

# Aranet Stem Diameter sensor kit

## assembling instructions

Contents of the kit, how to connect the transmitter and sensor. Connecting to a power supply, and how to pair the kit with the Aranet base station.

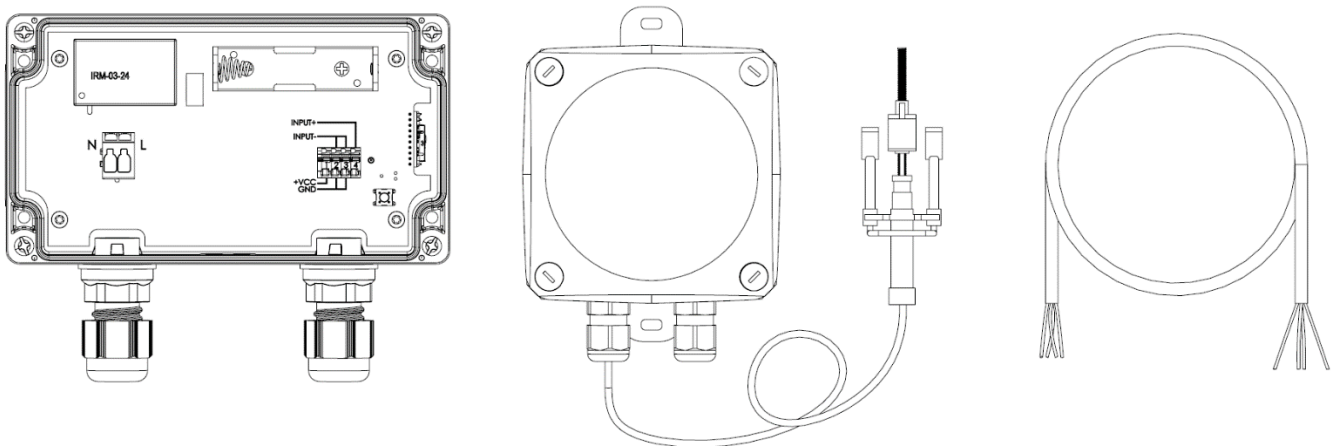
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## What is included in the Aranet Stem Diameter kit?

Aranet Stem Diameter sensor kit consists of **Aranet 4-20 mA with 12 VDC (datasheet)** and **SD-5Mi Stem Micro-Variation Sensor (datasheet)**, as well as relevant details for the sensor and transmitter to be connected. The cable to connect the transmitter to the mains power is not included.



Visual 1. Contents of the Aranet Stem Diameter sensor kit

## Assembling the kit

### Things to know before starting the pairing procedure

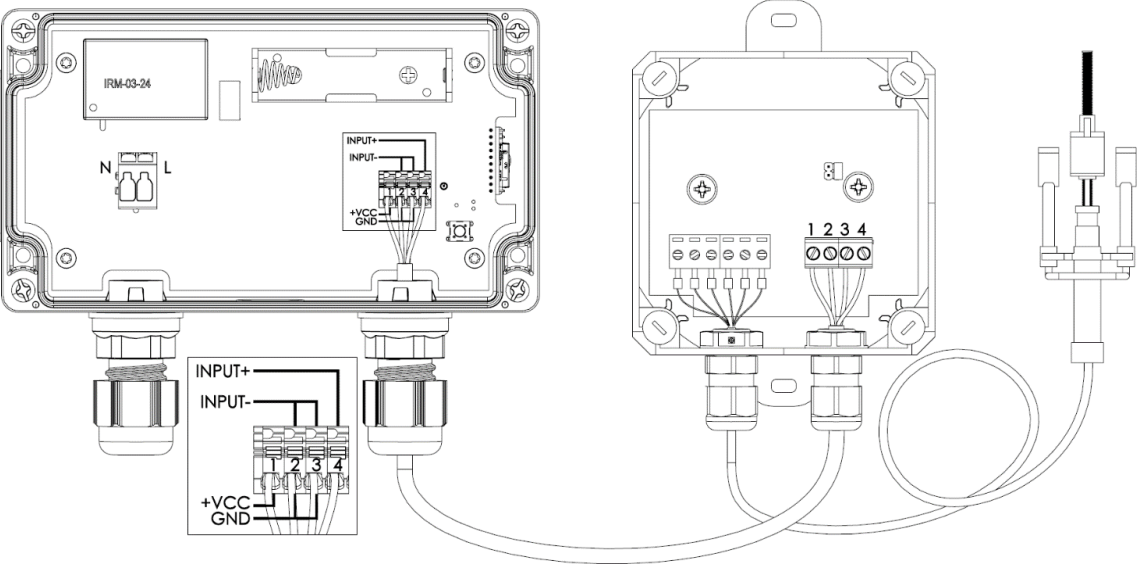
- It is possible to pair the transmitter to the base station with or without the sensor connected.
- To pair the transmitter, the transmitter must be near the base station (max 20 m).
- Pairing the sensor with the battery ensures an interrupted signal to the base station during the whole installation process, as well as in case of an electricity outage or sensing element failure.
- When installing and placing the sensor note that the cable must be routed in a manner to obtain a “water/drip loop” for water to drop off. Do not stress the cable.
- If you experience any difficulties, get in touch with [support@aranet.com](mailto:support@aranet.com).

