's Relay using a radio frequency.
3. Unscrew the existing thermostatic valves\* and replace them with the Netatmo Valves. It's now ready!

\*If the existing valves are manual, it is advised that Smart Radiator Valves be installed by a professional.



Check the "how to" installation videos online: [www.netatmo.com](http://www.netatmo.com)



## Requirements

Netatmo Smart Radiator Valves are suitable for flats with collective or district heating.

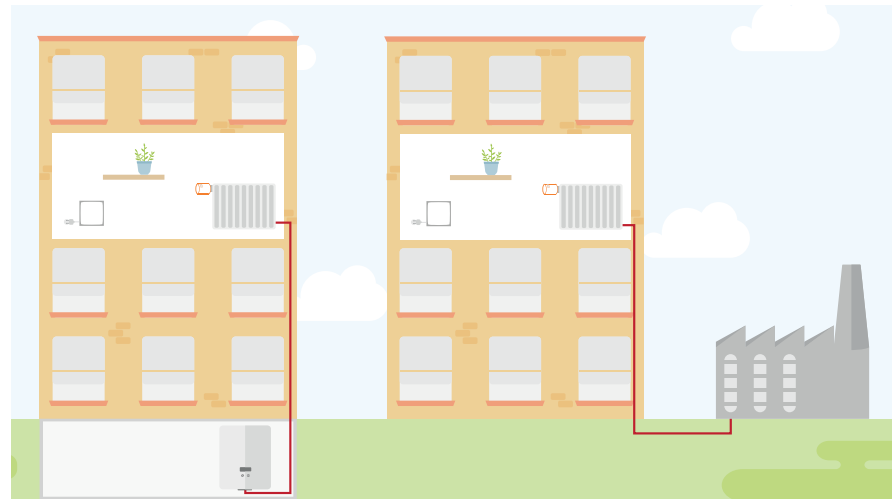


A private  
Wi-Fi network



A compatible  
system

Check the compatibility online:  
<http://check.netatmo.com>



### Flat with collective heating

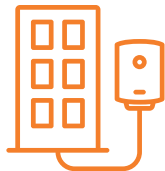
Collective heating is when one boiler produces heat for all the flats in a building.

### Flat with district heating

District heating refers to a centralised heating plant that produces heat for several buildings or an entire neighbourhood.



## How it Works

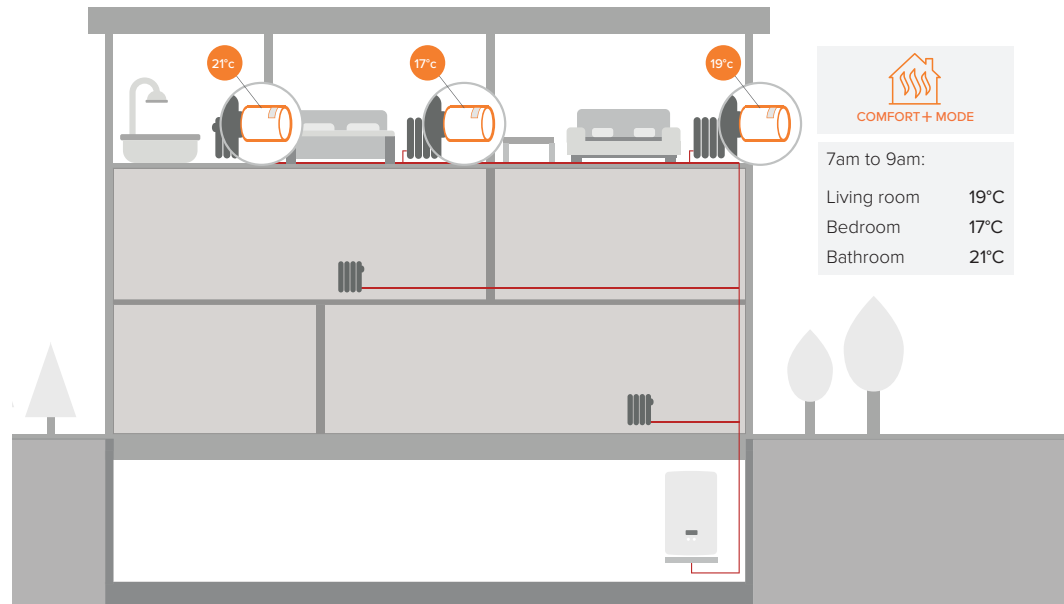


District or collective heating systems supply heating to individual homes.



Netatmo Smart Radiator Valves control the radiators.

The district or collective heating system needs to be turned ON for the radiators to work and heat each room.





