SIEMENS

Connected Home Water Sensor

SCH040ZB

Detects and informs you of water leakage at initial stage

- Battery-operated
- Audible alarm and message indication of water leakage
- Easy to install
- Communicates with Connected Home Hub via Zigbee network

Use

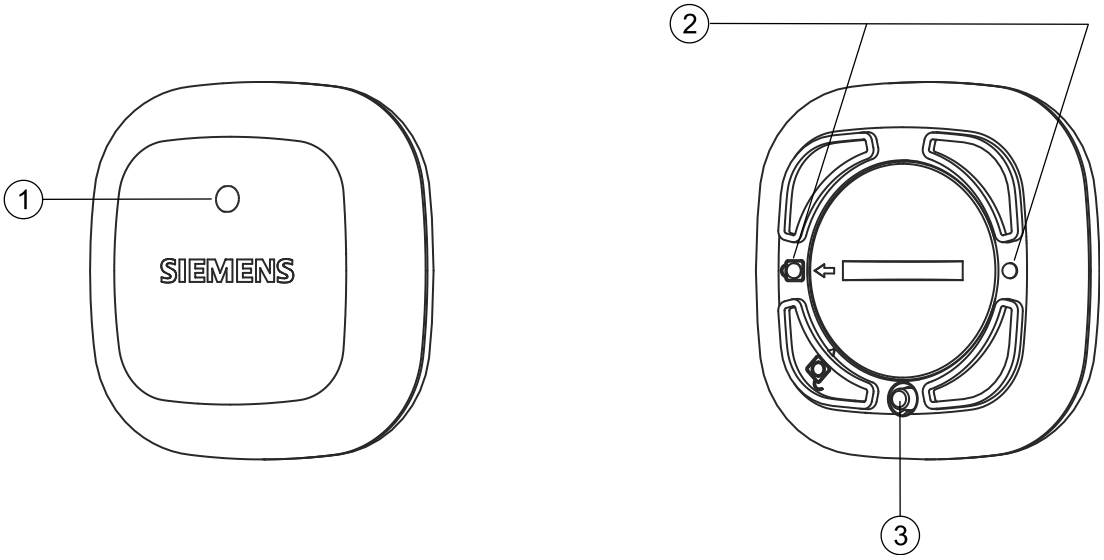
You can put the sensor in kitchen, washroom or balcony in your home to detect water leakage.

Mechanical design

The sensor consists of the following parts:

- Front housing
- Back housing
- Battery door
- Sensing probe

Sensor layout



No.	Description
1	LED indicator
2	Sensing probe
3	Button for user operation: ● When using the sensor for the first time, press and hold it down for 5 s to wake up the device from the deep sleep mode. ● Press it shortly to check sensor status. ● Press and hold it down for 3 s to join Zigbee network (initiated from the mobile application). ● Press and hold it down for 10 s to perform factory reset. ● See LED indication [► 3] for more information.

LED indication

Sensor state	Checking method[1)]	LED state
Sensor not added to the hub	Press the operation button shortly or reinstall the batteries	Solid amber for 8 s then turns off
Low battery		Flashes red fast for 8 s then turns off
Successful connection	Press the operation button shortly or after the connection is successfully established	Solid green for 8 s then turns off
Zigbee network failure[2)3)]	Press the operation button shortly	Flashes red slowly for 16 s (1 s on, 1 s off, 1 s on)
Firmware upgrade in process		Flashes amber for 8 s then turns off

Activity	Operation on the sensor	LED state
Join Zigbee network (initiated from the mobile application, 2-minute timeout)	Press and hold down the operation button for 3 s	Flashes green fast
Perform factory reset	Press and hold down the operation button for 10 s	Flashes red and green alternately and fast, and then turns off. After 1 to 3 seconds, the LED turns to solid amber for 8 seconds and then turns off.
Locate sensor (initiated from the mobile application when Zigbee network connection is normal)	No operation needed	Flashes green slowly (1 s on, 1 s off, 1 s on) until location is complete, then turns off

1. If the checking method is the same, priority of LED state indication (high to low) is: low battery > Zigbee network status > firmware upgrade.

