

USER AND SAFETY GUIDE

WI-FI HUMIDITY AND TEMPERATURE SENSOR

Read before use

This document contains important technical and safety information about the device, its safety use and installation.

CAUTION! Before beginning the installation, please read this guide and any other documents accompanying the device carefully and completely. Failure to follow the installation procedures could lead to malfunction, danger to your health and life, violation of the law or refusal of legal and/or commercial guarantee (if any). Allterco Robotics EOOD is not responsible for any loss or damage in case of incorrect installation or improper operation of this device due to failure of following the user and safety instructions in this guide.

Product Introduction

Shelly® is a line of innovative microprocessor-managed devices, which allow remote control of electric circuits through a mobile phone, tablet, PC, or home automation system. Shelly® devices can work standalone in a local Wi-Fi network or they can also be operated through cloud home automation services. Shelly Cloud is a service that can be accessed using either Android or iOS mobile application, or with any internet browser at <https://home.shelly.cloud/>. Shelly® devices can be accessed, controlled and monitored remotely from any place where the User has internet connectivity, as long as the devices are connected to a Wi-Fi router and the Internet. Shelly® devices have embedded Web Interface accessible at <http://192.168.33.1> when connected directly to the device access point, or at the device IP address on the local Wi-Fi network. The embedded Web Interface can be used to monitor and control the device, as well as adjust its settings.

Shelly® devices can communicate directly with other Wi-Fi devices through HTTP protocol. An API is provided by Allterco Robotics EOOD. For more information, please visit: <https://shelly-api-docs.shelly.cloud/#shelly-family-overview>.

Shelly® devices are delivered with factory-installed firmware. If firmware updates are necessary to keep the devices in conformity, including security updates, Allterco Robotics EOOD will provide the updates free of charge through the device embedded Web Interface or Shelly Mobile Application, where the information about the current firmware version is available. The choice to install or not the device firmware updates is user's sole responsibility. Allterco Robotics EOOD shall not be liable for any lack of conformity of the device caused by failure of the user to install the provided updates in a timely manner.

Shelly Plus H&T (the Device) is a Wi-Fi smart humidity and temperature sensor.

Installation instruction

CAUTION! Do not use the Device if it has been damaged.

CAUTION! Do not attempt to service or repair the Device yourself.

1. Power supply

Shelly Plus H&T can be powered by 4 AA (LR6) 1.5 V batteries or a USB Type-C power supply adapter.

CAUTION! Use the Device only with batteries or USB Type-C power supply adapters that comply with all applicable regulations. Inappropriate batteries or power supply adapters may damage the Device and cause fire.

A. Batteries

Remove the Device back cover using a flat screw driver as shown on fig. 1, insert the bottom row batteries as shown on fig. 3 and the top row batteries as shown on fig. 4.

CAUTION! Make sure the batteries + and - signs correspond to marking on the Device battery compartment (fig. 2 A)

B. USB Type-C power supply adapter

Insert the USB Type-C power supply adapter cable into the Device USB Type-C port (fig. 2 C)

CAUTION! Do not connect the adapter to the Device if the adapter or the cable are damaged.

CAUTION! Unplug the USB cable before removing or placing the back cover.

IMPORTANT! The Device cannot be used to charge rechargeable batteries.

2. Starting

When initially powered the Device will be put in Setup mode and the display will show SEt instead of the temperature. By default the Device access point is enabled, which is indicated by RP in the bottom right corner of the display. If it is not enabled, press and hold the Reset button (fig. 2 B) for 5 seconds to enable it.

IMPORTANT! To save the batteries the Device stays in Setup mode for 3 minutes and then goes to Sleep mode and the display will show the measured temperature. Press briefly the Reset button to bring it back to Setup mode. Pressing briefly the Reset button while the Device is in Setup mode will put the Device to Sleep mode.

3. Inclusion to Shelly Cloud

If you choose to use the Device with the Shelly Cloud mobile application and Shelly Cloud service, instructions on how to connect the Device to the Cloud and control it through the Shelly App can be found in the "App Guide".

The Shelly Mobile Application and Shelly Cloud service are not conditions for the Device to function properly. This Device can be used stand-alone or with various other home automation platforms and protocols.