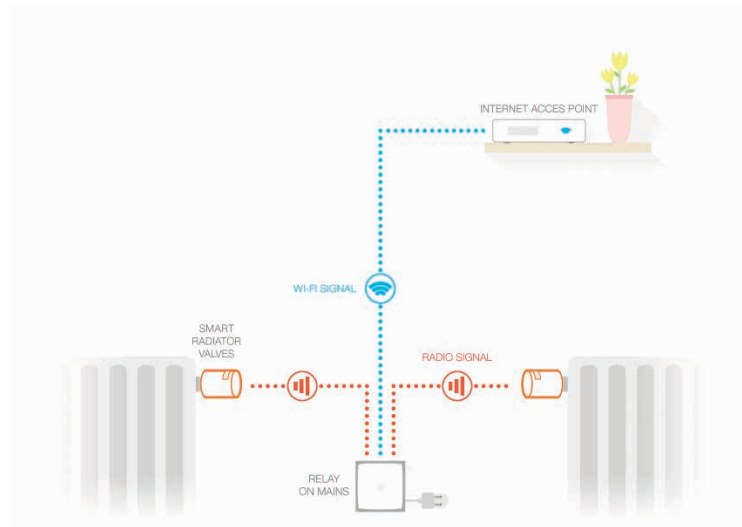
# Installation



## Installing the Valves

1. Download the Netatmo Energy App on the user's smartphone.  
Select 'Install a new product' in the App menu. Follow instructions in the App.
2. The Relay, included in the Starter Pack, must first be plugged into a mains socket.  
The Relay will connect the Valves to the house's Wi-Fi.
3. Insert the batteries into each Valve. The Valves connect to the Netatmo Relay (included in the Netatmo Starter Pack) using a radio frequency.
4. Unscrew the existing thermostatic valves\* and replace them with the Netatmo Valves.  
It's now ready!

\*If the existing valves are manual, it is advised that Smart Radiator Valves be installed by a professional.



Check the "how to" installation videos online: [www.netatmo.com](http://www.netatmo.com)

# FAQ Netatmo Smart Radiator Valves

## Product

- What are the the three packs in the Netatmo Energy range?

Netatmo sells 3 packs :

1. The Smart Thermostat pack, which contains:
  - 1 Smart Thermostat
  - 1 Netatmo Relay
2. The Smart Radiator Valves Starter Pack, which contains:
  - 2 Netatmo Smart Radiator Valves
  - 1 Netatmo Relay
  - 2 x 6 radiator adaptors compatible with 90% of hot water radiators and many brands including Danfoss, Giacomini, Honeywell etc.
3. The Additional Smart Radiator Valve pack, which contains:
  - 1 Netatmo Smart Radiator Valve
  - 1 x 6 adaptors for radiators compatible with 90% of hot water radiators and many brands including Danfoss, Giacomini, Honeywell etc.

In order to be compatible with most brands of radiators, Netatmo sells 4 types of Valve adaptors (10 adaptors per pack):

- Danfoss RAV adaptor pack
- M28x1 adaptor pack
- Vaillant adaptor pack
- Pettinaroli adaptor pack

- How to choose the best solution for my home?

1. If your home has its own individual heating system, you need:

- the Netatmo Smart Thermostat pack
- Additional Smart Radiator Valve packs, depending on the number of radiators you wish equip.

2. If your home is part of a collective heating system, or is connected to a district heating system, you need:

- The Smart Radiator Valves Starter Pack
- Additional Smart Radiator Valve packs, depending on the number of radiators you wish to equip.

- How many Additional Smart Radiator Valves can I add?

1. If your home has its own individual heating system:

You can connect up to 20 Additional Smart Radiator Valves to a Homekit version of the Netatmo Thermostat, and up to 5 Additional Smart Radiator Valves to a non-Homekit version of the Netatmo Thermostat.

2. If your home is part of a collective heating system, or is connected to a district heating system:

You can supplement your Starter Pack with a maximum of 18 Additional Smart Radiator Valves, sold separately.

# Operation

- **How does the Smart Valve measure a room's temperature?**

The Smart Radiator Valve uses two built-in sensors to measure a room's temperature.

- **How does the Smart Valve control the radiator?**

The Smart Radiator Valve compares the actual temperature in the room to the setpoint temperature, regulating the hot water flow in the radiator to control the temperature.

- **Several radiators in the same room?**

If there are several radiators in the same room, you need to fit each one with a Smart Radiator Valve. All the Smart Radiator Valves in the room will synchronise to guarantee that the room maintains the same ambient temperature throughout.

- **Can the Valves in one room register different temperatures?**

No, the Smart Radiator Valves in each room communicate with each other to calculate the average temperature of the room, which is the temperature that is displayed.

