

Remote access on
your smartphone



■ vSMART

The good feeling of doing the right thing.

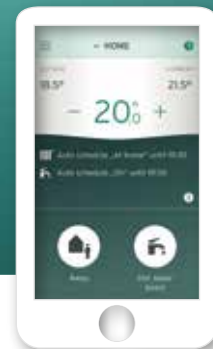
Because  **Vaillant** thinks ahead.



Remote access on
your smartphone



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User access-sharing and multi-home control



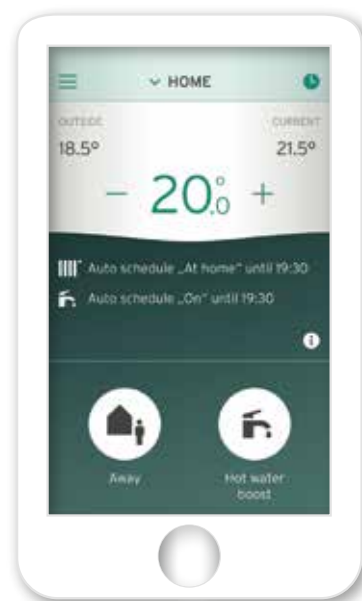
You and your family can manage several heating devices at different locations

The access to vSMART can be shared on several smartphones; it means that all family members can control the heating system. One app can also manage several vSMART thermostats installed in different houses (main and secondary residences).

Connected control

Remote access on your smartphone

As vSMART is connected to your box via Wi-Fi, you can manage your heating system from anywhere using your smartphone. vSMART can receive data from the Web for enhanced functions and firmware updates.



Dedicated smartphone app

And as well as user-friendly and heating-oriented app

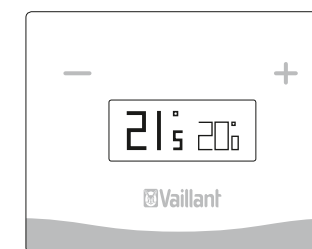
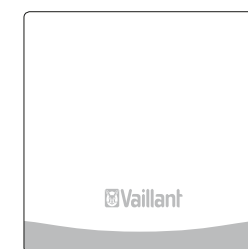
The smartphone app has been developed internally to make the end user confident and immediately ready to set their comfort requirements. The app is available from Google Play and App Store.



eBus control

vSMART and Vaillant boilers use the same communication protocol

vSMART is compatible with all our eBus boilers so it supports modulating heating, enhanced functions such as anticipation or automatic heating curve and permits a unique end user experience with time programs and consumption monitoring, for instance.





E Ink display

High readability and low energy consumption

The black-and-white display using the proven E Ink technology offers an outstanding contrast.

The screen energy consumption is almost reduced to zero.



One heating circuit

and DHW management



DHW and central heating control on one interface

vSMART can manage one heating circuit (under-floor or radiator) and DHW production at the same time via tailored time programs and override functions. Focus is made on simple and reliable heating and hot-water installations.

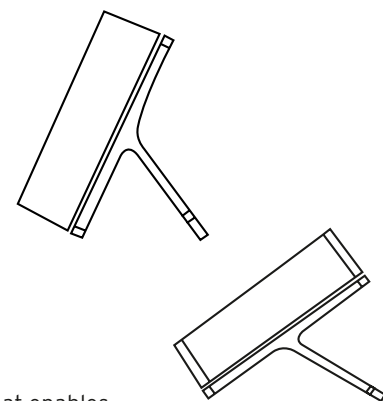
Intuitive interface

Fast and simple settings directly on the control

With a short press on the minus or plus button, you can directly set the room temperature set point that will appear on the right. The temperature in bold on the left is the current room temperature.

