

Aranet Rain and Precipitation sensor kit is specifically designed for outdoor monitoring of rain and precipitation. This versatile kit finds applications in agriculture for irrigation and soil moisture management, weather stations, water treatment plants, and more.



Precise rain and precipitation measurements



Accuracy: +/- 2%



Wireless solution for outdoor applications

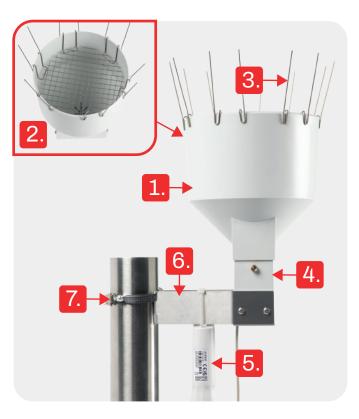
Features:

The Rain and Precipitation sensor kit includes a calibrated rain gauge funnel with a 200 cm2 orifice 1. Its outer shell is constructed from ASA, providing easy cleaning and high UV resistance. The funnel is equipped with leaf grid 2. and bird spikes 3.

The funnel channels water into the self-emptying tipping bucket 4., which employs a patented meteorological design-a unique single spoon tipping bucket -to ensure precise measurements. This design facilitates easy recalibration if necessary and is constructed from POM to prevent dust and dirt from sticking to the spoon, thus optimizing water release.

The bucket is linked to the Aranet Dry Contact Pulse counter **5** to monitor bucket release events and wirelessly transmit data to the Aranet Pro Base station.

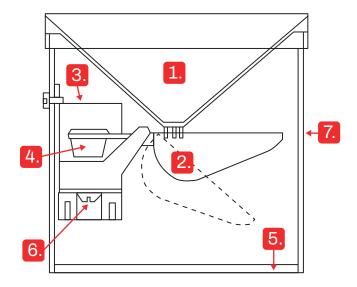
The sensor kit includes a pole bracket 6. and metal clamps 7. for easy installation on the



Tipping bucket design:

The self-emptying tipping POM bucket is secured in place by a hard ferrite magnet. This magnet consistently applies the right amount of tension, enabling the measuring bucket to empty in one quick motion (less than 300 ms) before returning to its original position, ready to collect precipitation once more.

- 1. Funnel with grille
- 2. Self-emptying tipping bucket
- 3. PCB with reed switches
- 4. Magnet
- 5. Base
- 6. Adjustment screw
- 7. Housing

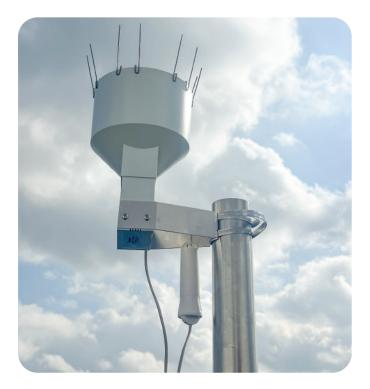


Good practice recommendations:

Utilize the Rain Gauge in your designated area. Mount the funnel perpendicular to the ground level to obtain accurate readings. We recommend attaching the sensor to a vertical pole, ensuring that the funnel is unobstructed by trees, roof constructions, or any other obstacles.

Position the Pulse counter radio transmitter vertically with the wire pointing downwards. Choose a location sheltered from direct sunlight and harsh weather conditions. Avoid placing the transmitter inside metal cases or other obstructions, as they may significantly reduce the data transmission range.

The sensor is designed to function above freezing temperature ($0^{\circ}C$), as it does not feature a built-in heater.





During sensor pairing

switch the Conversion on and use the drop-down menu to choose a predefined Dimension and unit. The pulse counter counts the number of cycles resulting in water volume monitoring. Both the count-per-measurement interval and the cumulative count are registered. Within the base station interface, you can convert and represent measurements in the preferred volume units: volume in liters, milliliters, gallons, or express in mm per square meter (1 mm of rain translates to 1 liter of water in a single meter square).

- 1 pulse = 0.2 mm per square meter (factory calibrated)
- 1 pulse = 4 ml per 200 cm²
- 1 pulse = **200 ml per 1 m**²