### First step: how to pair the transmitter to the base station with batteries (recommended)

1. Have the transmitter and 1x AA battery ready.
2. Unscrew and take off the transmitter's lid.
3. Open the Sensorhub application (ensure that you have the latest firmware upgrade).
4. Open the section “SENSORS” and there choose the preferable measurement interval.
5. Click the “PAIR SENSOR” button on the computer screen and then immediately insert the batteries or insert batteries and click the “PAIRING” button on the transmitter (left corner).
6. The sensor will be paired and appear in the category “SENSORS”.
7. You can finish your sensor setup and screw the lid back

### Second step: connect the transmitter to the sensor

Connect the SD-5Mi sensor to the Aranet transmitter with the cable included in the installation kit. Connect the cables to the terminals in the junction box as shown.



Visual 2. Connecting the Aranet transmitter with the Stem Micro-Variation sensor

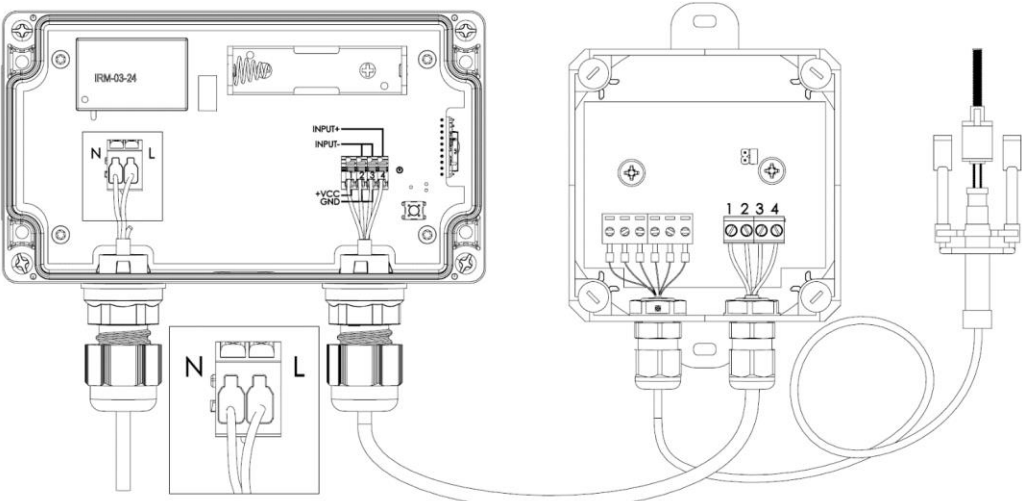
| Aranet 4-20 mA transmitter with 12 VDC power supply |         |             |                | SD-5Mi Stem Micro-Variation Sensor |                |             |
|-----------------------------------------------------|---------|-------------|----------------|------------------------------------|----------------|-------------|
| Slot no.                                            |         | Cable color |                | Slot no.                           |                | Cable color |
| 1                                                   | +VCC    | Green       | Power          | 1                                  | 10-30 VDC      | Green       |
| 2                                                   | GND     | Yellow      | Power ground   | 2                                  | GND            | Yellow      |
| 3                                                   | INPUT - | White       | Current ground | 3                                  | GND            | White       |
| 4                                                   | INPUT+  | Brown       | Current        | 4                                  | 4–20 mA output | Brown       |

Third step: connect the kit to the mains power cable

- Make sure the cable is not connected to the power mains. Unscrew and take off the transmitter’s lid.
- Connect the cable to the transmitter as shown in the scheme below.
- To ensure high IP protection, the cable must be directly connected to mains power.
- After finishing the assembly, tighten the cable glands to ensure water protection. Screw back the transmitter’s lid.

| Connection to mains power | Cables       |
|---------------------------|--------------|
| N – Neutral               | Blue         |
| L – Live                  | Brown        |
| GND*                      | Green/yellow |

\*The wire should be clipped at the end.



Visual 3. Connecting the sensor kit with the mains power