CAUTION! Do not allow children to play with the buttons/switches connected to the Device. Keep the Devices for remote control of Shelly (mobile phones, tablets, PCs) away from children.

4. Manually connecting to a local Wi-Fi network

Shelly Plus H&T can be managed and controlled through its embedded web interface. Make sure the Device is in Setup mode, its access point is enabled and you are connected to it using a Wi-Fi enabled device. From a web browser open the Device Web Interface by navigating to 192.168.33.1. Click the Networks button and then expand the Wifi section.

Enable the Wifi1 and/or Wifi2 (backup network) by toggling the corresponding Enable switch. Enter the Wi-Fi network name(s) (SSID) or select it(them) by clicking on the gray Click here to select network link(s). Enter the Wi-Fi network password(s) and click APPLY.

The Device URL will appear in blue color at the top of the Wifi section, when the device is successfully connected to the Wi-Fi network.

RECOMMENDATION: For security reasons we recommend disabling the AP mode, after the Device successful connection to the local Wi-Fi network. Expand the Access point section and toggle the Enable switch.

When ready including the Device to Shelly Cloud or another service, place the back cover.

CAUTION! Unplug the USB cable before removing or placing the back cover.

5. Attaching the stand

If you want to place the Device on your desk, on a shelf or any other horizontal surface, attach the stand as shown on fig. 5.

6. Wall mounting

If you want to mount the Device on a wall or any other vertical surface use the back cover to mark the wall where you want to mount the Device.

CAUTION! Do not drill through the back cover.

Use screws with head diameter between 5 and 7 mm and max 3 mm thread diameter to fix the Device to a wall or another vertical surface.

Another option to mount the Device is using a double sided foam sticker.

CAUTION! The Device is intended for indoor use only.

CAUTION! Protect the Device from dirt and moisture.

CAUTION! Do not use the Device in a damp environment and avoid water splashing.

Reset button actions

The Reset button is shown on fig. 2 B.

Press briefly:

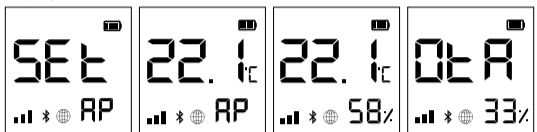
• If the Device is in Sleep mode, puts it in Setup mode.

• If the Device is in Setup mode, puts it in Sleep mode.

Press and hold for 5 sec: If the Device is in Setup mode, enables its access point.

Press and hold for 10 sec: If the Device is in Setup mode, factory resets the Device.

Display



• SEt The Device is in Setup mode.

• RP The Device access point is enabled.

• 58% Humidity

• 22.1°C The Device is receiving over-the-air update. Shows the progress in percents instead of the humidity.

• ☁ Device has reported current readings to the Cloud. If missing, the current readings on the display are not yet reported. In this case the readings on the display may differ from the ones in the Cloud.

• 📶 Wi-Fi signal strength indicator

• 🔋 Indicates battery level. Shows an empty battery when USB powered.

• 📶 Bluetooth connectivity is enabled. Bluetooth is used for inclusion. It can be disabled from the Shelly app or the Device local web interface.

• ▲ Error while updating the Device firmware

Specifications

- Power supply:
 - Batteries: 4 AA (LR6) 1.5 V (batteries not included)
 - USB power supply: Type-C (cable not included)
- Estimated battery life: Up to 12 months
- Electrical consumption: Sleep mode $\leq 32\mu\text{A}$ / Setup mode $\leq 76\text{mA}$
- Humidity sensor measurement range: 0-100%
- Working temperature: 0°C-40°C
- Radio signal power: 1mW
- Radio protocol: Wi-Fi 802.11 b/g/n
- Frequency: 2412-2462 MHz
- Max RF output power <15 dBm
- Dimensions without stand (HxWxD): 70x70x26 mm
- Dimensions with stand (HxWxD): 70x70x45 mm
- Operational range: up to 50 m outdoors / up to 30 m indoors
- Bluetooth: v.4.2
- Bluetooth modulation: GFSK, $\pi/4$ -DQPSK, 8-DPSK
- Bluetooth frequency: TX/RX - 2402 - 2480MHz
- RF output Bluetooth: $\leq 5\text{dBm}$
- Webhooks (URL actions): 10 with 2 URLs per hook
- MQTT: Yes
- CPU: ESP32
- Flash: 4 MB

