Makerere

List of Components

Expected Env. Var	Component	Signal	Reference Docs
mm/min	Rain-O-Matic "Professional" rain gauge	Pulse from High to Low and back to High	Manual
m/s	Small Wind Transmitter	Pulses in Hz. 50 Hz @ 40 m/s	
deg	Wind Direction Transmitter Compact	Current 0 to 20mA. 0 and 20mA Magnetic North	
Temp. and %RH	Rotronic HygroClip2 HC2A-S	Digital signal UART	Probes Guide Manual Mounting
W/m2	Kipp & Zonen CMP3 Pyranometer	Voltage 20.39 uV per W/m**2 (from calibration certificate_	Manual Datasheet
	Raspberry Pi Zero W		

Raspberry

Raspberry Pi Setup

First Program

Rain Bucket

intro.py

```
import time
import RPi.GPIO as GPIO

BUCKET_PIN = 7

GPIO.setmode(GPIO.BOARD)

GPIO.setup(BUCKET_PIN, GPIO.IN, pull_up_down=GPIO.PUD_UP)

def bucket_back(channel):
    print("Back")

GPIO.add_event_detect(BUCKET_PIN, GPIO.RISING, callback=bucket_back)

try:
    while True:
        time.sleep(0.1)
except KeyboardInterrupt:
```

```
    pass

GPIO.cleanup()
```

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

Permanent link:
https://wiki.eolab.de/doku.php?id=eolab:weather_station:makerere:start&rev=1782911625

Last update: **2026/07/01 15:13**