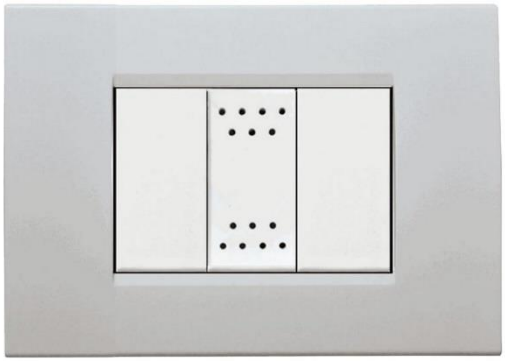
Technical Sheet

ROOM PROBE

Remote control via APP

Temperature-Humidity-tVOC probe



Probe for detecting the main parameters of an indoor environment.

Air humidity, temperature and total volatile organic compounds (tVOC) are measured.
CO2 concentration is calculated according to the tVOC measured value.

A digital sensor is used for recording the relative humidity and temperature to ensure exact measurement results.

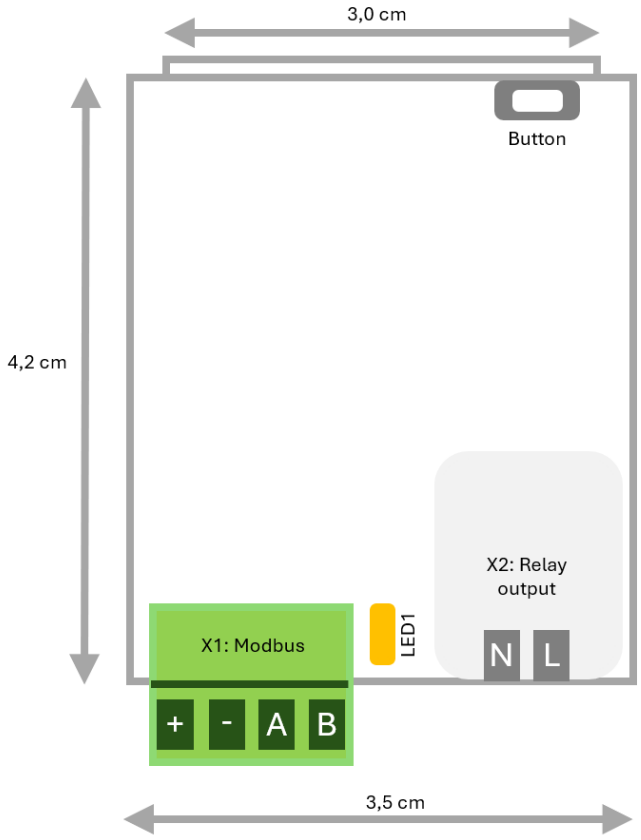
Together with the tVOC (a value that can be difficult to interpret), as well as the equivalent CO2, the air quality index (AQI) is provided, a level that indicates the quality of the air according to the EU legislation, which can be used to regulate the systems system for heating, ventilation and air conditioning (HVAC) according to the recommendations indicated to obtain correct ventilation of indoor environments.

TECHNICAL SPECIFICATION

Product Code	SND-THT	SND-THRT	SND-TH-LIGHTT	SND-THR-LIGHTT	SND-TH-VOCT
Compatible Control Unit	TSHT, TSTT, TSHMT	TSHT, TSTT, TSHMT	SCIOCENT, SCIOCOMT	SCIOCENT, SCIOCOMT	TSHT, TSTT, TSHMT
Power supply	12/24 V DC	12/24 V DC	12/24 V DC	12/24 V DC	12/24 V DC
Measurement range pressure	300...1100 hPa	300...1100 hPa	300...1100 hPa	300...1100 hPa	300...1100 hPa
Measurement range temp.	-40…85°C	-40…85°C	-40…85°C	-40…85°C	-40…85°C
Measurement range humidity	0…100%	0…100%	0…100%	0…100%	0…100%
Accuracy (typ)	± 0,5°C ± 3 % RH	± 0,5°C ± 3 % RH	± 0,5°C ± 3 % RH	± 0,5°C ± 3 % RH	± 0,5°C ± 3 % RH
Resolution	± 0,1°C ± 0,1%	± 0,1°C ± 0,1%	± 0,1°C ± 0,1%	± 0,1°C ± 0,1%	± 0,1°C ± 0,1%
Bus protocol	Modbus RTU	Modbus RTU	Modbus RTU	Modbus RTU	Modbus RTU
Consumption	5 mA	5 mA	5 mA	5 mA	5 mA
N. di relè* (works with AC)	0	1	0	1	0
Relay RMS current	NA	0,9A	NA	0,9A	NA
Relay Non repetitive surge current	NA	9A	NA	9A	NA
Mounting	Wall mounted	Wall mounted	Wall mounted	Wall mounted	Wall mounted

**Solid state relay. It cannot be used as dry contact.*

Geometry and dimensions of the ambient probe



Modbus RTU

PARAMETER: 9600 Baud, 8 Bits, Parity None, 1 Start bit, 1 Stop bit
ADDRESS: configurable from 0 to 245 via modbus interface and from 1 to 60 via push button (default 200).

Check the Modbus address with the button and LED

Click the button on the probe once. The LED will start to flash slowly to indicate the tens and quickly to indicate the units.

Ex. address 43: 4 slow flashes (1s) and 3 fast flashes (200ms)

Modbus address change with button

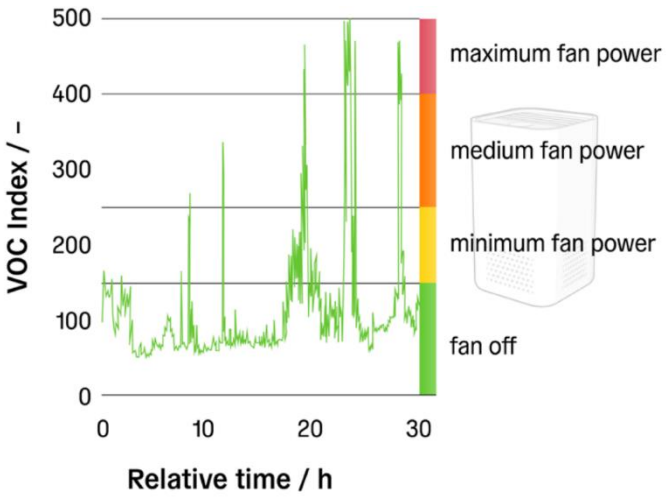
Keep the button pressed for more than 5 seconds. The sensor will enter programming mode and the LED will start to flash.

Count the number of flashes and release at the desired value. The sensor will restart with the address equal to the number of flashes.

Ex. address 12: 12 flashes

Factory address reset

Keep the button pressed for more than 65 seconds until the sensor restarts. The sensor will return to the factory address (200).



AIR QUALITY INDEX (AQI) TABLE:

Level	Hygienic Rating	Recommendation	TVOC (µg/m³)
5 Unhealty	Unacceptable situation	Intense ventilation necessary	10.000-25.000
4 Poor	Major objections	Intensified ventilation/airing necessary	3.000- 9.999
3 Moderate	Some objections	Intensified ventilation recommended	1.000-2.999
2 Good	No relevant objections	Ventilation/airing recommended	300-999
1 Excellent	No objections	No action needed	<300