Wall-mounted or

table stand installation



Fixed or flexible position for the best end user handling

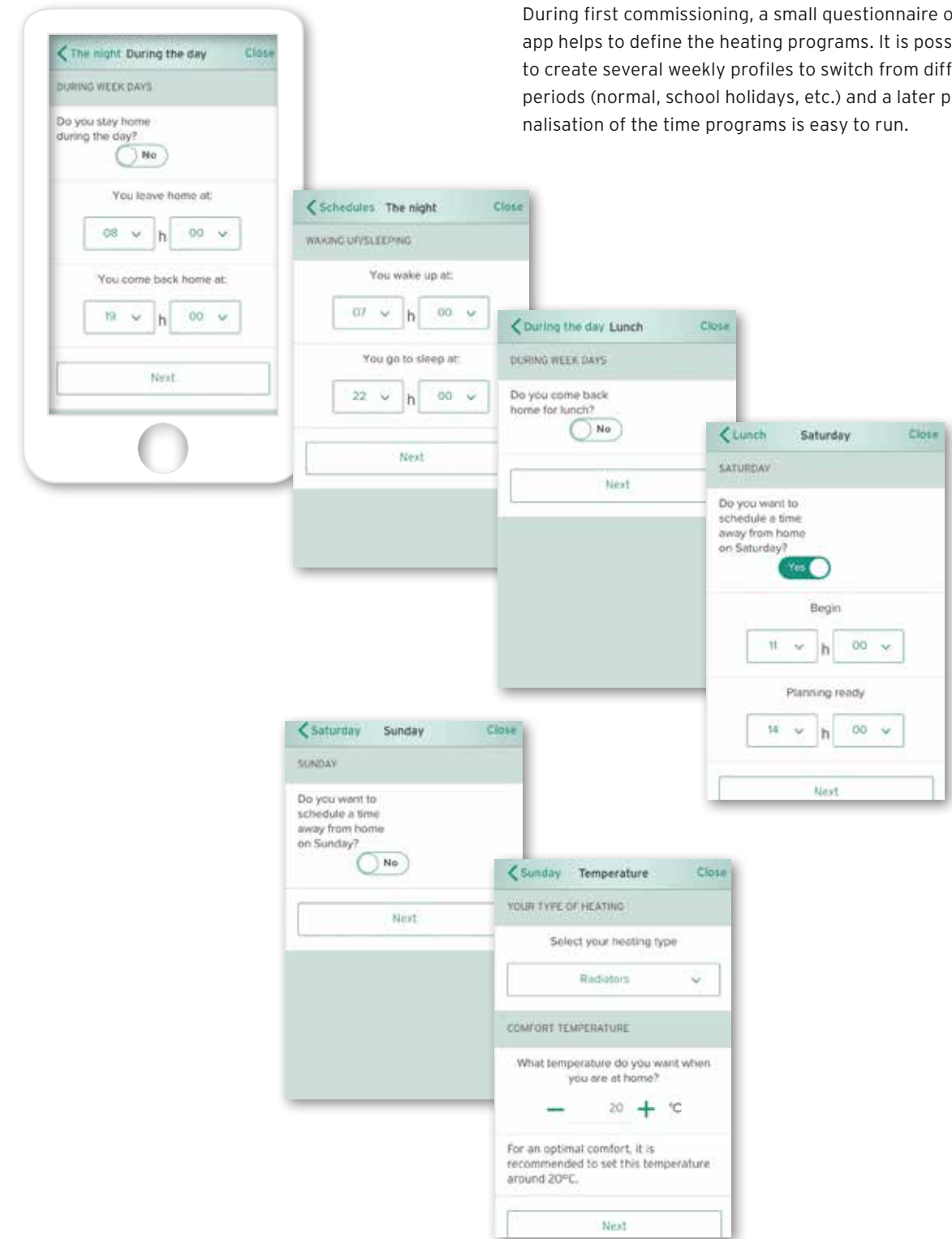
vSMART is delivered with a wall bracket and a two-position table stand dock that enables the user to choose the preferred place of installation (on the wall, on low or high furniture).





Wizard set-up of weekly programs

Time programs are based on the customer's lifestyle
During first commissioning, a small questionnaire on the app helps to define the heating programs. It is possible to create several weekly profiles to switch from different periods (normal, school holidays, etc.) and a later personalisation of the time programs is easy to run.



Installation assistant

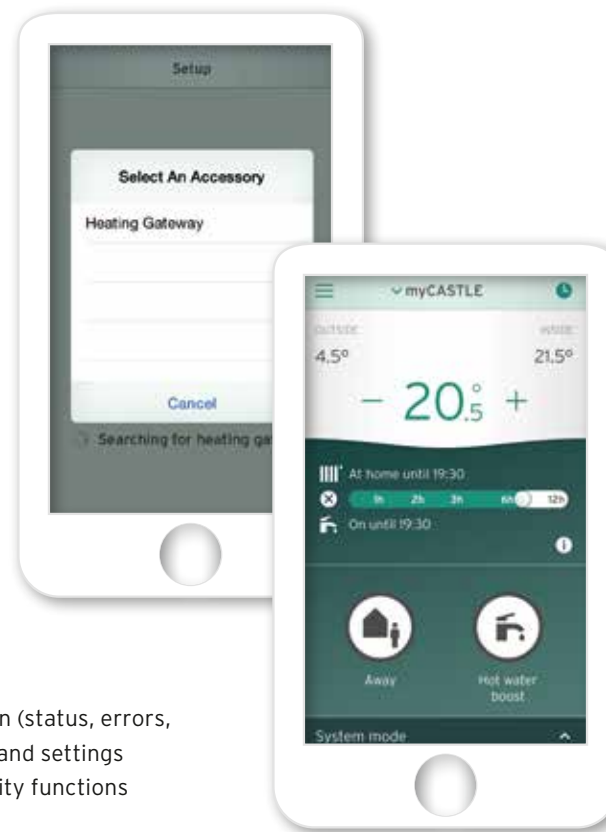
Mistake-proof step-by-step pairing process

Using the app installation assistant, the end user is guided step by step through the convenient and intuitive Wi-Fi pairing process.

User friendly app

Quick understanding of all main functions and settings

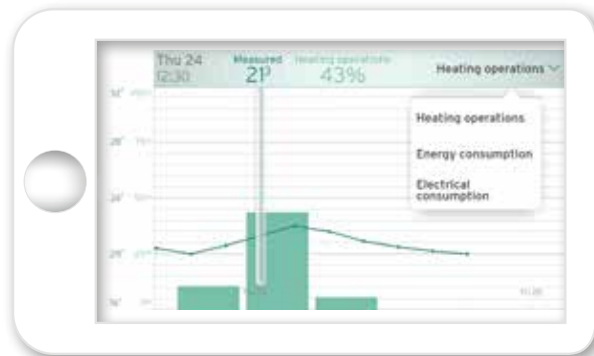
The app gives easy access to heating and DHW information (status, errors, outside/inside temperatures, energy consumption, etc.) and settings (operating modes, time programs, override, comfort priority functions such as away or one-time storage loading mode, etc.).



