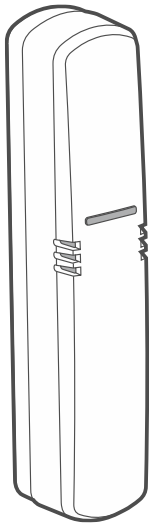
Temperature, pressure and humidity bus sensor

TPH-2

Firmware version 1.00

EN



CE

tph-2_en 10/26

SATEL sp. z o.o. • ul. Budowlanych 66 • 80-298 Gdańsk • POLAND
tel. +48 58 320 94 00
www.satel.pl

IMPORTANT

The device should be installed by qualified personnel.

Prior to installation, please read carefully this manual.

Changes, modifications or repairs not authorized by the manufacturer shall void your rights under the warranty.

Description of symbols on the device:

The device meets the requirements of the applicable EU directives.

The device must not be disposed of with other municipal waste. It should be disposed of in accordance with the existing rules for environment protection (the device was placed on the market after 13 August 2005).

The device is designed for indoor installation.

SATEL aims to continually improve the quality of its products, which may result in changes in their technical specifications and software. Current information about the changes being introduced is available on our website.
Please visit us at:
https://support.satel.pl

The declaration of conformity may be consulted at www.satel.pl/ce

Signs in this manual

Caution – information on the safety of users, devices, etc.

Note – suggestion or additional information.

CONTENTS

1. Features 2
2. Description 2
Electronics board 2
Terminals 2
LED indicator 2
3. Installation 3
Tips for installation 3
Mounting 3
4. Specifications 5

The TPH-2 sensor measures temperature, pressure and humidity. The sensor can be connected to the RS communication bus of a SATEL control panel that supports bus devices.

1. Features

- Temperature sensor:
  - measuring range: -10°C...+55°C,
  - measurement accuracy: ±0.2°C.
- Barometric pressure sensor:
  - measuring range: 260...1260 hPa,
  - measurement accuracy: ±1 hPa.
- Humidity sensor:
  - measuring range: 0% RH...93% RH,
  - measurement accuracy: ±1.5% RH.
- RS communication bus.
- Firmware update via the RS bus.
- LED indicator.
- Sensors supervision.
- Powered by 12 VDC (±15%).

2. Description

Electronics board

Do not remove the electronics board from the enclosure to avoid damage to the components on the board.

1

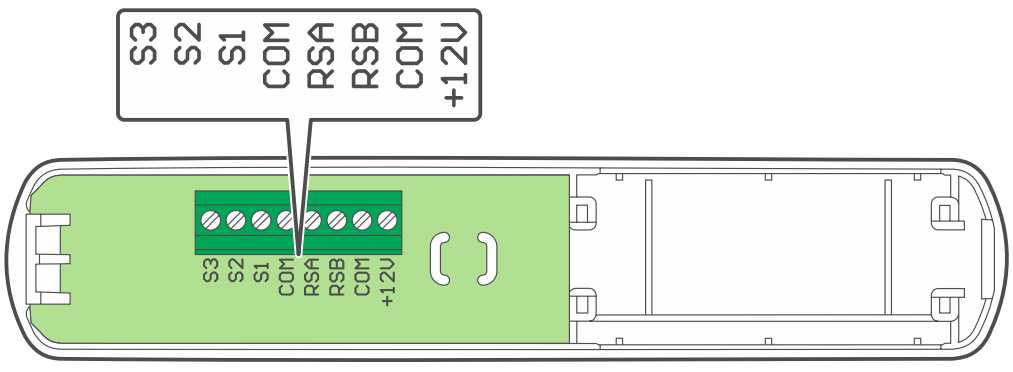


Figure 1 shows the inside of the sensor after opening the enclosure.

Terminals

S1...S3 - terminals for future use.
COM - common ground.
RSA, RSB - RS communication bus.
+12V - power input.

LED indicator

The LED indicator is flashing for several seconds after power on.

3. Installation

Disconnect power before making any electrical connections.