Declaration of conformity

Hereby, Allterco Robotics EOOD declares that the radio equipment type for Shelly Plus H&T is in compliance with Directive 2014/53/EU, 2014/35/EU, 2014/30/EU, 2011/65/EU. The full text of the EU declaration of conformity is available at the following internet address:

<https://shelly.cloud/knowledge-base/devices/shelly-plus-h/>

Manufacturer: Allterco Robotics EOOD

Address: Bulgaria, Sofia, 1407, 103 Cherni vrah Blvd.

Tel.: +359 2 988 7435

E-mail: support@shelly.cloud

Web: <https://shelly.cloud>

Changes in the contact data are published by the Manufacturer at the official website of the Device <https://shelly.cloud>

All rights to trademark Shelly®, and other intellectual rights associated with this Device belong to Allterco Robotics EOOD.

fig.1

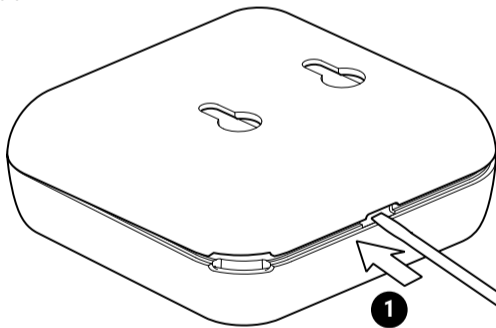


fig.2

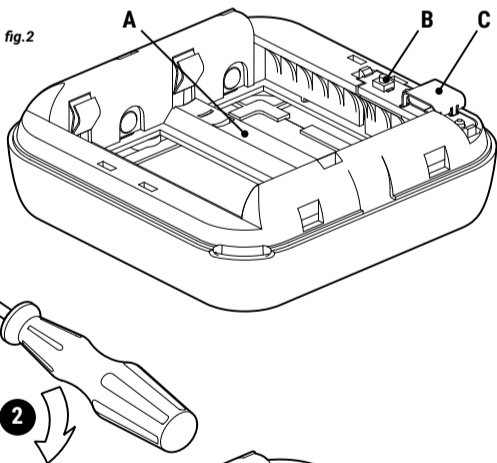


fig.3

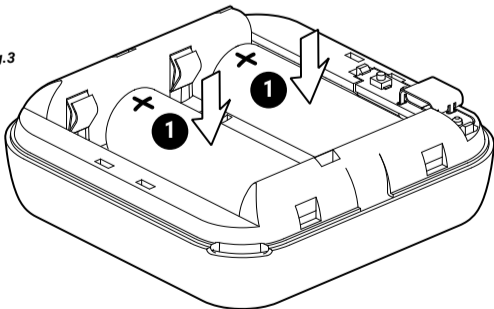


fig.4

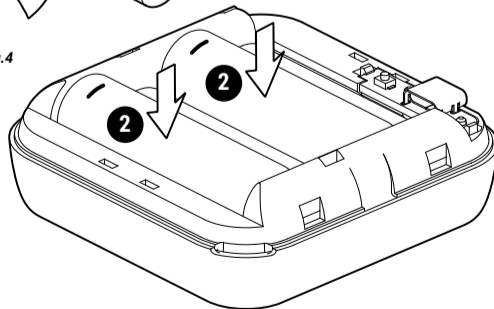
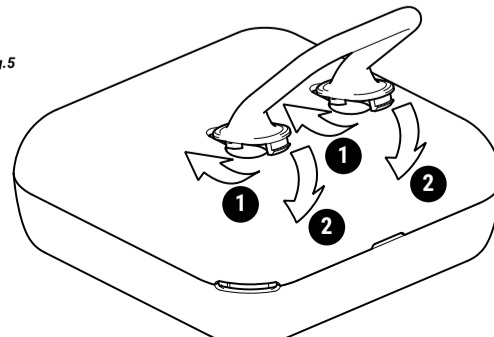


fig.5



FCC Warning

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.