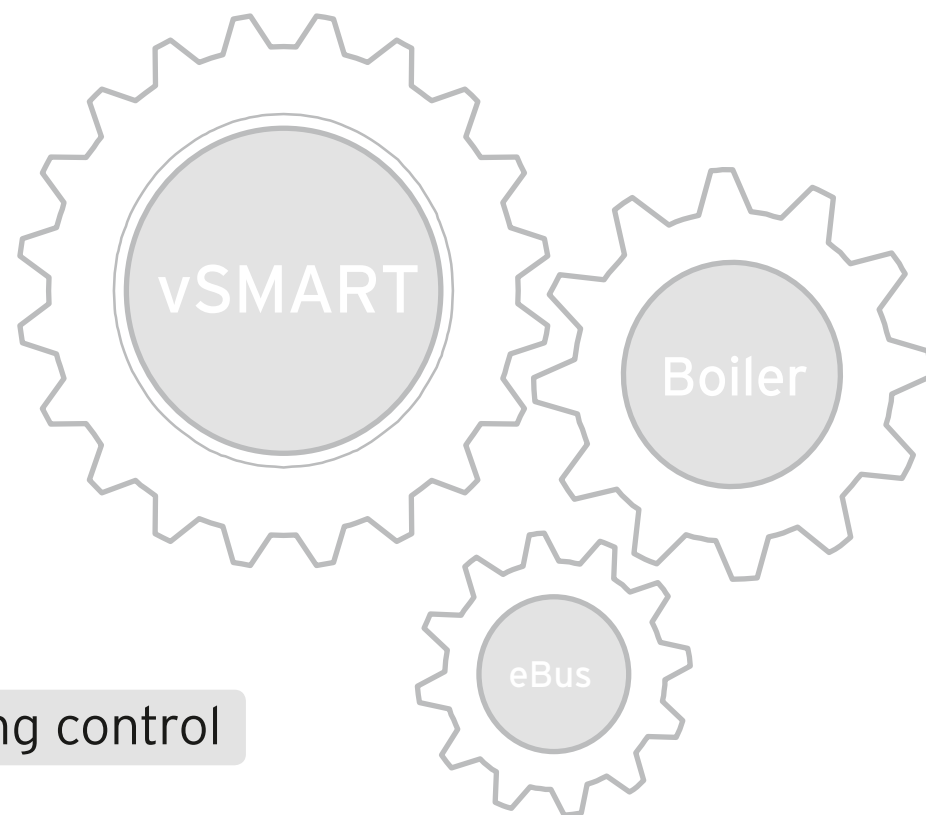
Energy consumption monitoring

Gas and electricity consumption* for both heating and DHW are available, as well as operating data from the system

It is possible to display historical boiler runtime as well as desired and measured temperatures and the energy consumption split by energy type (gas or electricity) and use (heating or DHW) per day, month or year. It allows you to make a comparison from year to year.



* This function is compatible only with eBus boilers using EMF (embedded metering function); the energy consumption is calculated by the boiler itself and sent to vSMART.



Self-learning control

vSMART continuously adapts the flow temperature to optimise comfort

vSMART uses high-quality weather data from the Internet and analyses additional data, (e.g. heating losses, time to heat up the house) which will be recorded constantly to determine the thermal behaviour of the house. Two weeks after the commissioning and thanks to eBus communication, vSMART is able to ask the boiler when and at which temperature to start to reach the right set point at the right time.



