

PluviDB[®]-IoT

Standalone Raing Gauge



PluviDB-[®]IoT

Precipitation sensor with IoT transmission



SPECIFICATIONS

Capacity

0 a 500 mm/h

Resolution⁽¹⁾

0,2 mm

Operating Range

-20 a 70 °C | 0 a 100% RH

Maximum accuracy⁽²⁾

± 5% @ 0 a 200 mm/h

Leveling system

Bubble level

Bucket orifice opening⁽³⁾

314 cm²

Funnel Collector Diameter⁽³⁾

200 ± 0,5 mm

Output

Double reed-switch
ON pulse of 100 ms.

APRESENTAÇÃO

The **PluviDB-[®]IoT** is based on the modern Nordic Semi nRF9160 chip with ARM Cortex processing core. It simultaneously has 4G – LTE-M Cat-M1 and NB-IoT version 2 (NB2) connections, compatible with 3GPP LTE release 14. It also has GPS reception, and all this with extremely low energy consumption.

Employing the best energy-saving techniques, the PluviDB-[®]IoT operates with a non-rechargeable primary lithium battery that can last up to 5 years.

- NOTE:**
- 1 - Can be provided with different resolutions;
 - 2 - Coverage factor k=2 for a 95% confidence level;
 - 3 - Can be provided with a different collection area.

MANUFACTURER



Manufacture: Dualbase Tecnologia Eletrônica LTDA.

Brand: Dualbase

Model: PluviDB-[®]IoT

Type: Rain gauge with transmission

The characteristics may be changed without prior notice. July/2024

APPLICATIONS



Hydrology



Meteorology



Agrometeorology



Sun



Wind

OVERVIEW

The **PluviDB-[®]IoT** is the combination of the traditional PluviDB, widely known in the Brazilian market, now with the addition of embedded electronics capable of recording rainfall data, storing it, and automatically transmitting the collected data.

PRODUCT DETAILS

- Unstable tipping bucket principle.
- Entirely built with rust-resistant materials;
- With a flow regulator device;
- Aluminum body, stainless steel, and epoxy paint;
- Leveling system with bubble level;
- Internal edges at right angles and external edge at an oblique angle, minimizing wind turbulence effects.
- ARM Cortex M33
- 64Mb Flash memory for data storage
- 2 pulse measurement ports
- 1 SDI-12 v1.3 port
- USB-C connector
- Bluetooth LE - Low Energy connection
- LTE frequencies from 700 to 2200 Mhz
- Cat-M1: B1, B2, B3, B4, B5, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B66
- NB1/NB2: B1, B2, B3, B4, B5, B8, B12, B13, B17, B19, B20, B25, B26, B28, B66
- eDRX and PSM power-saving functions.
- Protocols: MQTT, HTTP, NTP, FTP, among others.
- Primary lithium battery Li-SOCI2 – D - 3.6V – 19Ah

DIMENSIONS