- **Which functionalities are available thanks to Apple HomeKit?**

Compatibility with Apple HomeKit means:

- voice-controlled heating is enabled using Siri on an iPhone, iPad or Mac,
- Smart Radiator Valves can be accessed using Apple's Home App,
- Smart Radiator Valves can be accessed directly from the control centre on an iPhone or iPad.

- **Battery requirements?**

The Smart Radiator Valve works with 2 AA batteries (supplied). Estimated battery life is 2 years.

- **Can I integrate the Smart Radiator Valves into my pre-existing home automation system ?**

Yes! The Netatmo system allows you to connect the Smart Radiator Valves to your home automation system. It is also possible to connect the Smart Radiator Valves to other 'smart' objects using IFTTT, via HomeKit on iOS and Amazon Alexa on Amazon Echo devices.

For more details go to [dev.netatmo.com](http://dev.netatmo.com)



# Remote control

- **How does the remote control function?**

Smart Radiator Valves communicate using a radio frequency with the Netatmo Relay (included in the Smart Thermostat pack or in the Smart Radiator Valve Starter Pack). The Relay secures the Wi-Fi connection to the wireless internet router and allows you to control the Netatmo system from the Netatmo App.

- **What methods of communication does the system use?**

Smart Radiator Valves use a radio frequency of 868 MHz to communicate with the Relay. The Relay uses Wi-Fi to communicate with the wireless internet router.

- **Maximum distance between Relay and Valve?**

Up to 100 metres. We suggest that you situate the Relay somewhere central inside your home.

- **Do the Valves continue to work if the Wi-Fi stops working?**

If the Wi-Fi connexion is down, the Smart Radiator Valves continue to heat rooms to scheduled temperatures. The heating can also be controlled manually, by directly turning the Smart Radiator Valves.

- **Are the Thermostat and Valves controlled by the same App?**

Yes, the Netatmo Energy App controls both the Smart Thermostat and the Smart Radiator Valves.

- **Can I schedule the Away and Frost-Guard modes for all my Valves?**

Yes. You can activate the Away and Frost-Guard modes on all your Smart Radiator Valves with the tap of a button.

When either of these modes is activated, all the Smart Radiator Valves are regulated to the scheduled temperature for Away or Frost-Guard mode (default: 12°C for Away mode and 7°C for Frost-Guard mode).

# Radiator compatibility

- Can the Netatmo Smart Radiator Valves be installed onto any radiator?

The Smart Radiator Valves are compatible with 90% of hot water radiators in Europe. Compatibility depends on what kind of body the radiator valve has. 6 types of adaptor are included in Smart Radiator Valve packs (6 adaptors per Valve):

- |                |                  |
|----------------|------------------|
| - Danfoss RA   | - M30 x 1        |
| - Danfoss RAVL | - M28 x 1,5      |
| - M30 x 1,5    | - Giacomini (GI) |

4 additional types of adaptor are available separately from the online Netatmo eshop (10 adaptors per pack):

- |               |               |
|---------------|---------------|
| - Danfoss RAV | - Vaillant    |
| - M28 x 1     | - Pettinaroli |

- What happens if I purchase a pack of Smart Radiator Valves and it turns out that my radiators aren't compatible?

To replace manual valves, contact a professional who will be able to replace the bodies of your current valves with compatible valve bodies.

- In what circumstances should I contact a professional to install the Smart Radiator Valves?

If your current radiators have manual valves you will need to change the bodies of the valves and empty the radiators before installing the Netatmo Smart Radiator Valves. To replace manual valves, contact a professional. Check your current valves on [check.netatmo.com](https://check.netatmo.com)



## Individual heating system

- **37% energy savings?**

In homes with individual heating systems (boiler or heat pump) installing the Netatmo Smart Thermostat leads to an average energy saving of 37%. This figure represents the average energy saving of Europeans with a Netatmo Smart Thermostat during winter 2014-2015 (between November 2014 and March 2015).

Users can make further energy savings by using Smart Radiator Valves with their Smart Thermostat to regulate each radiator individually.

- **How does programming the Valves work with the Thermostat schedule?**

If you already own a Netatmo Smart Thermostat, you already have a schedule that fits your lifestyle. The Smart Radiator Valves are integrated into this schedule and regulated according to how and when each room is used.

- **Can I raise the temperature in one room when the Thermostat has already reached its setpoint temperature?**

You can use the Manual Boost function on the App or just adjust the Valve manually to temporarily increase room temperature. The Manual Boost function forces the boiler to switch on, and overrides the Thermostat's schedule.