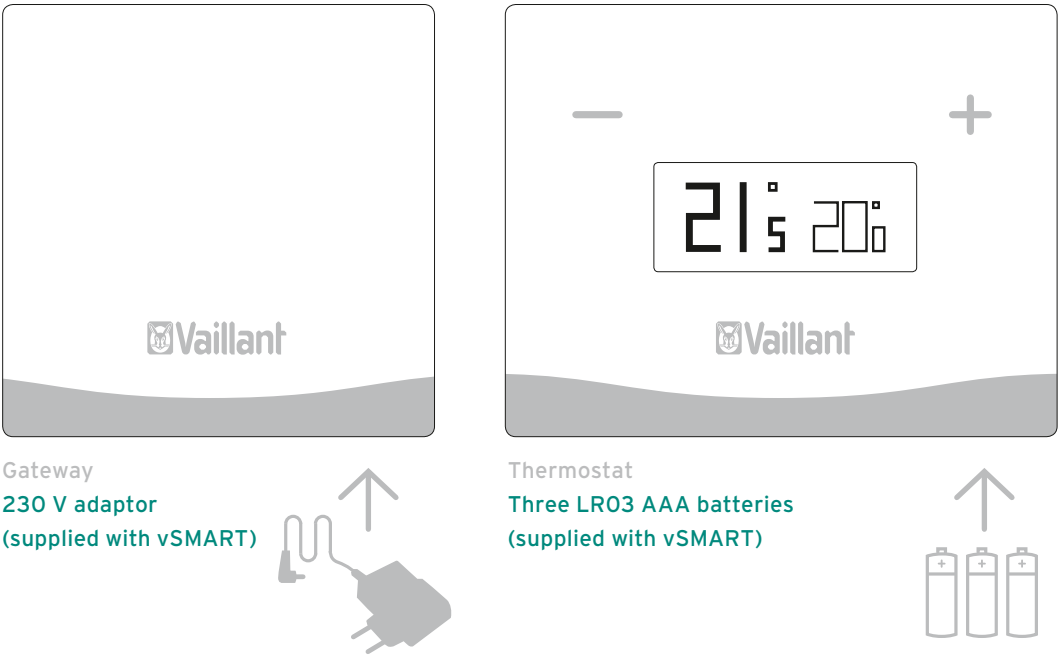
Technical features



1. Product dimensions

	Gateway	Thermostat
Height (mm)	83	83
Width (mm)	83	105
Depth (mm)	26	26

2. Product energy supply



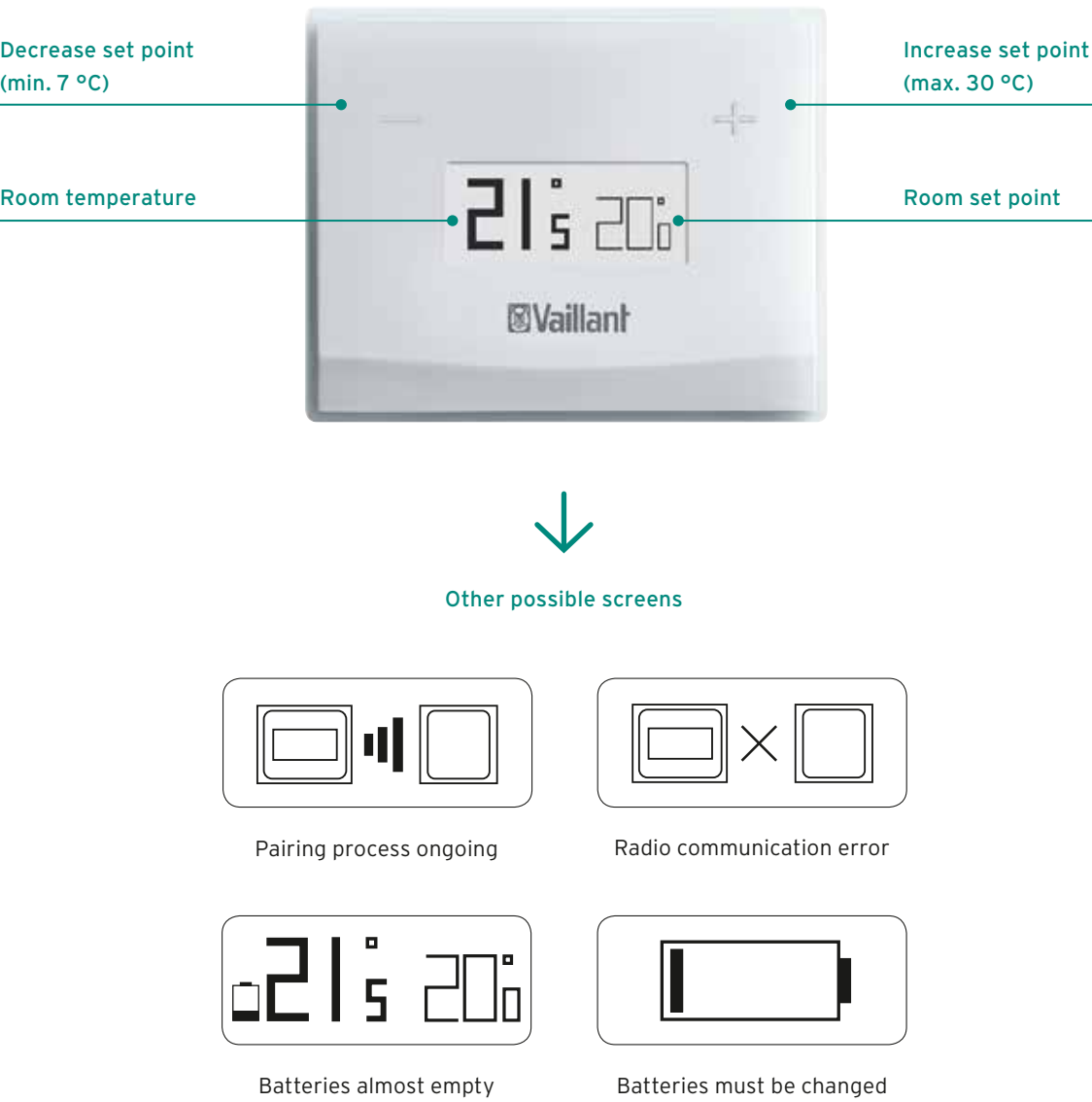
What happens if:

The thermostat is running out of battery (or the radio signal is disturbed)	- We use the last room temperature value for one hour; after one hour the system will work in weather compensation only mode
Wi-Fi connection is lost	- The last programming changes made in the app are always stored in the base station so can be used in case of Wi-Fi trouble - The outside temperature follows the same rule but after one week of missing value, the regional average winter temperature is used (also stored in the gateway) - By pressing the pairing button briefly, we can enter the fallback mode where the thermostat set point is taken into account regardless of the last programs (same for DHW)
eBus connection is lost or gateway has no power supply	- The boiler will regulate based on the flow temperature

3. Thermostat handling

Override function

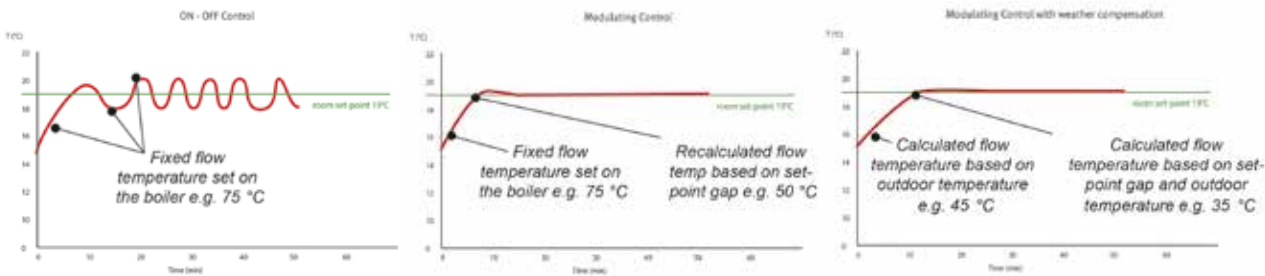
If the user modifies the room set point using the thermostat or the app, the heating programs will be placed in stand by and this set point will be considered during the next three hours (this time span can be defined in the app). No matter the modification being done on the thermostat or the app, the new set point is displayed on both interfaces then.





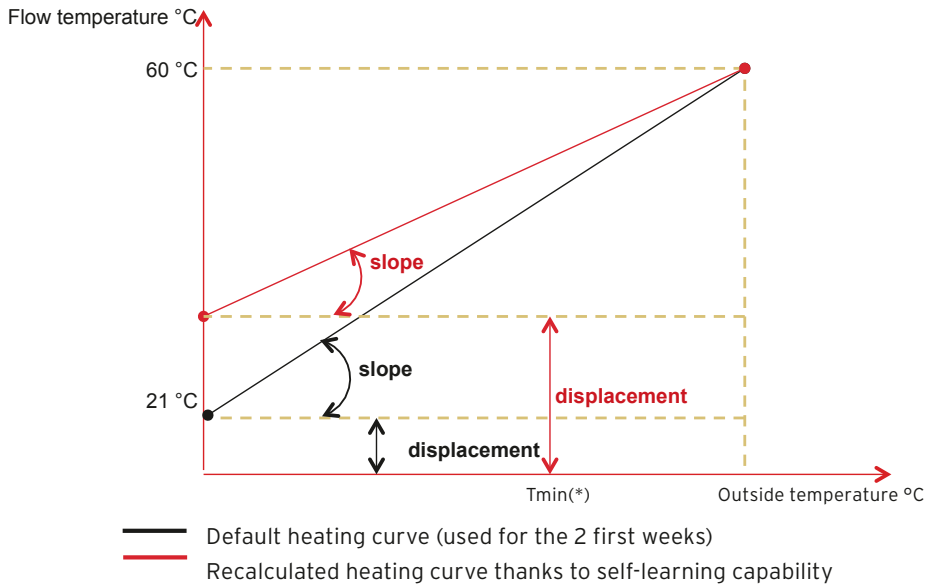
4. Regulation mode

vSMART is an eBUS modulating control that brings comfort and economy. Modulation permits you to adapt the heating flow to the room temperature so as to avoid overheating the house and on/off cycles of the boiler.



vSMART is a self-learning control that will study your house behaviour for two weeks such as thermal insulation and inertia.

During these two weeks vSMART simply uses a hysteresis-based regulation with default heating curve and weather conditions gathered from the Web to adjust the heating flow temperature. After those two weeks, vSMART uses all the collected data to improve both slope and displacement of the heating curve in order to adjust the heating flow temperature to be as efficient as possible. It also switches to a full modulating PID regulation and continues to record info to continuously improve both heating curve and PID parameters. An additional feature thanks to the self-learning function: vSMART is able to anticipate the start of your boiler so as to reach the room set point exactly at the scheduled time.