   For example, if there is a Zigbee network failure when battery level is low, the LED flashes red fast rather than slowly.
2. Check if the hub is powered on and try to reduce distance between the sensor and the hub.
3. Try network reconnection.
   – Remove the sensor from the mobile application, perform factory reset and then rejoin the Zigbee network.

Operation and settings

To add the sensor to the hub

◈ Add the sensor to the hub from the mobile application "Connected Home" following on-screen instructions.

To reset the sensor to factory settings

◈ See LED indication [▶ 3].

To remove battery insulation before using the sensor for the first time

1. Detach the instructive insulation label from the back cover.
2. Twist the back cover of the sensor gently using a tool, e.g., a coin, to the unlock position and remove the cover.
3. Tear off the battery's insulation sheet.
4. Put back the cover and twist it to the lock position.

To replace battery

1. Twist the back cover of the sensor gently using a tool, e.g., a coin, to the unlock position and remove the cover.
2. Remove the old battery and insert a new one.
3. Put back the cover and twist it to the lock position.
4. Dispose of the exhausted battery in compliance with environmental requirements.

Water leakage indication on the sensor

After the sensor detects water leakage, it buzzes for 2 seconds, followed by silence for 1 second, and then another two-second buzz within the first 3 minutes, no matter whether water leakage stops or not.

If the leakage continues after 3 minutes, the sensor buzzes for 2 seconds every 5 minutes for 12 times in total.

If the leakage continues after the 12-time buzzes, the sensor stops buzzing.

The sensor stops buzzing immediately when the leakage stops after the first 3 minutes.

Go to the mobile application for more operations such as assigning the sensor to a room and viewing monitoring records on water leakage.

Type summary

Type	Stock number	Description
SCH040ZB	S55772-T118	Connected Home Water Sensor

Ordering

When ordering, indicate product number, stock number and description.

Inbox items

Items	Quantity
Sensor	1
Battery (CR2032, installed in the device)	1
Mounting instructions	1

Equipment combinations

Product number	Stock number	Description
GTW100ZB	S55772-T109	Connected Home Hub

Product documentation

Title	Document ID
Mounting instructions	A6V13959847
CE declaration	A5W00705027A
UKCA declaration	A5W00705028A
Product environmental declaration	A5W00670144A

Related documents such as the environmental declarations, declarations of conformity, etc., can be downloaded from the following Internet address:
www.siemens.com/bt/download

Notes

Safety

⚠ CAUTION	
	**National safety regulations** Failure to comply with national safety regulations may result in personal injury and property damage. ● Observe national provisions and comply with the appropriate safety regulations.

	**For indoor use only**
	The sensor is for indoor use only. Do not place it outdoors.

Mounting

- Place the sensor directly on surfaces that need monitoring, e.g., under washing machine, sink or toilet.
- Adhere to allowed ambient conditions.

Installation

⚠ WARNING	
	**Risk of explosion** Personal injury and property damage ● Install only the correct battery type according to the indication in the battery compartment. ● In case of a leakage, avoid contact with skin, eyes and mucous membranes. ● Remove leaking battery from the battery compartment with a cloth.

Observe the following:

- Remove battery insulation before using the sensor for the first time.
- The battery must be undamaged.
- The battery is for normal use under normal ambient room temperature.
- Remove the back cover to install/replace the battery. See Operation and settings [▶ 3] for information on battery replacement.
- Remove the battery before disposing of the sensor.
- Dispose of the exhausted battery in compliance with environmental requirements.

Maintenance

The sensor is designed for maintenance-free operation.

