

SIEMENS



Connected Home Receiver

RCR110.2ZB

Quick Start Guide

Imprint

Technical specifications and availability subject to change without notice.

Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for payment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

Issued by:

Siemens Switzerland Ltd.

Smart Infrastructure

Theilerstrasse 1a

CH-6300 Zug

Tel. +41 58 724-2424

www.siemens.com/buildingtechnologies

Edition: 2024-02-01

Document ID: A6V12680330_en--_c

© Siemens 2024

Table of contents

1	About this document.....	4
1.1	Revision history	4
1.2	Reference documents	4
1.3	Before you start	4
2	Product overview.....	5
3	Mounting and installation.....	5
4	Adding the device to the hub (GTW100ZB)	6
5	LED indication	6
6	Operation on the device	7
6.1	Manual override behavior	7
6.2	Minimum output on/off time	7
7	Upgrading firmware.....	8
8	Cyber security disclaimer.....	8

1 About this document

1.1 Revision history

Edition	Date	Changes	Section
1	February 2022	First edition.	All
2	January 2023	<ul style="list-style-type: none"> Added minimum output on/off time in "Minimum output on/off time [→ 7]". Added a note in "Upgrading firmware [→ 8]". 	6.2 7
3	February 2024	Revised information in sections "LED indication [→ 6]" and "Upgrading firmware [→ 8]".	5 7

1.2 Reference documents

Ref.	Document title	Document number
[1]	Connected Home Receiver mounting instructions	A6V12680334
[2]	Connected Home Receiver datasheet	A6V12680327

Download the above documents from <http://siemens.com/bt/download> by searching the document numbers listed above.

1.3 Before you start

Copyright

This document may be duplicated and distributed only with the express permission of Siemens.

Quality assurance

These documents were prepared with great care.

- The content of all documents is checked at regular intervals.
- All necessary corrections are included in subsequent versions.
- Documents are automatically amended as a consequence of modifications and corrections to the products described.

Please make sure that you are aware of the latest document revision date.

If you find any lack of clarity while using this document, or if you have any criticisms or suggestions, please contact your local point of contact (POC) at the nearest branch office. Addresses for Siemens RCs are available at www.siemens.com/sbt.

Document use/ request to the reader

Before using products from Siemens Switzerland Ltd., it is important that you read the documents supplied with or ordered at the same time as the products (equipment, applications, tools, and so on) carefully and in full.

Before you get started, make sure you have an internet connection, a valid Email address and a smartphone in hand.

Additional information on products and applications is available:

- At your Siemens branch office www.siemens.com/sbt or at your system suppliers.
- From the support team at headquarters fieldsupport-zug.ch.sbt@siemens.com if there is no local point of contact.

Siemens assumes no liability to the extent allowed under the law for any losses resulting from a failure to comply with the aforementioned points or for the improper compliance of the same.

Symbol identifications

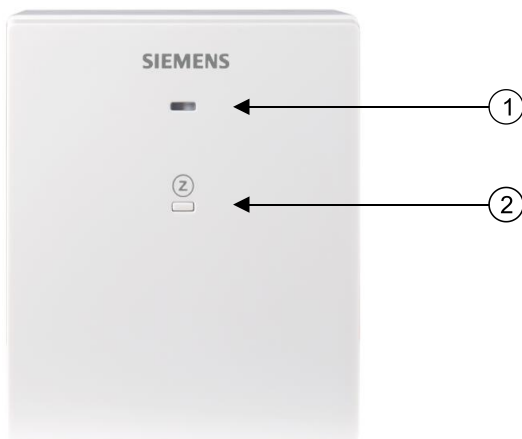
NOTICE	
!	This symbol identifies an important notice that you should be aware of when you are using the product.



The 'i' symbol identifies supplementary information and tips for an easier way of working.

2 Product overview

Connected Home Receiver RCR110.2ZB is a wireless receiver that can be used either as a wireless relay or as a Zigbee repeater. When used as a relay, the receiver is wired to the heating equipment and/or domestic hot water (DHW) and receives wireless control signals from mobile application "Connected Home" via the hub GTW100ZB. When connecting to no heating equipment and purely working as a Zigbee repeater, it extends reach of the Zigbee signal and connects to other devices on the Zigbee network. When used as a relay, the receiver also acts as a Zigbee repeater.



No.	Description
1	LED for operating state indication
2	Button for user operation

3 Mounting and installation

NOTICE	
!	We recommend hiring licensed installers to mount and install the device. See document A6V12680327 for more information about mounting and wiring notes.

1. Switch off power to the heating system by using either your home's breaker box or the system's power switch.
2. Label the wires according to terminal designations, using the stickers provided with the device.
3. Loosen the screw at the bottom of the device using a screwdriver to separate the front panel from the mounting plate.
4. Screw the mounting plate tightly on the conduit box.

