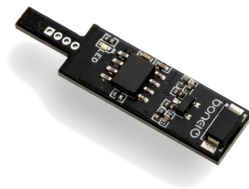


USER MANUAL

boneIO Edge Temperature & Humidity



ENGLISH VERSION



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 instruction 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). boneIO 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

⚠ CAUTION

Danger of electrocution. Mounting and Installation of the boneIO device to the power grid has to be performed with caution, by a qualified person (electrician).

⚠ CAUTION

Danger of electrocution. Every change in the connection of the terminals has to be done after ensuring all local power is powered off/disconnected.

⚠ CAUTION

The power supply that powers the boneIO device should be connected by protecting it with a differential switch and a circuit breaker.

Product Information

This is an advanced **temperature & humidity sensor**, designed for integration with smart home systems, such as Home Assistant, using modbus.

Main Features

- **Power Supply:** The device operates on a DC voltage range of **5-24V DC**.
- **Temperature range:** Very wide range -40 to 125°C.
- **Accuracy:** To 0.2°C
- **Humidity range:** From 0 to 100%.
- **Accuracy:** 1.8%
- **Small form factor:** The device is very small and light, the dimensions are 33x8x3mm and the weight is 2grams.
- **Connectivity:** Sensor use for communication reliable and stable bus RS485 - modbus.

Integration

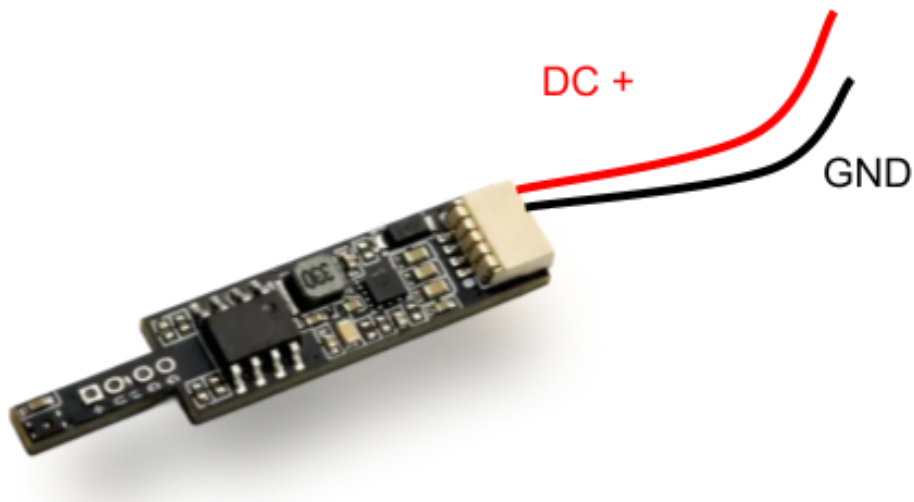
Edge Temperature & Humidity is built to work with the **Black** and **ESPHome** platform, which allows for easy configuration and deep integration with **Home Assistant**. This enables users to create advanced automations, and monitor its operation.

Comparison with other boneIO Products

Temperature & Humidity is the first device in the **Edge** series. This is a series of devices in which boneIO goes beyond the area of the electrical distribution board, all to provide an extensive and advanced ecosystem.

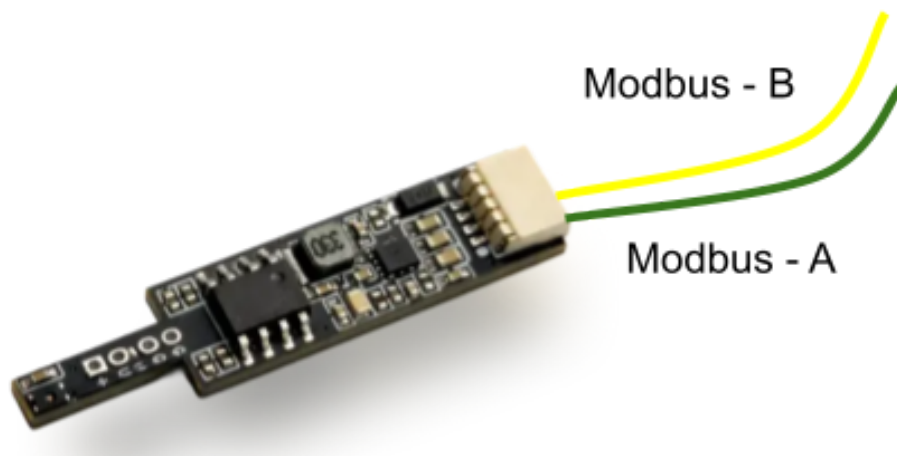
Power up device

To power the device, connect **5-24VDC**. Remember to correctly connect the **+** and **GND** polarity! **Red wire - is +**, **Black - Ground**.



Connecting Modbus RTU

Connect the **Modbus** bus cable to the ports of the **corresponding wires**. **Green wire - Modbus - A**, **yellow wire - Modbus - B**.



Software installation

boneiO Edge Temperature & Humidity is compatible with both Black and ESP series controllers. It is delivered with the following parameters:

- Address: 1
- Baud rate: 9600
- Parity: none

Extensive documentation along with step-by-step instructions can be found at:
<https://boneio.eu/en/docs/edge/products/tempandhumidity/overview>

Technical data

| | |
|----------------------|------------------|
| Power supply | 5-24V DC |
| Power consumption | < 20mW |
| Temperature Range | -40 to 125°C |
| Measurement Accuracy | 0.2°C |
| Humidity Range | 0 to 100% |
| Accuracy | 1.8% |
| Communication | Modbus RTU |
| Dimensions (WxHxD) | 33mm x 8mm x 3mm |
| Weight | 2g |



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Discord support:
<https://discord.gg/Hm2CzSjvtu>