* : Tmin depends on the location where vSMART is installed (to be set in the advanced parameters menu)

5. Technical data

Thermostat

Power supply	3 x1.5 V (AAA)
Battery life	Approx. 2 years
Level of protection	IP20
Protection class	III
Degree of contamination	II
Ambient temperature	< 50 °C
Adjustable temperature range	7-30 °C
Transmission frequency	868 MHz
868 MHz transmission power	+10 dBm
Receiver category	2
Relative activation duration	< 0.1 %
Maximum range, outdoors	100 m
Maximum range, indoors	25 m
Height	83 mm
Width	105 mm
Depth	26 mm

ErP / Ecodesign values (EU regulation⁹811/2013)

Temperature control class	VI
Contribution to the seasonal room heating energy efficiency η_s	4.0 %

Gateway

Power supply	100 ... 200 V
Frequency	50/60 Hz
Current consumption	< 2 W
Level of protection	IP20
Protection class	III
Protection of the power supply	II
Degree of contamination	II
Ambient temperature	< 50 °C
Transmission frequency	868 MHz
868 MHz transmission power	+10 dBm
Receiver category	2
Relative activation duration	< 0.1 %
Wi-Fi type	802.11 b/g/n (2.4 GHz)
Wi-Fi transmission power	< +16 dBm
Wi-Fi supported network encryption	WEP, WPA, WPA2
Bluetooth type	2.1
Bluetooth transmission power	+10 dBm
Height	84 mm
Width	83 mm
Depth	25 mm



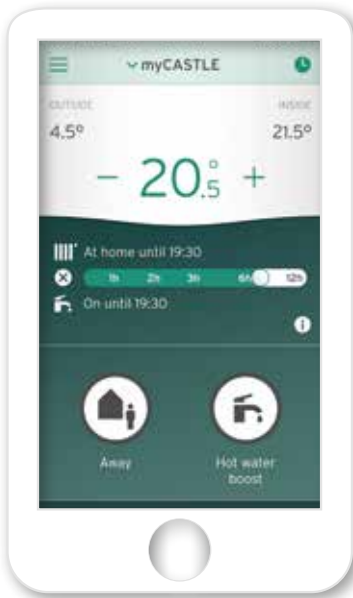


Using the app

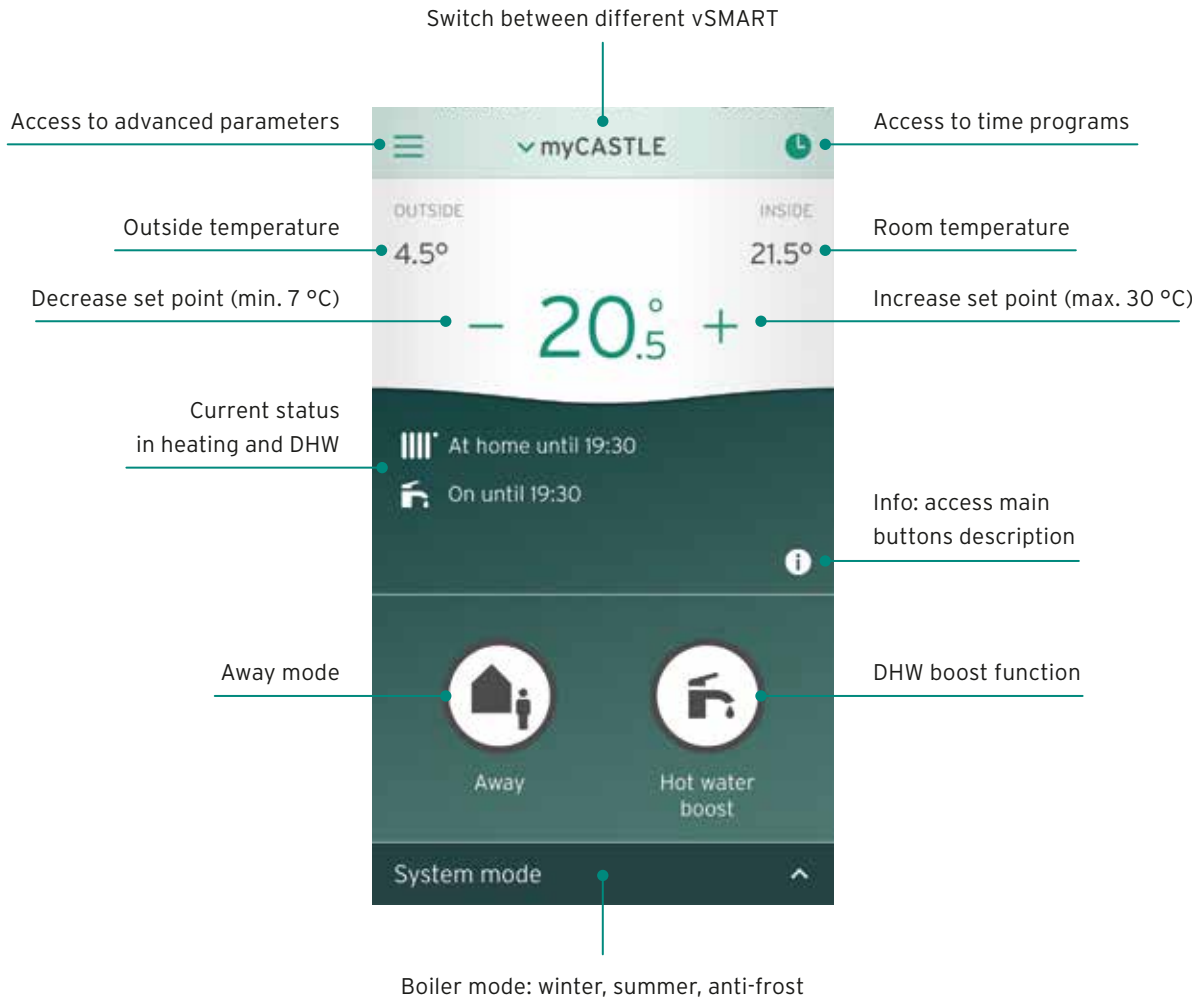


Downloading the app

The app is available free of charge from Google Play and the App Store. It works on both smartphones or tablets. It requires at least IOS 8.0 or Android 4.0.



