# 1W-T-IB2 on-wall temperature sensor

A compact on-wall sensor for the 1-Wire bus, designed to measure temperature in building interiors.

## Basic parameters

| | |
|---|---|
| **Sensor type** | DS18B20 |
| **Temperature measurement range** | -40 °C/+85 °C with +-0.5 °C tolerance |
| **Connectioń** | 1-Wire (screw terminal) |
| **Protection** | IP30 |
| **Plastic box material** | ABS plastic |
| **Installation** | Installation box (KU 68) |
| **Dimensions** | 100 × 100 × 25 mm |
| **Power supply** | 5 V (on connector along with 1-Wire) |
| **Max. current draw** | 2 mA |

## Installation guide

1. Remove the plastic box cover held in place by four small plastic holders visible from the below.
2. Connect all conductors to the sensor's screw terminal according to the descriptions:
    a. ← **1W:** 1-Wire bus input
    b. → **1W**: 1-Wire bus output
    c. +**5V:** direct voltage positive pole*
    d. **GND**: direct voltage negative pole*
3. Thread the wires out of the box through the circular opening in the backplate.
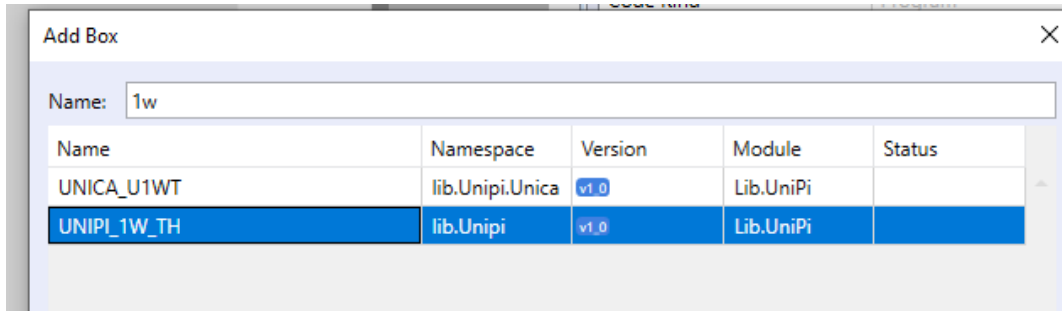4. Re-assemble the sensor.

*On all Unipi controllers the corresponding voltage is available on a single connector along with 1-Wire data conductor.*

## Software

The sensor is fully compatible both with the **Mervis**, the officially supported SW platform for Unipi products, and the **EVOK,** an open-source application programming interface (API)

### Mervis

For reading data from the sensor the Mervis IDE development environment contains *UNIPI_1W_TH* function block available in the Lib.Unipi library.

| Add Box | | | | × |
|---|---|---|---|---|
| Name: 1w | | | | |
| **Name** | **Namespace** | **Version** | **Module** | **Status** |
| UNICA_U1WT | lib.Unipi.Unica | v1_0 | Lib.UniPi | |
| UNIPI_1W_TH | lib.Unipi | v1_0 | Lib.UniPi | |

### EVOK

The sensor is detected automatically and be used right away. Measured values are accessible on an address of the particular sensor also serving as a device identification. You can find the address on a sticker provided with the product.

A request example: *192.168.221.78:8080/json/1wdevice/XYZ* (XYZ = sensor address)

## Useful info

- **Unipi Knowledge Base**
- **Unipi e-shop**
- **Unipi product catalogue**
- **Unipi homepage**