5. Connect tightly the labeled wires to the terminals on the back of the front panel and tighten all inserted wires by screwing down the screws. Note that wiring is different for different applications.
6. Attach the front panel and tighten the screw at the bottom.
7. Switch on power to the heating system. The device powers on too.

4 Adding the device to the hub (GTW100ZB)


Add the device to the hub from the mobile application based on its field application (heating equipment controller (boiler, circulating pump, etc.), DHW or Zigbee repeater).



If the hub is factory reset, the RCR110.2ZB is removed from the mobile application. Re-add it in the app based on its field application.

5 LED indication

Device state	LED state
Idle	Solid orange
Joining the Zigbee network	Flashes green rapidly
Successful connection	Solid green
Zigbee network failure ¹⁾²⁾³⁾	Flashes red slowly
Hardware error	Solid red ⁴⁾
Factory reset	Alternates red and green
Firmware upgrade in process	Flashes orange rapidly
Manually overwriting	Flashes green slowly
Output state change ⁵⁾	Flashes green rapidly for three times (0.5 Hz), and then changes back to the previous state.

1. Relay outputs are turned off when Zigbee network fails.
2. Check if the hub is powered on and try to reduce distance between the device and the hub.
3. Try network reconnection.
 - Remove the device from the mobile application, press and hold down button  on the device for 10 seconds to perform factory reset, and then press and hold down the same button for 5 seconds to re-add the device to the network.
4. The LED indication of hardware error is only supported in product version A. See the product version on the label (the number after "2PFS") on the back of the device.
5. Output state change can be done either on the device or through the mobile application. However, frequent switching is not recommended as the device and mobile application might not be synchronized in a timely manner. The relay outputs maintain their previous states after a reboot and firmware upgrade.

Priority of LED state indication (high to low)

Zigbee network failure > manual override > normal operation (including firmware upgrade).

For example, if you perform manual override when there is a Zigbee network failure, the LED flashes red rather than green slowly.

6 Operation on the device

There is one physical button on the device for user operation.

Operation	Device action
Long press (time > 5 s)	Join network
Long press (time > 10 s)	Factory reset to idle
Double press (within 1 s)	Manual override: Change output state. See Manual override behavior [→ 7] for more details. Upon manual override, switching on/off relay outputs in the mobile application does not take effect within 15 minutes. After that, the previous operating mode resumes. If network fails, manual override continues until network is resumed.

6.1 Manual override behavior

If both relays are wired to corresponding equipment, pressing the operation button twice switches on/off the first relay output (Q1). The second relay output (Q2) follows the first relay output's changed state.

Output Q1	Output Q2	After manual override	Output Q1	Output Q2
On	On		Off	Off
On	Off		Off	Off
Off	On		On	On
Off	Off		On	On

6.2 Minimum output on/off time

Upon manual override, pressing the operation button twice switches on/off relays immediately without any minimum on/off time. However, if the device is in automatic mode and follows programmed schedules in the mobile application, the minimum output on/off time is 1 minute. Having this limit of on/off switching cycle is to protect the HVAC equipment and reduce wear and tear.

7 Upgrading firmware

Firmware version of the device is displayed in the mobile application. Once a new firmware version is available, you can upgrade the firmware via the mobile application.

NOTICE	
!	If upgrading firmware from v1000x to v20007 or higher, perform a factory reset on the RCR110.2ZB, remove the device from the mobile application, and then re-add it based on its field application.

NOTICE	
!	The firmware upgrade may not be notified in the mobile application at the same time if product versions are different. See the product version on the label (the number after "2PFS") on the back of the device.

8 Cyber security disclaimer

Siemens provides a portfolio of products, solutions, systems and services that includes security functions that support the secure operation of plants, systems, machines and networks. In the field of Building Technologies, this includes building automation and control, fire safety, security management as well as physical security systems.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art security concept. Siemens' portfolio only forms one element of such a concept.

You are responsible for preventing unauthorized access to your plants, systems, machines and networks which should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. Additionally, Siemens' guidance on appropriate security measures should be taken into account. For additional information, please contact your Siemens sales representative or visit the following website:

<https://www.siemens.com/global/en/products/automation/topic-areas/industrial-cybersecurity.html>.

Siemens' portfolio undergoes continuous development to make it more secure. Siemens strongly recommends that updates are applied as soon as they are available and that the latest versions are used. Use of versions that are no longer supported, and failure to apply the latest updates may increase your exposure to cyber threats. Siemens strongly recommends to comply with security advisories on the latest security threats, patches and other related measures, published, among others, under the following website:

<https://www.siemens.com/cert/> => 'Siemens Security Advisories'.

Issued by
Siemens Switzerland Ltd
Smart Infrastructure
Global Headquarters
Theilerstrasse 1a
CH-6300 Zug
+41 58 724 2424
www.siemens.com/buildingtechnologies

© Siemens 2024

Technical specifications and availability subject to change without notice.