Main menu





Manual change of set point (override)

By default, this override will occur for the next three hours and vSMART tells you when it ends.

At any moment, you can shorten or finish this time period by sliding the bar.

The default time span (three hours) can be changed in the advanced parameters menu.

The set point displayed on the thermostat is updated consequently.

By clicking on + or - the set point is manually changed and becomes prioritised over the time programs.

Away mode

1. Click here to activate the Away mode.

2. vSMART asks you when you will come back.

3. If you don't know, click here and simply stop the function when you are back at home.

In Away mode, we use the same room set point as for the absent period in time programs.

By default, this set point is 1 °C lower than the comfort value.

It can be modified in the planning menu (see below).

Boiler mode

Winter mode: both heating and DHW are activated.

Summer mode: only DHW is active. The room set point is decreased to the minimum (7 °C).

Off mode = anti-frost function. The heating set point is fixed at 7 °C. A manual adjustment of the set point is possible and after this override period, the system comes back to off mode.

Hot-water boost function

Hot-water boost activation; Boiler runs in DHW production until the DHW set point is reached or one hour is elapsed.



Heating operations

and energy consumption* display

To display heating operations and energy consumption, click on the bar graph icon on tablets.



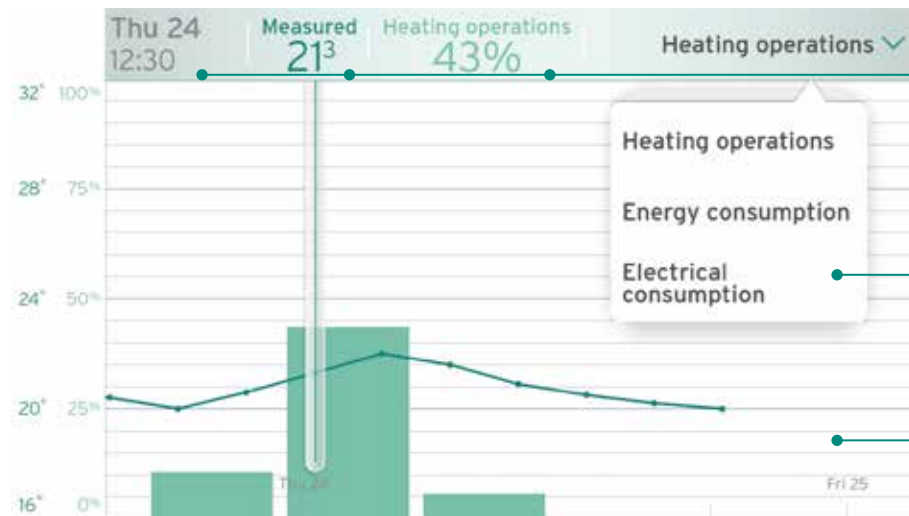
Simply rotate a smartphone.



Time programs (planning)

Overview of the weekly planning

You can copy and paste one day to another. To view/edit one day just click on it.



It can be sorted yearly, monthly or daily by heating or DHW mode.

You can monitor either the operating time of the boiler, the gas consumption or the electric consumption.

The room temperature is also displayed.

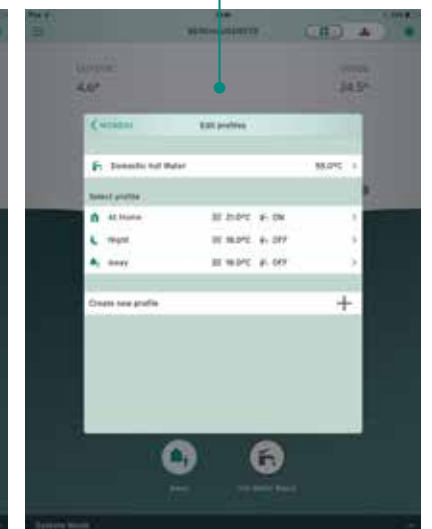
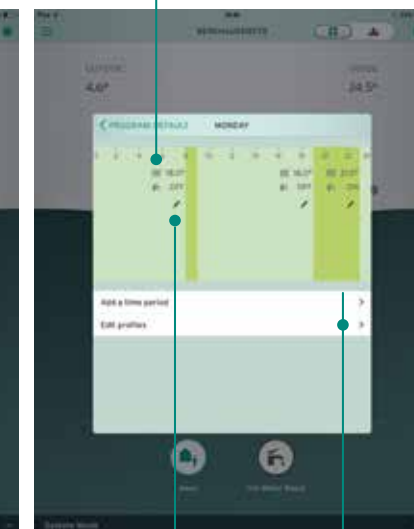
Information provided in the heating operation menu (boiler runtime, historic heating behaviour like desired and measured temperatures) is available for all vSMART connected boilers.

