

# User manual GRENTON MULTISENSOR IR SEN-181-T-0x

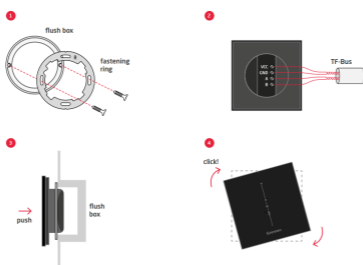
Grenton Multisensor IR provides many environmental parameters, such as: temperature, humidity, CO<sub>2</sub>, TVOC, atmospheric pressure, sound level and ambient light. It contains an IR (Infrared) transceiver, that allows you to control external devices such as Audio, TV, Air Conditioning. The versatile and intuitive control interface makes it easy and quick to control an individual device or the whole home.



## 1. Technical data

Temperature sensor	0 to +45 °C +/-0.5 °C at 25 °C
Humidity sensor	0 to 100 (Non-Condens.) %RH +/-5 %RH
Atmospheric pressure sensor	300 to 1100 hPa +/-2 hPa
CO <sub>2</sub> sensor (estimated by the H <sub>2</sub> )	400 to 60000 ppm +/-10 %
TVOC sensor	0 to 60000 ppb +/-15 %
Ambient light sensor	0 to 15000 lx +/-10 %
Sound level sensor	30 to 130 dB +/-3 dB
IR(Infrared) transceiver	940 nm, carrier frequency 38 kHz
Device power supply	24 Vdc
Maximal power consumption	0,3 W
Maximal device current	14 mA
Maximal wire cross section	1,5 mm <sup>2</sup>
Weight	110 g
Dimensions (H/W/D)	surface part: 80/80/10 mm, concealed part: Ø 50 mm / h: 22 mm
Operating temperature range	0 to +45 °C

## 2. Wiring diagram



VCC	power supply signal
GND	power supply ground signal
A	TF-bus A signal
B	TF-bus B signal

## 3. Warnings and cautionary statements



### ATTENTION !

- Before proceeding with the assembly, read the installation schematics and full instructions available at [www.grenton.com](http://www.grenton.com). Failure to follow the guidelines contained in the instructions and other requirements of due care valid as a result of the nature of the equipment (device) may be dangerous to life / health, damage the device or installation to which it is connected, damage other property or violate other applicable regulations. The manufacturer of the device, Grenton Sp. z o. o. does not bear any responsibility



### DANGER !

- Danger to life caused by electric current!
- The components of the installation (individual devices) are designed to work in a home

for the damage (property and non-property related) resulting from the assembly and / or use of the equipment not in accordance with the instructions and / or due diligence in handling the equipment (device).

- Device power supply, permissible load or other characteristic parameters have to be in accordance with the device specification, described in particular in the "Technical data" section.
- The product is not intended for children and animals.
- If you have technical questions or comments about the device operation, contact Grenton Technical Support.
- Answers to frequently asked questions can be found at: [www.support.grenton.pl](http://www.support.grenton.pl)

electrical installation or directly in its vicinity. Incorrect connection or use may cause a fire or electric shock.

- All work related to the installation of the device, in particular works involving interference in the electrical installation, may be performed only by a person with appropriate qualifications or licences.
- When installing the device, make sure that the power supply voltage is disconnected from the circuit in which the device is connected or near which the assembly takes place.

## 4. CE marking

The manufacturer declares that the device is in full compliance with the requirements of EU legislation that includes the directives of a new approach appropriate for this equipment. In particular, Grenton Sp. z o. o. declares that the device fulfills the requirements on safety, specified by law, and that it

conforms to the national regulations that implement the appropriate directives: The Directive on the electromagnetic compatibility (EMC - 2014/30/UE) and the Directive on the limitation of the use of specific substances in electrical and electronic equipment (RoHS II - 2011/65/UE).



## 5. Warranty

Warranty available at: [www.grenton.com/warranty](http://www.grenton.com/warranty)

## 6. Manufacturer contact details

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