

Operating instructions for the system user


VIESSMANN

ViCare climate sensor
ViCare wireless repeater


ViCare climate sensor
ViCare wireless repeater



Safety instructions


-  Please follow these safety instructions closely to prevent accidents and material losses.

Safety instructions explained

-  **Danger**
This symbol warns against the risk of injury.

Note

Details identified by the word "Note" contain additional information.

-  **Please note**
This symbol warns against the risk of material losses and environmental pollution.

Target group

These instructions are intended for system users.

This appliance can also be operated by children aged 8 and older, as well as by individuals with reduced physical, sensory or mental faculties or those lacking in experience and knowledge, provided such individuals are supervised or have been instructed in the safe use of this appliance and any risks arising from it.



Danger

Wireless signals can interfere with electronic medical devices, particularly pacemakers, hearing aids and defibrillators.

If any such equipment is fitted, users should avoid being in the immediate vicinity of operational wireless components.

Installation and adjustment

- All settings and work on the device must be carried out as specified in these instructions.
- Observe minimum clearances to ensure reliable signal transmission.

Operation of the system

- Only operate the devices inside closed buildings.
- Never operate devices in rooms where there is a risk of explosion.
- Protect devices from:
 - Moisture
 - Dust
 - Liquids
 - Vapours
 - Direct sunlight
 - Other direct thermal radiation
- After a restart, check the status of the wireless components.

Safety instructions (cont.)**Danger**

Damaged equipment poses a safety hazard.

Check the appliance for external damage. Never start up a damaged appliance.

Auxiliary components and individual parts

For replacement, use only spare parts supplied or approved by Viessmann.

1. Safety and liability	Operational reliability	5
	Liability	5
2. Introductory information	Disposal of packaging	6
	Symbols	6
	Intended use	6
	Product information	7
	■ Maintenance parts and spare parts	7
	Data connections with ViCare climate sensor	7
	Data connections with ViCare wireless repeater	8
3. Preparing for installation	Installation location for ViCare climate sensor	9
	■ Wireless signal range	9
	■ Angle of penetration	9
	■ ViCare wireless repeater	10
4. Installation sequence	Device as ViCare climate sensor	11
	■ Inserting or changing the batteries	11
	Device as ViCare wireless repeater	11
	Mounting the device on the wall	12
5. Commissioning	Display and controls	13
	Pairing the ViCare climate sensor	13
6. Checks and settings	Displaying the battery level	14
	Transmitting current temperature and humidity values	14
	Restoring factory settings	14
7. Maintenance	Software update	15
	Cleaning	15
	Maintenance/battery replacement	15
	Connection faults	15
8. Specification	16
9. Appendix	Final decommissioning and disposal of the heating system	17
10. Keyword index	18

Operational reliability

The ViCare climate sensor has ventilation slots in the bottom left corner to measure temperature and humidity. Do not cover these ventilation slots.

Liability

No liability is accepted for loss of profit, unattained savings, or other direct or indirect consequential losses resulting from use of the ViCare climate sensor, the Viessmann server or the software, or for damage resulting from inappropriate use.

Liability is limited to typical damage arising if a fundamental contractual obligation is violated through slight negligence, the fulfilment of which is essential for proper execution of the contract.










The limitation of liability shall not apply if the damage was caused deliberately or through gross negligence, or if mandatory liability applies due to product liability legislation.

The Viessmann General Terms and Conditions apply, which are included in each current Viessmann pricelist. Viessmann accepts no liability for push notifications and email services, which are provided by network operators. The terms and conditions of the relevant network operators apply in this context.

Disposal of packaging

Please dispose of packaging waste in line with statutory regulations.

Symbols

Symbol	Meaning
	Reference to other document containing further information
	Step in a diagram: The numbers correspond to the order in which the steps are carried out.
	Warning of material losses and environmental pollution
	Live electrical area
	Pay particular attention.
	<ul style="list-style-type: none"> ▪ Component must audibly click into place. or ▪ Acoustic signal
	<ul style="list-style-type: none"> ▪ Fit new component. or ▪ In conjunction with a tool: Clean the surface.
	Dispose of component correctly.
	Dispose of component at a suitable collection point. Do not dispose of component in domestic waste.

Intended use

Install and operate the ViCare climate sensor and the ViCare wireless repeater as intended and only in conjunction with the electronic control units and controllers of the supported Viessmann heat and power generators. Also take account of the relevant installation, service and operating instructions.

