

Sensor CO₂ 1W-UNI

Temperature, relative humidity and CO₂ sensor



This unique sensor protects comfortable conditions in working and living environments. Different combinations of values for every home, office, or public installation.



Temperature – °C



Relative Humidity – %RH



Carbon dioxide – ppm



Sensor CO₂ 1W-UNI

Combined Temperature, Relative Humidity and CO₂ sensor in one box. Connected via RJ11 interface (1-Wire UNI bus) with most of the HW group monitoring devices.

The sensor can be connected to:



GSM / LTE



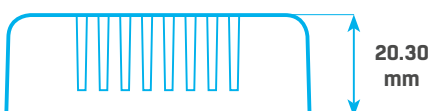
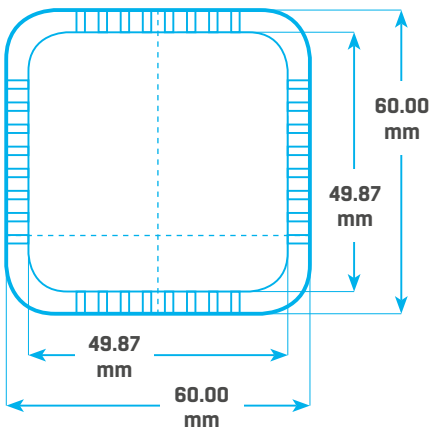
LAN



WiFi



NB IoT



Air quality levels	
Less than 500 ppm	Excellent
500-800 ppm	Very good
800-1200 ppm	Good
1200-1500 ppm	Bad
More than 1500 ppm	Unhealthy

Technical specifications

• Communication interface:

1-Wire UNI (RJ11)

• Sensor values (quantities): 3

• Maximum distance from active

1-Wire port: 30 m

• Power: 5V from RJ11 port

• Power limitation: max. 1 sensor per active RJ11 port

• Sensor dimensions: 60×60×20 mm

• Protection: IP30



Temperature

• **Range:** 0 – 50 °C

• **Accuracy:** 0.8 °C

• **Resolution:** 0.1 °C



CO₂

• **Range:** 300 – 40 000 ppm

• **Accuracy:** 50 ppm +3%

• **Resolution:** 1 ppm (0 – 2000 ppm)

• **Temperature stability:** 2.5 ppm / °C



Relative Humidity

• **Range:** 0 – 95 % RH

• **Accuracy:** 5% RH

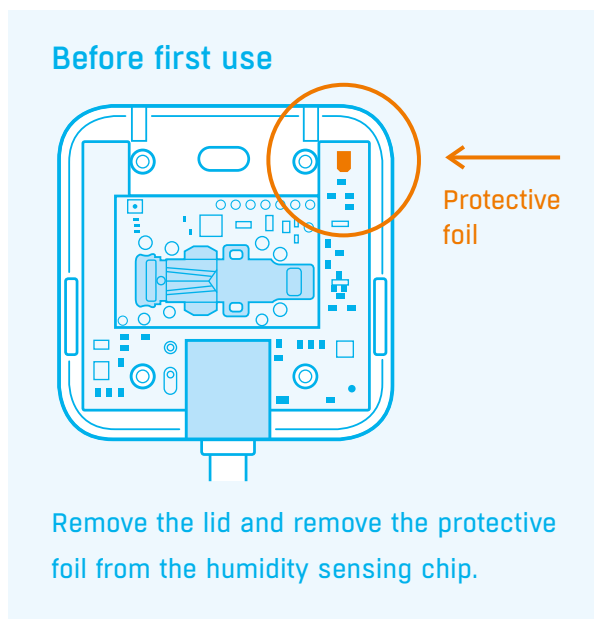
(20 – 80% RH / 25 °C)

• **Resolution:** 0.3% RH

Installation and use

Housed in an elegant plastic box, it can be mounted on a wall or a ceiling or placed on a desk (use double-sided adhesive tape).

1. Open the box & remove the protective foil from the humidity sensing chip.
2. Connect the sensor to any HW group monitoring device (RJ11 cable included).
3. Switch on device power & sersch for the sensors.
4. Temperature and humidity values are available immediately.
5. Internal **CO₂ sensor needs to be first calibrated in the environment**. The calibration takes 7 days; during this time, it is necessary to air the premises regularly and thoroughly, at least 3 times a day.



Versions and related products

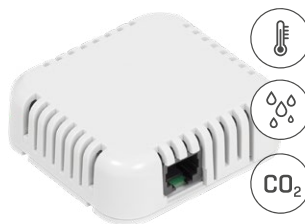
Compatibility: Ares, NB 2x1-Wire, Poseidon2, SD 2x1-Wire, STE2 r2



Temp HomeBox



HTemp HomeBox



Sensor CO₂ 1W-UNI



Sensor THPVoc 1W-UNI

Sensor name	Temperature	Relative Humidity	Atmospheric pressure	VOC	CO ₂	Sensor values
Temp HomeBox	✓	✗	✗	✗	✗	1
HTemp HomeBox	✓	✓	✗	✗	✗	2
Sensor CO ₂ 1W-UNI	✓	✓	✗	✗	✓	3
Sensor THPVoc 1W-UNI	✓	✓	✓	✓	✗	4