- **Can I use HomeKit with my Additional Valves if my Thermostat isn't compatible with HomeKit?**

No, your Smart Thermostat must be compatible with HomeKit in order for you to be able to use HomeKit with Additional Smart Radiator Valves.

- **Can I schedule a higher temperature in one room than the temperature that the Thermostat is set to?**

Yes, thanks to the Auto-Balance function. This function allows each room in the house to be heated to a specific temperature. For example, the bathroom is at 21°C while the living room has a Thermostat set to 19°C.

To use this function, you need to have Smart Radiator Valves installed in the room where your Netatmo Smart Thermostat is installed, for example in the living room.

The Smart Radiator Valves in the living room will then privilege the flow of hot water to those rooms where a higher temperature is required.

- **Is it necessary to install Valves in the room where the Thermostat is located?**

No, but we do recommend that you equip all your radiators with Smart Valves, including those in the room where the Thermostat is located, in order to ensure that all the other rooms in the house are heated to the temperatures that you require, using the Auto-Balance function.



- **What happens if there is no Valve in the room where the Thermostat is located?**

If there is no valve in the room where the Thermostat is located:

- your Thermostat will regulate the room in question,
- but you can't use the Auto-Balance function,
- and additionally, when the Manual Boost function is activated, the room with the thermostat will still continue to be heated even when the required temperature has been reached.

- **What happens if I don't install Smart Radiator Valves in every room?**

The rooms where no Smart Radiator Valve has been installed will heat up when the heating (whether a boiler or a heat pump) is on.

- **What happens if my Thermostat is situated in a room without a radiator?**

The Thermostat will not be able to regulate the temperature in the house, because there are no radiators in the room. We recommend that you install your Thermostat in a room that is representative of your daily routine, and which can be heated correctly by your radiators, for example the living room.



- **Can I buy a Starter Pack to work with my pre-existing Netatmo Thermostat?**

No, the Thermostat's Relay would be in conflict with the Starter Pack's Relay. If you already own a Netatmo Thermostat you need to buy one or several packs of Additional Smart Radiator Valves.

- **Why can't I use another brand of thermostat with Netatmo Smart Radiator Valves?**

The Thermostat regulates the boiler and the Valves regulate the radiator.

The two schedules need to be synchronised to guarantee that all the rooms are heated to the right temperature at specified times.

- **Can I use the Relay from the Starter Pack to replace the one from the Thermostat?**

No, the Relay from the Starter Pack can't be used to replace the Thermostat's Relay, because it can't regulate the boiler. If you already have a Smart Thermostat, you can buy Additional Smart Radiator Valves to be used with your Thermostat.

- **What is a free flowing radiator? Do I need to install a Smart Valve on this type of radiator?**

A free-flowing radiator is a radiator that must always be open to allow hot water to flow through it. These kinds of radiator tend to be installed in living rooms or hallways. They should not be regulated so as not to damage the heating system.



## Collective or district heating systems

- **When should I buy a Starter Pack?**

The Starter Pack is suitable for all homes without a central thermostat, which are heated with collective heating (a boiler shared with other private apartments) or district heating systems (a heating network supplied by geothermic or cogenerated heat). You can have up to 20 valves per installation.

- **37% energy savings?**

In homes with collective or district heating systems, the Netatmo solution allows residents to make energy savings of 37% on average.

This figure is taken from a study undertaken in 2016 by the CentraleSupélec Engineering School, modelled on a standard European-style apartment with hot water radiators, where all radiators are equipped with Netatmo Smart Radiator Valves.

- **Do Netatmo Valves conform to the regulations for calculating the heating costs in individual homes?**

Netatmo Valves do conform to European regulations regarding the calculation of individual heating costs. Buildings under shared ownership (condominiums) have to calculate heating costs according to the actual energy consumption of each private apartment. To do this, each home must be equipped with heat cost allocators or heating meters and must be able to regulate their heating efficiently with thermostatic valves such as the Netatmo Valves.

- **What happens if I don't install Smart Radiator Valves in every room?**

In homes with collective or district heating systems, rooms that aren't equipped with Smart Radiator Valves are heated as and when there is hot water in the radiators.

## Other F.A.Q.s

- Any after-sales problems?

If you have any problems, go to the Support area on [www.netatmo.com](http://www.netatmo.com)

- What does Netatmo do?

Netatmo makes and sells smart objects for the home.

The company sells its products in 170 countries.

# NETATMO

BY  
S+ARCK®

## Select the right solution for the home

for individual  
boiler or heat pump



Smart Thermostat

+



Netatmo Additional  
Smart Radiator Valve

for collective  
or district heating



Smart Radiator Valves  
Starter Pack

+



Netatmo Additional  
Smart Radiator Valve

## DOWNLOAD THE APP



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