HW group

Sensor CO2 1W-UNI

Temperature, relative humidity and CO₂ sensor

°C	Temperature – °C
%RH	Relative Humidity – %RH
CO₂	Carbon dioxide – ppm

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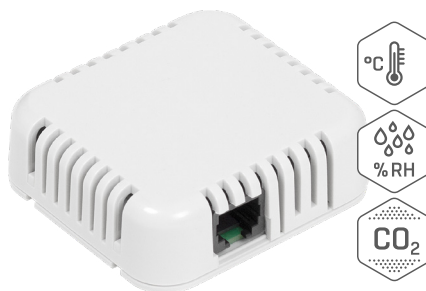

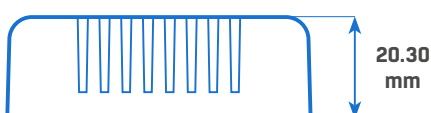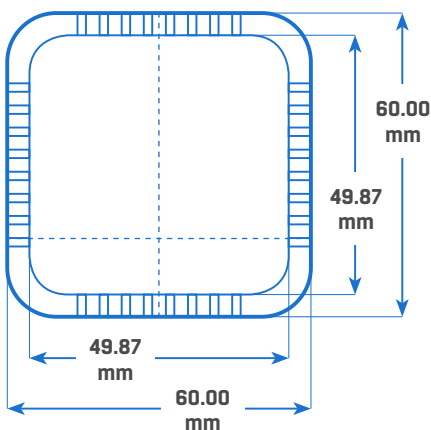### Sensor CO2 1W-UNI

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

Dimensions:

60.00 mm

49.87 mm

49.87 mm

60.00 mm

20.30 mm

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) Connect the sensor to any HW group monitoring device (RJ11 cable included).
2) Switch on device power & sersch for the sensors.
3) Temperature and humidity values are available immediately.
4) 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.

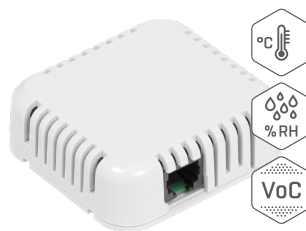# Versions and related products
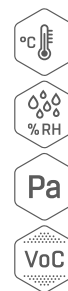
Compatibility: Ares, NB-2x1Wire, Poseidon2, SD-2x1Wire, STE2 R2

Temp HomeBox

HTemp HomeBox

Sensor CO2 1W-UNI

Sensor THPVoc 1W-UNI

Sensor name	Temperature	Relative Humidity	Atmospheric pressure	VOC	CO₂	Sensor values
Temp HomeBox	✔	✖	✖	✖	✖	1
HTemp HomeBox	✔	✔	✖	✖	✖	2
Sensor CO2 1W-UNI	✔	✔	✖	✖	✔	3
Sensor THPVoc 1W-UNI	✔	✔	✔	✔	✖	4