In particular, observe the current and voltage specifications for connections and hook-ups.
The ViCare climate sensor is only for use with a Viessmann gateway, e.g. Vitoconnect, type OPTO2.

In connection with a gateway, the measured values are transmitted wirelessly to the gateway.
Incorrect usage of the device is prohibited and results in an exclusion of liability. Installation, service and operating instructions included with the product and available online must be observed.

Note

The device is intended exclusively for domestic or semi-domestic use, i.e. even users who have not had any instruction are able to operate the device safely.

Product information

Depending on the type of power supply, the device can be operated as a ViCare climate sensor or ViCare wireless repeater.

For further information on ViCare products: See www.vicare.info

ViCare climate sensor

If you want to use the device as a ViCare climate sensor, you have to operate it with batteries. The ViCare climate sensor records the room temperature and humidity, and sends the information to the Viessmann gateway.

The ViCare climate sensor can only be used in conjunction with a Viessmann gateway, e.g. Vitoconnect, type OPTO2. Standalone use is not possible.

ViCare wireless repeater

If you want to use the device as a ViCare wireless repeater, you have to operate it with the plug-in power supply unit provided.

The ViCare wireless repeater increases the range for low power radio.

Maintenance parts and spare parts

Maintenance parts and spare parts can be identified and ordered directly online.

Viessmann Partnership

Login:

<https://shop.viessmann.com/>



Viessmann spare part app

www.viessmann.com/etapp



Data connections with ViCare climate sensor

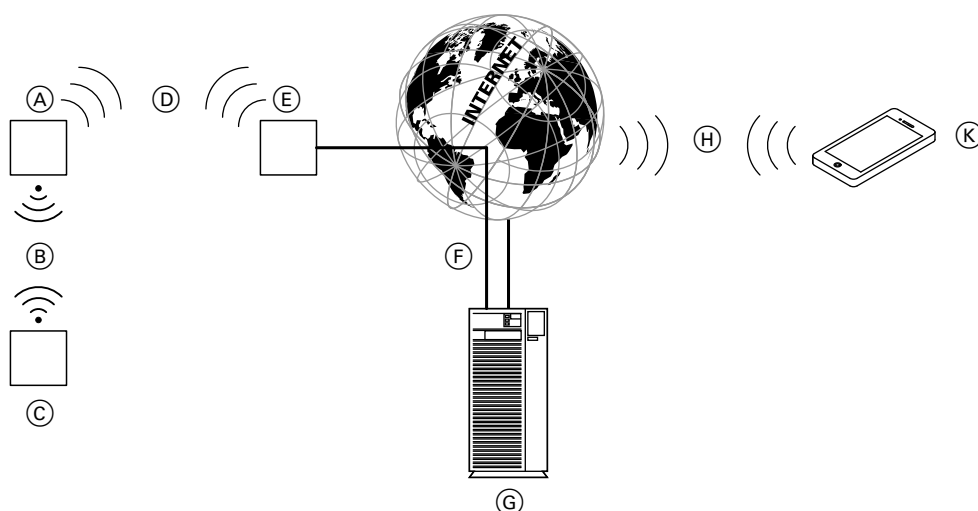


Fig. 1

- (A) Viessmann gateway (e.g. Vitoconnect, type OPTO2 or OT2)
- (B) Low power radio
- (C) ViCare climate sensor
- (D) WiFi
- (E) WiFi router (on site)

- (F) Secure internet connection to the Viessmann server
- (G) Viessmann server

Data connections with ViCare climate sensor (cont.)

- Ⓜ Mobile network
or
WiFi connection
- Ⓚ Smartphone

Note

Please note that the compatibility of iOS and Android devices changes over time. It is essential to keep mobile devices updated and even to replace them if necessary.

