

UAV-mounted Weather Station

ESP32 DHT22 SIMULATION IN WOKWI MICROPYTHON

- <https://wokwi.com/arduino/projects/316682113004864066>

MPU6050 6-DoF Accelerometer and Gyro Micropython

- <https://learn.adafruit.com/mpu6050-6-dof-accelerometer-and-gyro/python-and-circuitpython>
- https://github.com/adafruit/Adafruit_CircuitPython_MPU6050
- <https://microcontrollerslab.com/micropython-mpu-6050-esp32-esp8266/>

ESP32 and Micropython

- <https://docs.micropython.org/en/latest/esp32/quickref.html#general-board-control>

MicroPython: ESP32/ESP8266 with DHT11/DHT22 Temperature and Humidity Sensor

- <https://randomnerdtutorials.com/esp32-esp8266-dht11-dht22-micropython-temperature-humidity-sensor/>

A BMP180 MICROPYTHON EXAMPLE ON AN ESP32

- <http://www.learnmicropython.com/esp32/a-bmp180-micropython-example-on-an-esp32.php>

MicroPython: BME680 with ESP32 and ESP8266 (Temperature, Humidity, Pressure, Gas)

- <https://randomnerdtutorials.com/micropython-bme680-esp32-esp8266/>

A SI145 SENSOR MICROPYTHON EXAMPLE ON AN ESP32

- <http://www.learnmicropython.com/esp32/a-si1145-sensor-micropython-example-on-an-esp32.php>

MicroPython Program: Mini Weather Station

- <https://www.instructables.com/MicroPython-ProgramMini-Weather-Station/>

LoRa Based Wireless Weather Station with Arduino & ESP32

- <https://how2electronics.com/lora-based-wireless-weather-station-with-arduino-esp32/>

INTERESTING SENSORS

- <https://www.electronics-lab.com/interesting-sensors-to-add-to-your-weather-station-project/>

Software Inspiration

- <https://www.uavforecast.com/>

Instructables Projects Inspiration

- <https://www.instructables.com/Solar-Powered-WiFi-Weather-Station-V30/>
- <https://www.instructables.com/Outdoor-3D-Printed-Wireless-IoT-Weather-Station/>

Sensors List

- Air Quality Sensor

https://www.helladigital.gr/?match=all&subcats=Y&pcode_from_q=Y&pshort=Y&pfull=Y&pname=Y&pkeywords=Y&search_performed=Y&q=air+quality+sensor+&dispatch=products.search&security_has_h=29d350505e32165e7ae54cd6d6c23c49

- UV Sensor

<https://dronebotworkshop.com/arduino-uv-index-meter/>

https://www.helladigital.gr/?match=all&subcats=Y&pcode_from_q=Y&pshort=Y&pfull=Y&pname=Y&pkeywords=Y&search_performed=Y&q=uv+sensor+arduino&dispatch=products.search&security_has_h=29d350505e32165e7ae54cd6d6c23c49

- Temperature and Humidity

https://www.helladigital.gr/?match=all&subcats=Y&pcode_from_q=Y&pshort=Y&pfull=Y&pname=Y&pkeywords=Y&search_performed=Y&q=temperature+and+humidity+sensor&dispatch=products.search&security_hash=29d350505e32165e7ae54cd6d6c23c49

- Light Sensor

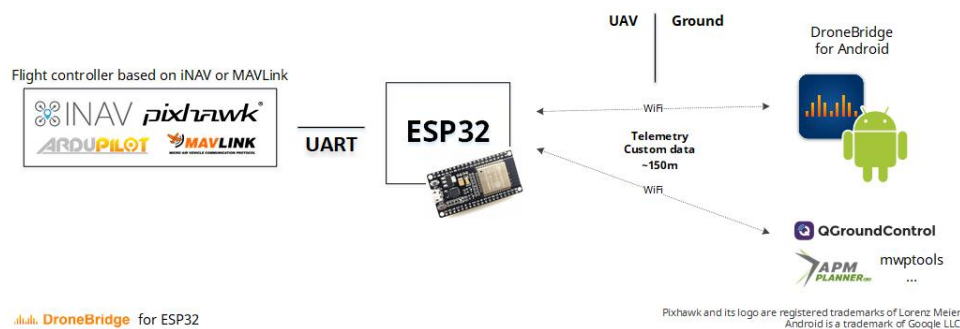
https://www.helladigital.gr/?match=all&subcats=Y&pcode_from_q=Y&pshort=Y&pfull=Y&pname=Y&pkeywords=Y&search_performed=Y&q=light+sensor+arduino&dispatch=products.search&security_hash=29d350505e32165e7ae54cd6d6c23c49

- Barometric Sensor

https://www.helladigital.gr/?match=all&subcats=Y&pcode_from_q=Y&pshort=Y&pfull=Y&pname=Y&pkeywords=Y&search_performed=Y&q=Barometric+Pressure+Sensor&dispatch=products.search&security_hash=29d350505e32165e7ae54cd6d6c23c49

ArduPilot and ESP32

- ESP32 WiFi telemetry. (n.d.). Retrieved from <https://ardupilot.org/plane/docs/common-esp32-telemetry.html>



Bibliography

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<https://doi.org/10.3390/atmos10090487>
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<https://doi.org/10.3390/s21144881>
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<https://doi.org/10.3390/s16071072>
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<https://doi.org/10.3390/rs11121443>