Tips for installation

- The sensor should be installed indoors, in spaces with normal air humidity.
- Do not install the sensor outdoors.
- The sensor requires 12 VDC power supply (±15%).
- To connect the power, use flexible wires with a cross-section of 0.5-0.75 mm^2.

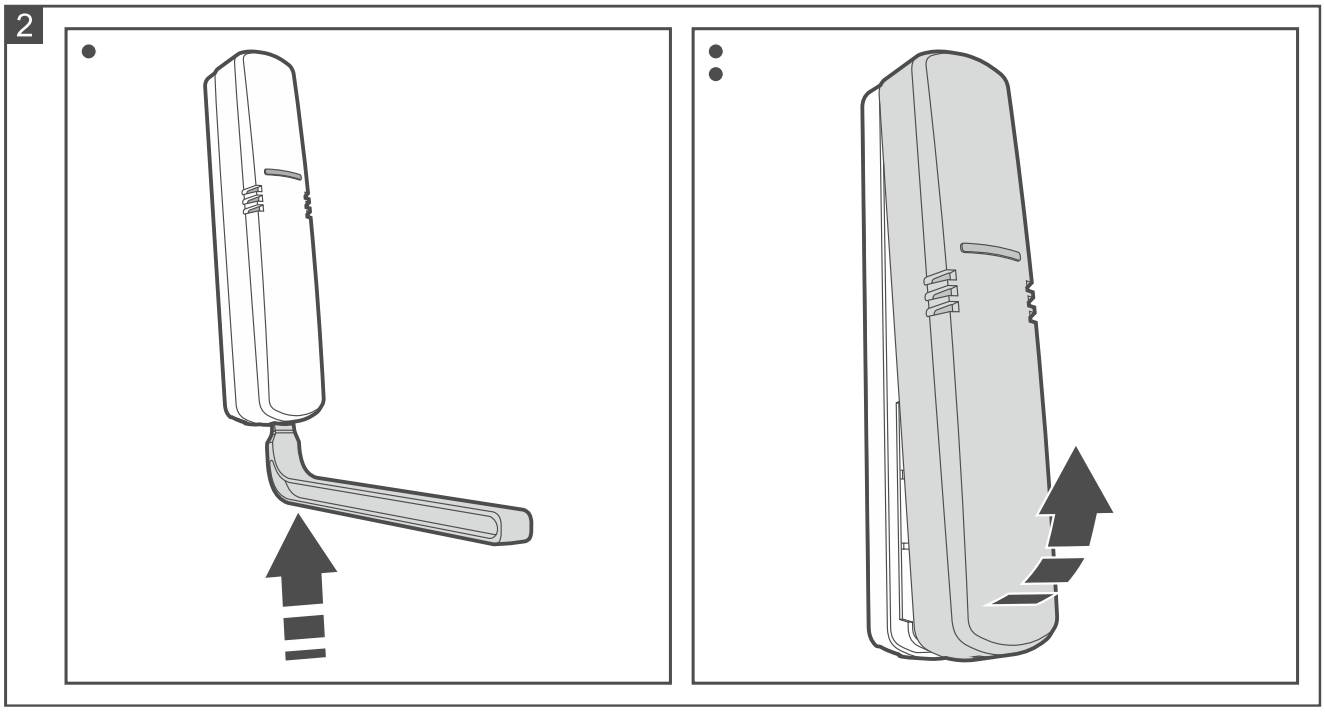
RS communication bus

- Use a UTP cable (unshielded twisted pair).
- The length of the bus must not exceed 1200 meters.
- If the device is connected at either end of the bus, place a 120 Ω ±20% resistor between the RSA and RSB terminals.
- Connect the COM terminals of all devices on the bus with an additional wire.