* This function is compatible only with eBus boilers using EMF (embedded metering function); the energy consumption is calculated by the boiler itself and sent to vSMART.

Selected day

Room set point
DHW on or off

In each profile you can set the room set point and the DHW reheating authorisation. DHW set point can be modified here.



To modify a time slot

To add a new time



Advanced parameters

Access to the advanced settings menu

You can manage several vSMART with the app; select the one you wish to modify here.

FAQ and contact

Log out

You can add a new vSMART; it will launch the pairing sequence.

You can set the location (important for weather data) and the time zone (important for time programs).

Here you can switch from one weekly program to another and create new ones.

Various info such as radio signal intensity, battery level, software number)

To reset the weekly program currently in use. It will launch the assistant again to create a new plan.

Info about the gateway (Wi-Fi signal intensity, address, software version)

Account being used

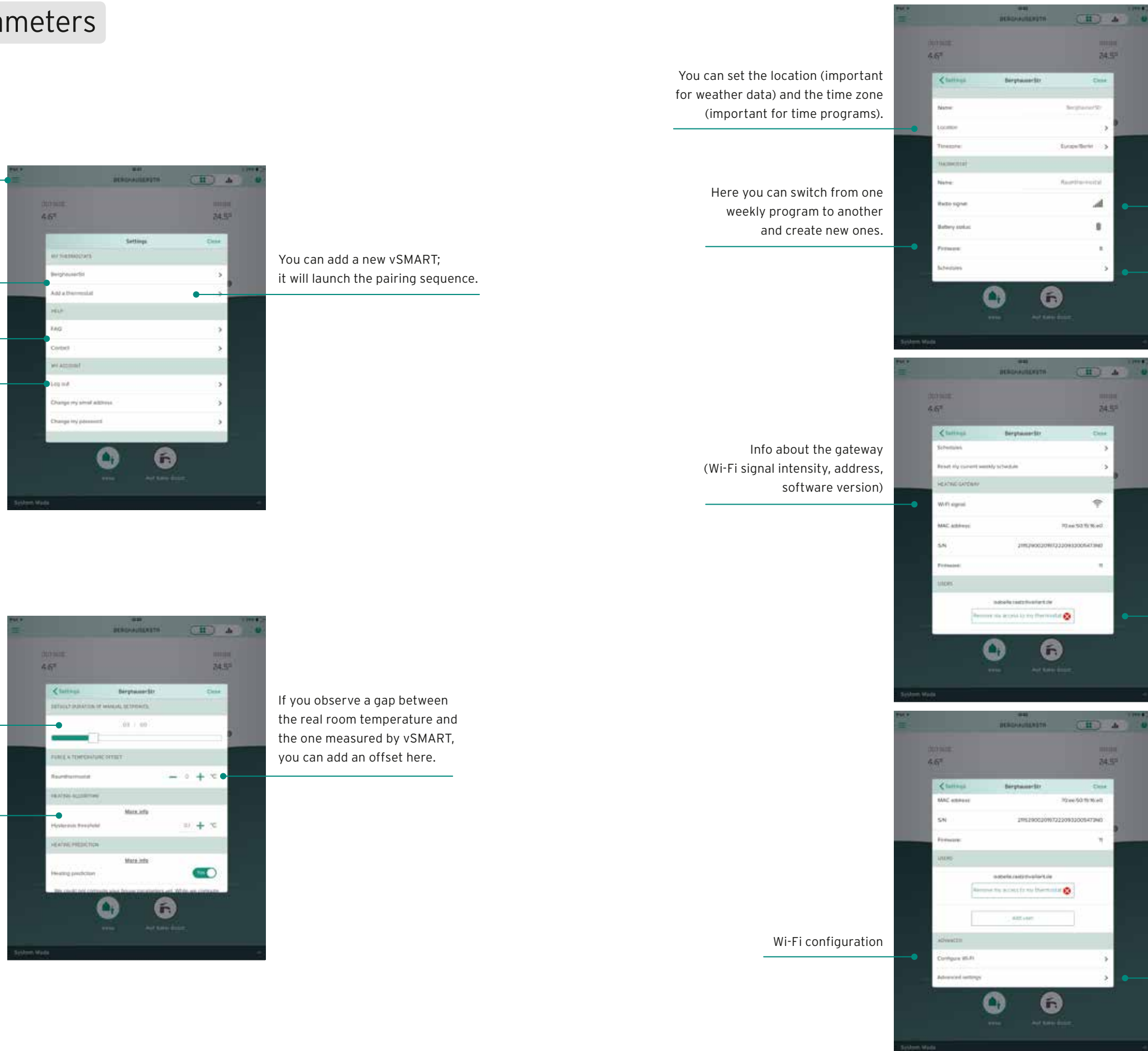
Override duration: here you can adjust the duration of the override (each manual set-point change will last for this time span).

If you observe a gap between the real room temperature and the one measured by vSMART, you can add an offset here.

Hysteresis threshold (only used during the first two weeks of vSMART self-learning phase; when the difference between the room temperature and the set point is below the threshold, the heating is shut down).

Wi-Fi configuration

Access to advanced settings (see next page)





Vaillant GmbH

Berghauser Str. 40 ■ 42859 Remscheid

www.vaillant.de/produkte