

Weather Station for our Friends in Africa

Current partners: Uganda, Benin, Ghana

Idea

We build our own data loggers based on ESP32. Data transmission is done via Wifi, Cellular Network or LoRaWAN.

Sensors

An initial set of sensors:

Tipping Bucket Rain Gauge

Rain Sensor
Comply with National Standard
GB/T 21978.2-2014

- Precise Measurement
- 304 Stainless Steel
- Strong Anti-interference

UICPAL Sensors

The image shows a cylindrical stainless steel tipping bucket rain gauge. To its left are three icons: a scale for 'Precise Measurement', a pair of scissors for '304 Stainless Steel', and a lightning bolt for 'Strong Anti-interference'. The text 'Comply with National Standard GB/T 21978.2-2014' is at the top left. The brand name 'UICPAL Sensors' is at the bottom.

Wind Velocity (Anemometer)

Wind Speed Transmitter

RS485
Output → 4-20mA
0-5V
0-10V

- Small Rotational Resistance
- Highly Sensitive
- Waterproof and Anti-corrosion
- Resolution: 0.1 m/s
- Range: 0-30m/s

UICPAL Sensors

The image shows a cup anemometer. To its left is a list of specifications: 'RS485', 'Output → 4-20mA', '0-5V', and '0-10V'. Below that is a list of features: 'Small Rotational Resistance', 'Highly Sensitive', 'Waterproof and Anti-corrosion', 'Resolution: 0.1 m/s', and 'Range: 0-30m/s'. The brand name 'UICPAL Sensors' is at the bottom.

Data Sheet

[pr-3000-fsjt-n01.pdf](#)

Wind Direction



Data Sheet

[pr-3000-fxjt-n01.pdf](#)

Air Temperature

- PT100 (best)
- DS18B20

Air Humidity

Air Pressure

From:
<https://wiki.eolab.de/> - HSRW EOLab Wiki

Permanent link:
https://wiki.eolab.de/doku.php?id=eolab:weather_station:diy:start&rev=1712823434

Last update: **2024/04/11 10:17**