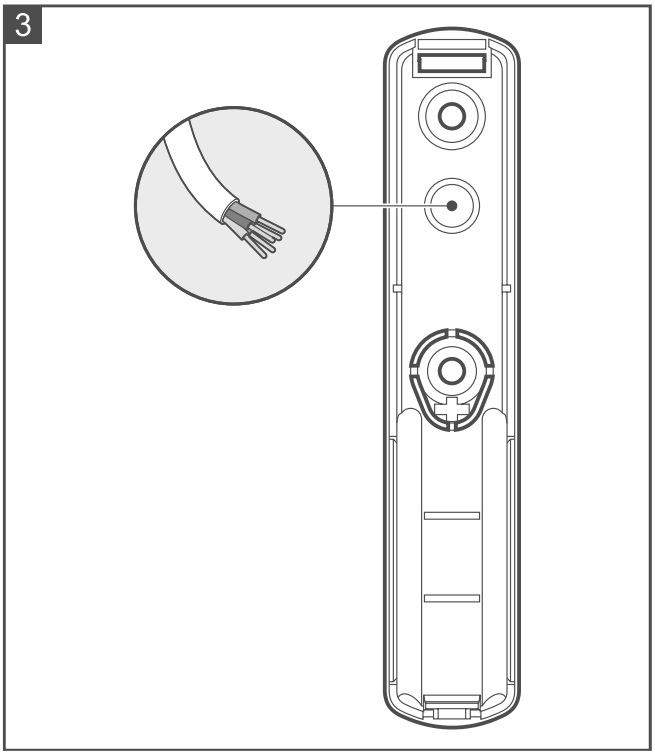
Mounting

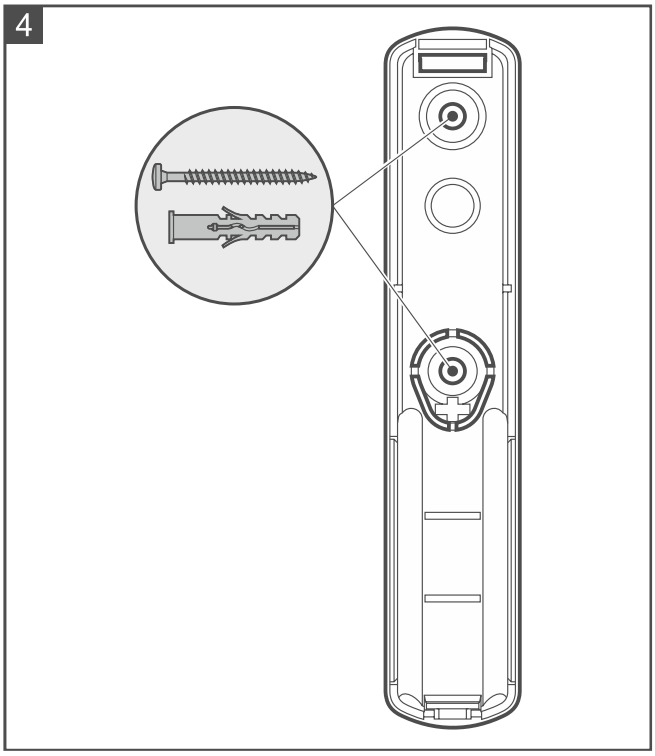
The figures show the detector mounted vertically, but it may be mounted in any position (it has no effect on its operation).

