

Home > Documentation > [Shelly Blu H&T Zb](#)

Shelly Blu H&T Zb



Device identification

- Device name: **Shelly BLU H&T ZB**
- Device model: **SBHT-203C**
- Device Bluetooth ID: **0x0011**

[Device models reference](#)

Short description

Shelly BLU H&T ZB is a smart humidity and temperature sensor. It has Zigbee and Bluetooth connectivity ensuring a secure connection with an extended battery life.

Main features

- Long battery life
- Air temperature and humidity reporting
- Splash and dust-resistant
- Compact size

Use cases

- **Climate control:** Adjust the heating, ventilation, and air conditioning system based on current temperature and humidity levels to maintain a comfortable indoor environment.
- **Prevent mold and mildew:** Monitor humidity levels to prevent the growth of mold and mildew in spaces like basements and bathrooms. The Shelly BLU H&T can activate ventilation or dehumidification devices when needed.
- **Alerts and notifications:** Receive alerts or notifications when the temperature or humidity reaches predefined thresholds and prevent issues like frozen pipes in cold weather or excessive moisture.

- **Optimizing greenhouse conditions:** Optimize conditions for greenhouse plants by adjusting watering systems and ventilation based on humidity and temperature levels.
- **Security enhancement:** Increase your home protection by detecting unusual temperature changes that might indicate fire or flood.
- **Appliance control:** Adjust operation of dehumidifiers, humidifiers, and fans based on the current temperature and humidity conditions.

Connectivity

- Bluetooth
- Zigbee

User interface

Inputs

- One push button
 - One press: Sends the currently measured ambient temperature in °C, relative humidity in %, and a button-pressed event.
 - Four quick presses or 10-second press: Initiates pairing with another Bluetooth device.
 - Five quick presses: Activates Zigbee pairing.
 - A 30-second press: Performs a factory reset (possible only shortly after inserting the battery).

Outputs

- One single-color (red) LED
 - One flash: The Device sends the current ambient temperature, humidity, and button-pressed event.
 - One flash every 2 seconds for 1 minute: The Device enters Bluetooth pairing mode for 1 minute.
 - Two flashes every 2 seconds for 1 minute: The Device enters Zigbee pairing mode for 1 minute.
 - One long flash: The Device performs a factory reset.

Specifications

Quantity	Value
Physical	
Size (HxWxD):	37x37x10 mm / 1.46x1.46x0.39 in
Weight:	13 g / 0.44 oz
Mounting	On a flat surface
Shell material:	Plastic
Color:	• Black • Mocha • Ivory

Environmental	
Ambient temperature:	-20 °C to 60 °C / -5 °F to 140 °F
Humidity:	0% to 100% RH
Electrical	
Power supply:	1x 3 V battery (included)
Battery type:	CR2032
Battery life:	3 years
Sensors	
Humidity sensor:	Yes
Temperature sensor:	Yes
Bluetooth	
Protocol:	5 (LE)
RF band:	2402 - 2480 MHz
Max. RF power:	< 8 dBm
Range:	Up to 10 m / 33 ft indoors and 30 m / 100 ft outdoors (Depends on local conditions)
Zigbee	
Protocol:	802.15.4
RF band:	2405 to 2480 MHz
Max. RF power:	< 8 dBm
Range:	Up to 10 m / 33 ft indoors and 30 m / 100 ft outdoors (Depends on local conditions)

Microcontroller unit	
CPU:	EFR32MG27
Flash:	768 kB
Firmware capabilities	
Schedules:	No
Webhooks (URL actions):	No
Scripting:	No
MQTT:	No
Encryption:	Yes
Other	
Supported Devices	• Shelly Plus / Gen3 / Gen4 series • Shelly Pro series

Components and APIs

- [This device](#)
- [All Shelly devices and services](#)

Compliance

- [Shelly BLU H&T ZB multilingual EU declaration of conformity 2025-11-26.pdf](#)
- [Shelly BLU H&T ZB UK PSTI ACT statement of compliance 2025-11-26.pdf](#)
- [Shelly BLU H&T ZB UKCA declaration of conformity 2025-11-26.pdf](#)

Printed user guide

- [Shelly BLU HT ZB printed user and safety guide.pdf](#)