Further information can be found on the internet at www.vicare.info

Data connections with ViCare wireless repeater

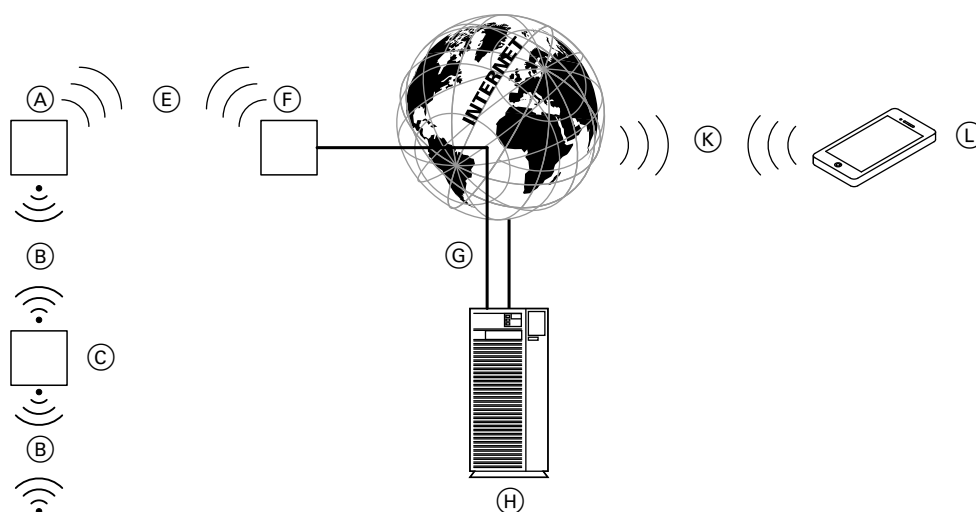


Fig. 2

- Ⓜ Viessmann gateway (e.g. Vitoconnect, type OPTO2 or OT2)
- Ⓚ Low power radio
- Ⓚ ViCare wireless repeater
- Ⓚ ViCare components, e.g. ViCare thermostatic radiator valve
- Ⓚ WiFi
- Ⓚ WiFi router (on site)
- Ⓚ Secure internet connection to the Viessmann server
- Ⓚ Viessmann server
- Ⓚ Mobile network
or
WiFi connection
- Ⓚ Smartphone

Note

Please note that the compatibility of iOS and Android devices changes over time. It is essential to keep mobile devices updated and even to replace them if necessary.

Further information can be found on the internet at www.vicare.info

Installation location for ViCare climate sensor

- Installation only in enclosed buildings
- The installation location must be dry and free of frost.
- Distance to floor: Min. 1.5 m
- Not near windows or doors
- Not above radiators
- Not near heat sources (direct sunlight, fireplace, TV set, etc.)
- Ensure ambient temperatures between +5 and +40 °C.

Note

- Check the reception quality of the ViCare climate sensor at the planned installation location.
- We recommend pairing the ViCare climate sensor near the gateway or other ViCare components before installation.

Wireless signal range

The range of wireless signals may be reduced by walls, ceilings and interior fixtures. These weaken the wireless signal.

The following circumstances can cause poor reception:

- On their way between transmitter and receiver, wireless signals are **damped**, e.g. by air or when penetrating walls.
- Wireless signals are **reflected** by metallic objects, e.g. reinforcements embedded in walls, metal foil of thermal insulation and thermal glazing with metalised thermal vapour deposit.

- Wireless signals are **isolated** by service ducts and lift shafts.
- Wireless signals are **disrupted** by devices that also operate with high frequency signals. Maintain a distance of **at least 2 m** from these devices:
 - Computers
 - Audio and video systems
 - Devices with active WiFi connection
 - Electronic transformers
 - Pre-ballasts

Angle of penetration

The reception quality remains best if wireless signals hit the walls vertically.

Depending on the angle of penetration, the effective wall thickness changes and so does the extent to which the electromagnetic waves are damped.