Open Source Software (OSS)

Software license overview

The device uses Open Source Software (OSS). All Open Source Software components used in the product (including copyrights and licensing agreement) are available at http://siemens.com/bt/download.

OSS document ID	Device
A6V14538718	SCH040ZB

Disposal

	This symbol or any other national label indicate that the product, its packaging, and, where applicable, any batteries may not be disposed of as domestic waste. Delete all personal data and dispose of the item(s) at separate collection and recycling facilities in accordance with local and national legislation. For additional details, refer to Siemens information on disposal.

Warranty

Technical data on specific applications are valid only together with Siemens products listed under "Equipment combinations". Siemens rejects any and all warranties in the event that third-party products are used.

Power supply	
Operating voltage	DC 3 V (1 x CR2032 lithium coin battery)
Battery life	Up to 2 years

Radio parameters	
Frequency band	2.4…2.4835 GHz
Maximum radio-frequency power	< 10 dBm (antenna gain is 0...2, depending on models)
Communication standard	Based on Zigbee
MAC protocol	IEEE 802.15.4
Communication range*	30 m (indoor)
Zigbee channels	11...26
Pairing method with GTW100ZB	Global Link Key

* The range depends largely on building structure and indoor environment.

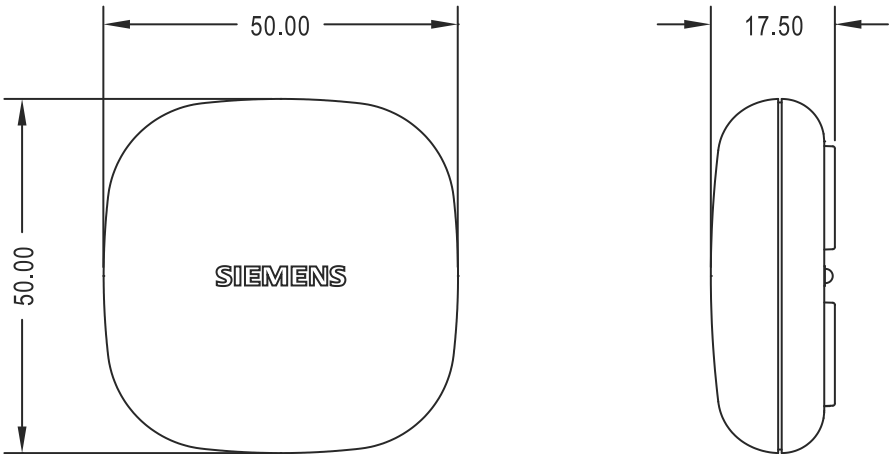
Ambient conditions and protection classification	
Degree of pollution	2
Overvoltage category	I
Protection against electrical shock as per EN 60730-1	Protection class III
Degree of protection of housing as per EN 60529	IP68 (max. 1.5 m in depth, up to 30 minutes)
Climatic ambient conditions	
Operation (in dry locations having no temperature or humidity control)	Temperature: 0...50 °C Ambient humidity: 5...95 % r.h. (Non condensing)
Transport and storage (in packaging)	Temperature: -25...+70 °C Ambient humidity: 5...95 % r.h. (Non condensing)
Operation altitude	Max. 3,000 m above sea level

Standards, directives and approvals	
Electromagnetic compatibility	For residential and commercial environments
EU conformity (CE)	See EU declaration of conformity A5W00705027A*
UK conformity (UKCA)	See UK declaration of conformity A5W00705028A*
Environmental compatibility	The product environmental declaration A5W00670144A* contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal).

* The documents can be downloaded from www.siemens.com/bt/download.

General	
Dimensions	See "Dimensions [▶ 8]"
Color	RAL9016
Sensor	Water leakage detector
Sensitive range	< 14M ohm
Buzzer alarm	> 60 dBA @ 0.3 m
Firmware upgrade	Via the mobile application
Weight (net)	26 g
Weight (with box, user document and accessory)	72.5 g

Dimensions



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