NodOn STP-2-1-05

NodOn STP-2-1-05 Wireless Batteryless EnOcean Temperature Sensor User Manual

Model: STP-2-1-05

1. Introduction

1.1 About Your NodOn Temperature Sensor

The NodOn STP-2-1-05 is an advanced, wireless, and batteryless indoor temperature sensor designed for seamless integration with EnOcean compatible home automation systems. It provides precise temperature monitoring for various indoor environments, leveraging solar energy for operation and offering an optional battery for dark conditions.

2. Safety Information

Please read this manual carefully before using the device. Keep it for future reference.

- This device is designed for indoor use only.
- Do not expose the device to extreme temperatures, direct sunlight for prolonged periods (unless for charging), or moisture.
- Do not attempt to disassemble or repair the device yourself. Refer all servicing to qualified personnel.
- Keep out of reach of children.

3. Package Contents

The NodOn STP-2-1-05 package includes:

- 1x NodOn STP-2-1-05 Temperature Sensor
- Adhesive strips for mounting
- User Guide (this document)

Note: Screws for mounting and an optional CR1216 battery are not included.

4. Product Overview

The NodOn STP-2-1-05 sensor utilizes EnOcean technology for wireless communication and is powered by an integrated solar panel, eliminating the need for batteries in well-lit environments.

4.1 Key Features

- **Wireless & Batteryless:** Powered by solar energy, with an option for a CR1216 battery for dark areas.
- **High Accuracy:** Measures temperature with less than 0.2°C precision.
- **Wide Measurement Range:** Operates from 0°C to 40°C.
- **EnOcean Compatibility:** Works with most EnOcean home automation gateways.
- **Easy Installation:** Mounts with adhesive strips or screws.
- **Indoor Range:** Up to 30 meters indoors.

4.2 Sensor Components

The sensor features a compact design with a solar panel for power generation and a temperature sensing element.

Image: Side view of the NodOn STP-2-1-05 sensor, highlighting its compact form factor and ventilation slots. This view shows the sensor mounted vertically on a wooden surface, suggesting its discreet integration into various environments like a wine cellar.

5. Setup

5.1 Choosing a Location

Select an indoor location that is representative of the temperature you wish to monitor. For optimal performance and batteryless operation, choose a spot with sufficient ambient light. Avoid direct sunlight if possible, as it might affect temperature readings.

Image: The NodOn STP-2-1-05 sensor mounted horizontally on a light-colored tiled wall, positioned above a bathroom sink and below a mirror. This demonstrates a typical indoor installation scenario.

5.2 Mounting the Sensor

1. **Adhesive Strips (Included):** Clean the mounting surface thoroughly. Remove the protective film from the adhesive strips and firmly press the sensor onto the desired location for at least 30 seconds.
2. **Screws (Not Included):** If using screws, mark the desired mounting points. Drill pilot holes if necessary and secure the sensor using appropriate screws.

5.3 Pairing with an EnOcean Gateway

To integrate the sensor into your smart home system, you need to pair it with your EnOcean compatible home automation gateway. The exact pairing procedure may vary depending on your gateway model.

1. Put your EnOcean gateway into pairing mode (refer to your gateway's manual for specific instructions).

2. Activate the NodOn sensor for pairing. Typically, this involves exposing the solar panel to light or, if an optional battery is installed, a specific button press (refer to the sensor's quick start guide if provided separately). The sensor will transmit its EnOcean ID.
3. Confirm successful pairing on your gateway. The sensor should now appear as a temperature device.

6. Operating Instructions

The NodOn STP-2-1-05 sensor continuously monitors the ambient temperature.

- **Measurement Frequency:** The sensor measures temperature every 100 seconds.
- **Data Transmission:**
  - If the temperature changes by more than 0.5°C from the last reported value, the new temperature is immediately sent to the home automation gateway.
  - If there is no significant temperature change, the sensor will transmit its temperature reading at least every 15 minutes to ensure regular updates.
- **Power Source:** The sensor primarily operates using its integrated solar panel. Ensure it receives adequate ambient light for continuous operation without a battery.
- **Optional Battery:** If installed, a CR1216 battery provides power in low-light or dark conditions, extending autonomy up to 3 years in complete darkness.

7. Maintenance

7.1 Cleaning

Gently wipe the sensor with a soft, dry cloth to remove dust. Do not use abrasive cleaners or solvents. Ensure the solar panel remains clean for optimal power generation.

7.2 Optional Battery Replacement (CR1216)

If you have installed an optional CR1216 battery and notice inconsistent readings or loss of communication in dark conditions, the battery may need replacement.

1. Carefully open the sensor casing (refer to the quick start guide for specific instructions on accessing the battery compartment).
2. Remove the old CR1216 battery.
3. Insert a new CR1216 battery, observing correct polarity.
4. Close the sensor casing securely.

8. Troubleshooting

8.1 Sensor Not Reporting Data

- **Check Light Exposure:** Ensure the sensor's solar panel receives sufficient ambient light. If in a dark area, consider installing an optional CR1216 battery.
- **Check Battery (if installed):** If using an optional battery, check if it needs replacement.
- **Range:** Verify the sensor is within the 30-meter indoor range of your EnOcean gateway. Obstacles like thick walls can reduce range.
- **Re-pairing:** Try re-pairing the sensor with your EnOcean gateway.

8.2 Inaccurate Temperature Readings

- **Placement:** Ensure the sensor is not placed in direct sunlight, near heat sources (e.g., radiators, lamps), or in drafts, which can affect readings.
- **Calibration:** While the sensor is factory calibrated, significant discrepancies might indicate an issue with placement or the sensor itself. Compare readings with a known accurate thermometer.

9. Specifications

Feature	Detail
Model	STP-2-1-05
Brand	NodOn
Technology	EnOcean
Power Source	Solar panel (batteryless), optional CR1216 battery
Measurement Range	0°C to 40°C
Measurement Precision	< 0.2°C
Data Transmission Interval	Every 100 seconds (if >0.5°C change), or at least every 15 minutes
Indoor Range	Up to 30 meters
Dimensions (L x W x H)	80 x 26 x 18 mm
Material	Silicone, Plastic/Polymer
Color	White
Specific Uses	Greenhouse temperature monitoring, room temperature monitoring, server room temperature surveillance, temperature control in wine cellars

10. Warranty and Support

For warranty information and technical support, please refer to the official NodOn website or contact your local distributor. Keep your proof of purchase for warranty claims.
For further assistance, visit: www.nodon.fr