Flat (unfavourable) angle of penetration

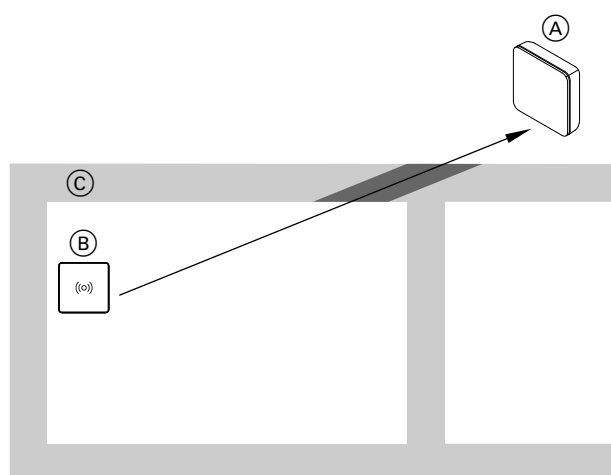


Fig. 3

- (A) ViCare climate sensor
- (B) Gateway
- (C) Wall

Ideal angle of penetration

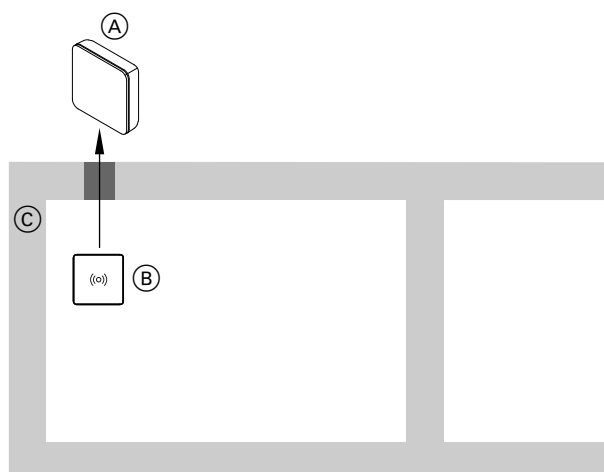


Fig. 4

- (A) ViCare climate sensor
- (B) Gateway
- (C) Wall

ViCare wireless repeater

If there are problems with the range of the wireless signal in low power radio, a further device can be used as a ViCare wireless repeater: See page 11.

Device as ViCare climate sensor

When powered by battery, the device **only** works as a climate sensor. The function as a low power radio repeater is **not** possible.

Note

If the device was previously registered as a ViCare wireless repeater (with plug-in power supply unit), you first have to restore its factory settings: See page 14. You then have to pair the device with the ViCare app again: See page 13.

Inserting or changing the batteries

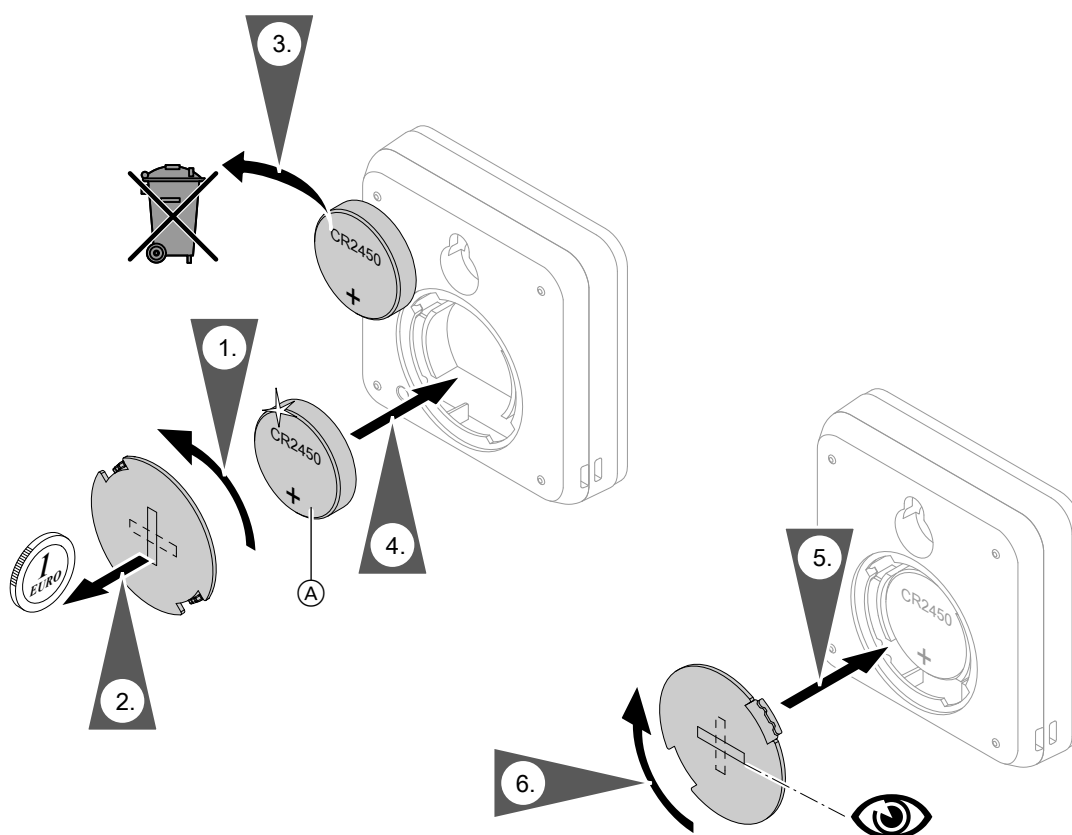


Fig. 5

(A) Battery 3 V CR2450



Please note

Incorrectly inserted batteries can damage the device.
Observe the polarity of the battery.

