WIFI Rain Level Sensor

SKU: RANWIE01
Version: 1.1.0

Product Description

This rain sensor measures the amount of rain at its location in milliliters using a tipping bucket mechanism and transmits the quantity within a 15-minute interval with an accuracy of 0.5 mm of water column, along with the temperature. In the case of heavy rain exceeding 20 l/h, a heavy rain alarm is triggered promptly. Both the heavy rain threshold and the measurement interval are configurable.

The device communicates via WLAN, either to the Aqua-Scope Cloud and thus to an app on your mobile phone or PC, or through MQTT to a server of your choice, or as a JSON object to a Smart Home Gateway.

The device is powered by two AAA batteries. The provided VARTA batteries allow for an approximate runtime of about 2 years. A low battery level is reported wirelessly, allowing for battery replacement before the device shuts down.

Scope of Delivery

- Main Device

- Mounting Screws
- 2 * AAA Batteries

Technical Data

- Processor:
    - Main: ESP32-WROOM_32E (Xtensa Dual Core 32 Bit, 240 MHz, 520 KB RAM)
    - Sub: Xtensa 16 bit Ultra Low Power RISC
- Wireless Connection: WIFI ESP Built-in 2.4 GHz 802.11 b/g/n
- Measurements:
    - Rain:
        - Min amount of rainfall: 0.5 mm or 0.5 l/m3
        - Metering Interval: 15 minutes
    - Temperature:
        - Precision: +/- 3 Degree
        - Range: - 20 °C … 50 °C
    - Heartbeat: every 6 hours unless there is rain
    - Threshold for Heavy Rain Alarm: ab 25 l/h
- User Interface: 3 colored LED, single button
- Power Supply:
    - 2 * AAA Battery
    - Voltage: 2.2 … 3.6 V
- Environmental Conditions:
    - Shipment and Storage: -65 °C … 125 °C
    - Operation: - 20 °C … 50 °C
    - Rel. Humidity: 0...90 %
- Protection: IP 55
- Size of device: 132x132x139 mm
- Size of packaging: 140x140x150 mm
- Weight: 219 gr.