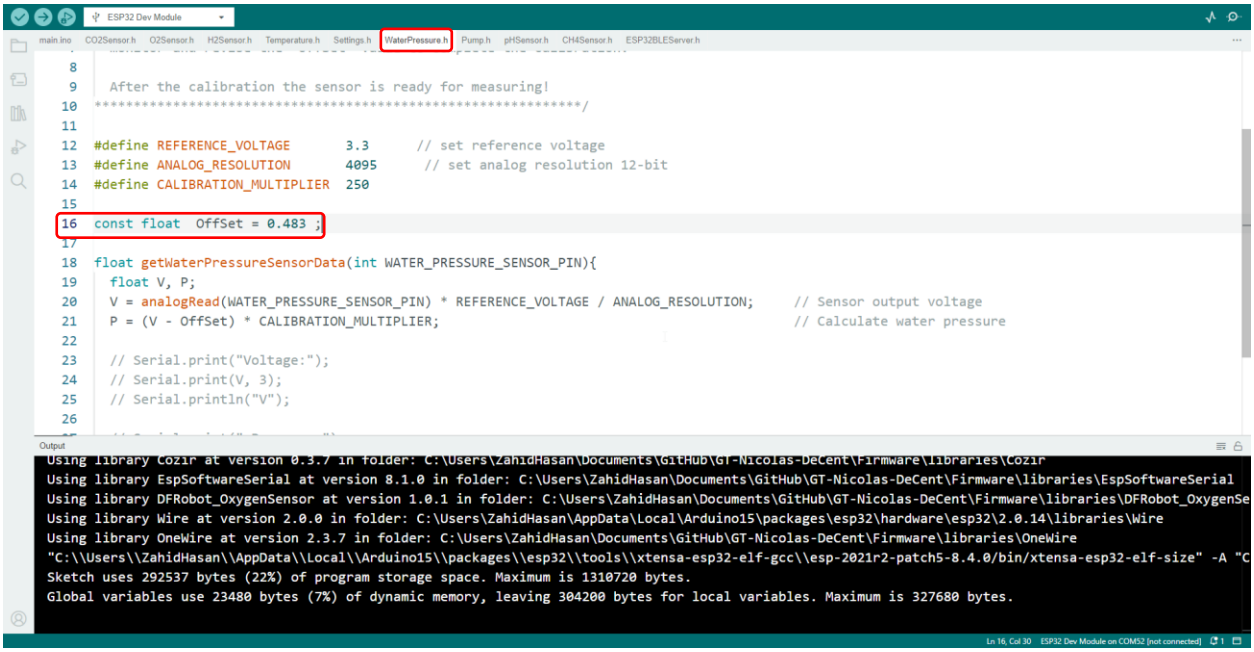
DeCent

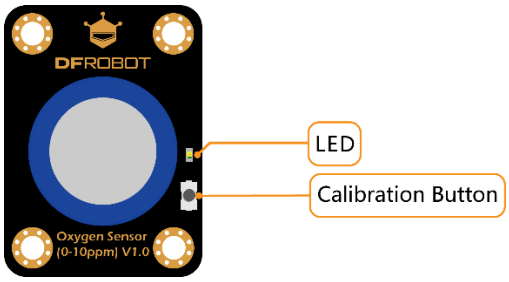
SL	Sensor Name	What we have done	What you need to do	Remark
1	Temperature	We tested the code, and the output is working perfectly.	You need to make sure that the sensor is measuring the temperature correctly.	
2	H_2	The sensor is performing as expected, as it is consistently providing values within its specified range and its readings are changing over time. So, we can say it is working.	You need to check the sensor value and ensure it is working accurately or not.	
3	O_2	The sensor is working and getting value within range	We are not sure if the O_2 value is correct or not. So, you need to calibrate the sensor first, please check the calibration steps below this document and calibrate the sensor and ensure that the sensor is working perfectly or not.	
4	Pressure	We have checked the sensor reading code. Now we need to calibrate the sensor.	Please calibrate the pressure sensor by following the instruction below and change the offset value from the code and let's know if the sensor is working or not.	
5	pH	We have written the pH v2 sensor code. Now, need to calibrate it.	Please calibration the sensor and change the value from the code and check the result.	
6	CO_2	We have checked the sensor reading code. Now we need to calibrate the sensor.	Ensure the CO_2 sensor reading exact value	
7	Methane	We need to test it	Let us know when the sensor is available	

Pressure sensor calibration

1. To calibrate the pressure sensor, connect the 3-pin wire to the ESP32 (VCC, GND and Signal) without connecting the sensor to the water pipe and run the program for once.
2. Mark down the LOWEST voltage value through the serial monitor.
3. Go to the **"WaterPressure.h"** header file and change the **"OffSet"** value to complete the calibration.



Oxygen Sensor calibration

The oxygen / O2 sensor can be calibrated using the characteristic that the oxygen content in the atmosphere is 20.9%.

Calibration Method: Place the oxygen / O2 sensor in the outdoor environment, after the sensor data is stable, long press the calibration button on the sensor for 2 seconds, the sensor will be calibrated.