Note

Spent batteries should not be disposed of in domestic waste. Dispose of spent batteries at an authorised collection site.

Device as ViCare wireless repeater

When supplied with power via the plug-in power supply unit, the device **only** works as a wireless repeater for low power radio.

The plug-in power supply unit with connecting cable is 1.5 m long.

Note

If the device was previously registered as a ViCare climate sensor (battery operation), you first have to restore its factory settings: See page 14. You then have to pair the device with the ViCare app again: See page 13.

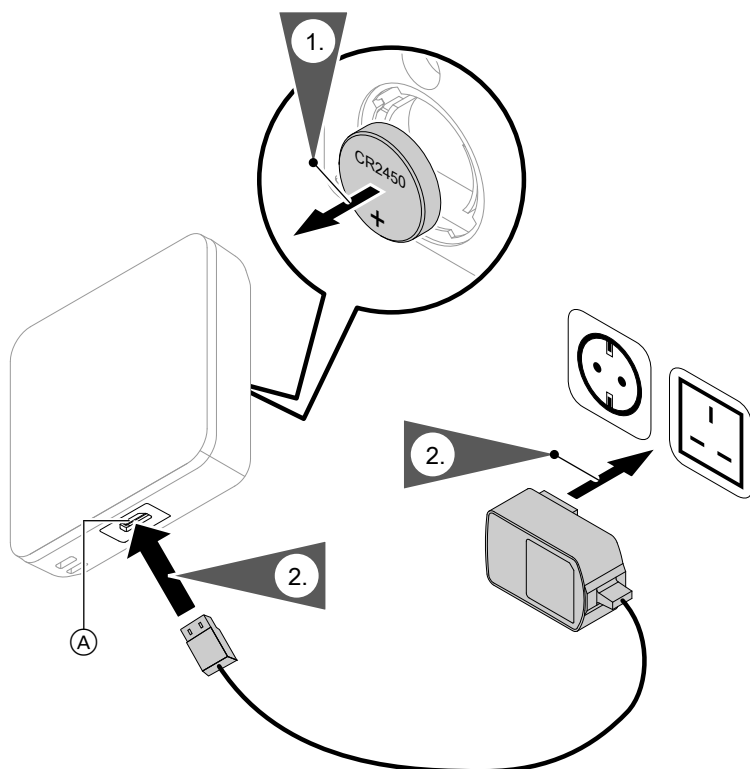


Fig. 6

Ⓐ Micro USB port for plug-in power supply unit (5 V_{DC})

1. Remove the battery.
2. Plug the micro USB connector into the device. Plug the plug-in power supply unit into a standard 230 V/50 Hz socket, max. 1 m from the installation location.

Note

If you are using the device with a plug-in power supply unit, remove the battery. Otherwise the battery may leak.

