

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

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- 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:
 - $\circ\,$ 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.

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