1. Open the sensor enclosure (Fig. 2). The enclosure opening tool, shown in the figure, is provided with the sensor.

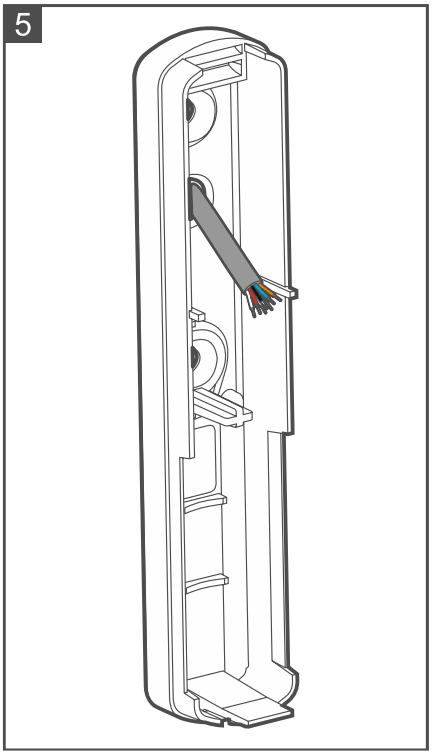


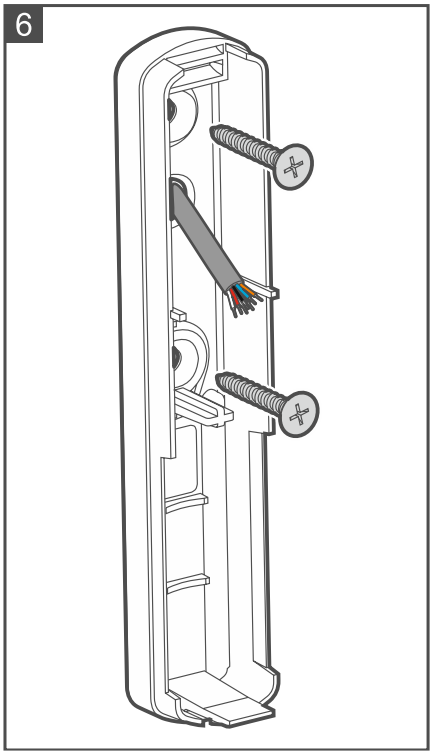
2. Make the opening for a cable in the enclosure base (Fig. 3).
3. Place the enclosure base against the wall and mark the location of the mounting holes (Fig. 4).

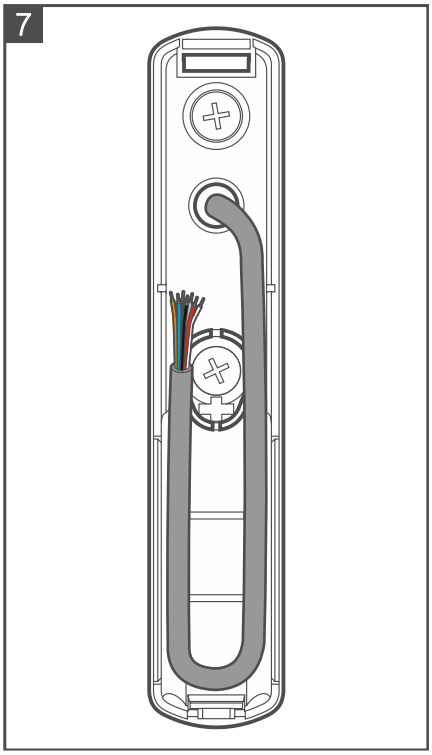




4. Drill the holes in the surface for wall plugs (anchors). The wall plugs provided with the sensor are intended for concrete or brick. For other types of surface (drywall, styrofoam), use other appropriately selected wall plugs.
5. Pass the cable through the prepared opening (Fig. 3 and 5).
6. Secure the enclosure base to the wall with screws (Fig. 6).
7. Shape the cable inside the enclosure base as shown in Figure 7.







8. Screw the communication bus wires to the RSA and RSB terminals on the electronics board (see: manual of the device to which the sensor is being connected).
9. Screw the power wires to the +12V and COM terminals on the electronics board.
10. Close the sensor enclosure.

11. Power on the sensor. The LED indicator will be flashing for several seconds to indicate the sensor warm-up.
12. Add the sensor to the system (see: manual of the device to which the sensor is connected).

4. Specifications

Supply voltage ..... 12 VDC ±15%
Maximum current consumption ..... 5 mA
Temperature measurement range ..... -10°C...+55°C
Temperature measurement accuracy ..... ±0.2°C
Temperature measurement resolution ..... 0.1°C
Pressure measurement range ..... 260...1260 hPa
Pressure measurement accuracy ..... ±1 hPa
Pressure measurement resolution ..... 0.1 hPa
Humidity measurement range ..... 0% RH...93% RH
Humidity measurement accuracy ..... ±1.5% RH
Humidity measurement resolution ..... 0.1% RH
Environmental class according to EN 50130-5 II
Operating temperature range ..... -10°C...+55°C
Maximum humidity ..... 93±3%
Sensor enclosure dimensions ..... 20 x 102 x 23 mm
Weight ..... 25 g