Mounting the device on the wall

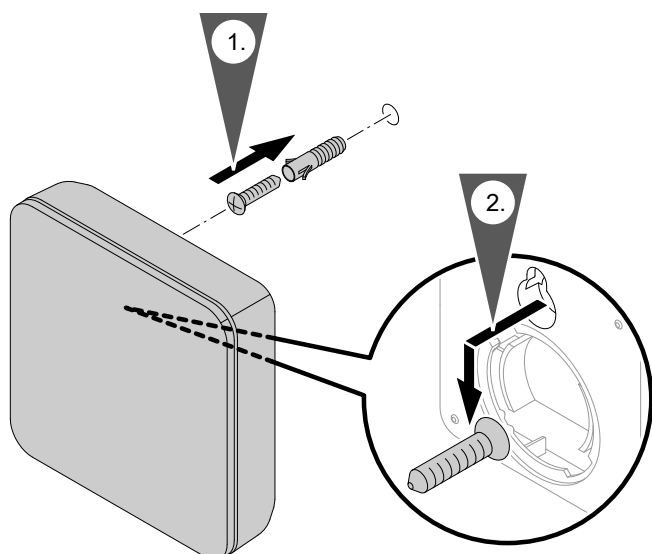


Fig. 7

Display and controls

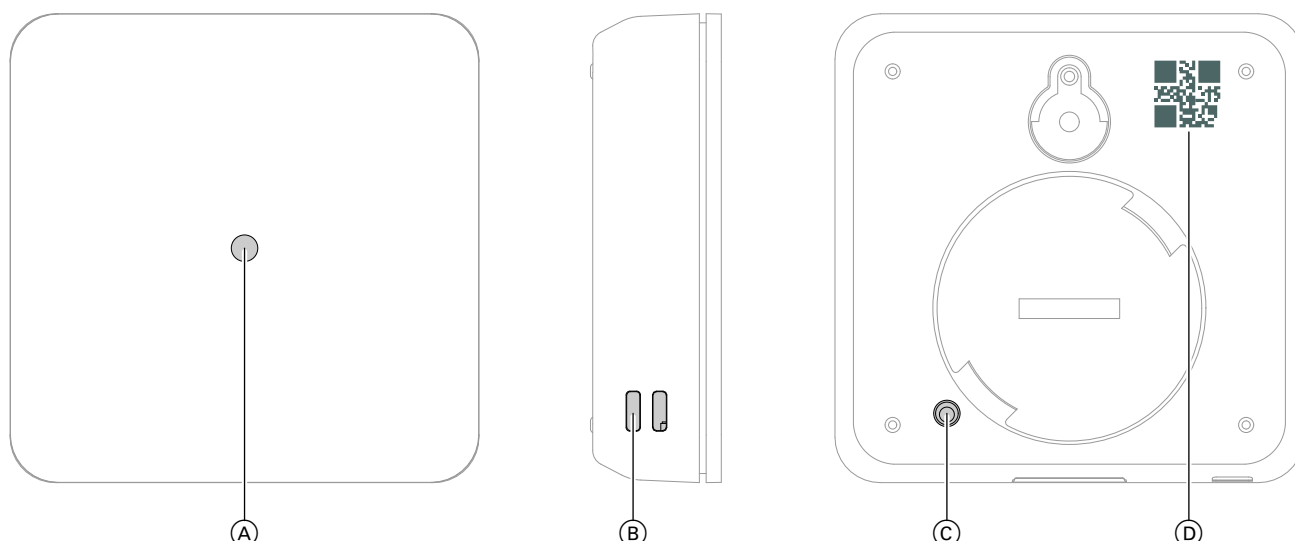



Fig. 8

- (A) Status LED
- (B) Openings for temperature and humidity measurement. Do not seal off.
- (C) Operating button
- (D) QR code

Pairing the ViCare climate sensor

1. Remove the ViCare climate sensor from the wall.
2. Open the ViCare app. Tap **"Settings"**, **"Individual room control"**.
3. Follow the instructions in the app.
4. Scan QR code (D) on the ViCare climate sensor.
5. **Pairing process**
 Confirm the pairing process by briefly pressing operating button (C). Pairing can take up to 3 minutes. During this time the status LED flashes green.
 If pairing was successful, the status LED shows green for about 5 seconds. The ViCare app displays the successful connection.
6. Put the ViCare climate sensor back on the wall.

Displaying the battery level


Briefly press operating button  (< 2 seconds).

Status LED flashes green once.	Good battery level
Status LED flashes red once.	Low battery level

Note
The battery level display only works if the ViCare climate sensor has been paired.

Note
You can also see the battery level of the ViCare climate sensor in the ViCare app.


Transmitting current temperature and humidity values


Briefly press operating button  (< 2 seconds).
The current temperature and humidity values are transmitted to the Viessmann gateway.

Restoring factory settings

The factory settings of the ViCare climate sensor can be restored:

- The connection to the Viessmann gateway or other ViCare components is disconnected. The network configuration of the device is deleted. You will subsequently have to reregister.
- All fault messages will be reset.
- The configuration is deleted.

2. Press operating button  5 times in quick succession (within 10 seconds).
The status LED flashes alternately red and green 3 times. The factory settings of the ViCare climate sensor have been restored.

1. Press operating button  of the ViCare climate sensor for at least 10 seconds.
The status LED shows red.

Software update

If a new software update is available, it is automatically downloaded via the Viessmann gateway and the device is updated. The functionality of the device is not interrupted by the update process.

Cleaning

You can clean the surfaces of the ViCare climate sensor with a microfibre cloth. Do not use any cleaning agents.

Maintenance/battery replacement

The ViCare climate sensor is maintenance-free. If the battery needs replacing, this will be indicated in the ViCare app.

Note

Changing the batteries: See page 11.

Connection faults

If communication with the Viessmann gateway or other ViCare components fails, the wireless connection is automatically re-established.

Note

If connection faults occur frequently, the ViCare climate sensor and the Viessmann gateway or other ViCare components may be too far apart. If this is the case, reduce the distance or position of the devices. If this does not help, you can also use a ViCare wireless repeater (accessories).

Specification

ViCare climate sensor

Power supply	Battery: 1 x 3.0 V CR2450 (button cell)
Power consumption	0.5 W
Max. transmission power	0.1 W (e.i.r.p.)
IP rating	IP 20D to EN 60529; ensure through design/installation.
Protection class	III
Low power radio	
▪ Radio frequency	2.4 GHz
▪ Frequency band	2405 to 2480 MHz
▪ Encryption	Yes
▪ Wireless range through walls	Up to 14 m (depending on wall thickness and wall structure)
Permissible ambient temperature	
▪ Operation	+5 to +40 °C Installation in living spaces or boiler rooms (standard ambient conditions)
▪ Storage and transport	–20 to +60 °C

ViCare wireless repeater

Power supply	5 V $\overline{=}$ with USB plug-in power supply unit
Power consumption	0.5 W
Max. transmission power	0.1 W (e.i.r.p.)
IP rating	IP 20D to EN 60529; ensure through design/installation.
Protection class	III
Low power radio	
▪ Radio frequency	2.4 GHz
▪ Frequency band	2405 to 2480 MHz
▪ Modulation type	2-FSK, 4-FSK
▪ Channel width	5 MHz
▪ Antenna gain	–2.0 dBi
▪ Output power	3.8 dBm
▪ Encryption	Yes
▪ Wireless range through walls	Up to 14 m (depending on wall thickness and wall structure)
Permissible ambient temperature	
▪ Operation	+5 to +40 °C Installation in living spaces or boiler rooms (standard ambient conditions)
▪ Storage and transport	–20 to +60 °C

Plug-in power supply unit

Rated voltage	100 to 240 V \sim
Rated frequency	50/60 Hz
Output voltage	5 V $\overline{=}$
Output current	2 A
Protection class	II
Permissible ambient temperature	
▪ Operation	+5 to +40 °C Installation in living spaces or boiler rooms (standard ambient conditions)
▪ Storage and transport	–20 to +60 °C

Final decommissioning and disposal of the heating system

Viessmann products can be recycled. Components and fluids from your heating system do not belong in ordinary domestic waste.

Speak to your contractor about the correct disposal of your old system.

DE: Operating fluids (e.g. heat transfer medium) can be disposed of at municipal collection points.

AT: Operating fluids (e.g. heat transfer medium) can be disposed of at municipal collection points (ASZ).

Keyword index

A		M	
Ambient temperatures.....	16	Maintenance.....	15
Angle of penetration.....	9		
B		N	
Battery replacement.....	15	Network operator.....	5
C		O	
Cleaning.....	15	Operational reliability.....	5
Commissioning.....	13	P	
Controls.....	13	Permissible ambient temperatures.....	16
		Product information.....	7
D		S	
Data connections.....	7, 8	Software update.....	15
Display.....	13	Specification	
E		– Plug-in power supply unit.....	16
Email.....	5	– ViCare climate sensor.....	16
		– ViCare wireless repeater.....	16
F		T	
Factory settings, restoring.....	14	Terms and Conditions.....	5
G		U	
General Terms and Conditions.....	5	Update.....	15
I		W	
Information.....	7	Wireless signal range.....	9
Installation location.....	9		
Intended use.....	6		
L			
Liability.....	5		



Viessmann Climate Solutions SE
35108 Allendorf / Germany
Telephone: +49 6452 70-0
Fax: +49 6452 70-2780
www.viessmann.com



Viessmann Limited
Hortonwood 30, Telford
Shropshire, TF1 7YP, GB
Telephone: +44 1952 675000
Fax: +44 1952 675040
E-mail: info-uk@viessmann.com

6155211 Subject to technical modifications.