

Adafruit DPS310 Precision Barometric Pressure / Altitude Sensor – STEMMA QT / Qwiic

PRODUCT ID: 4494

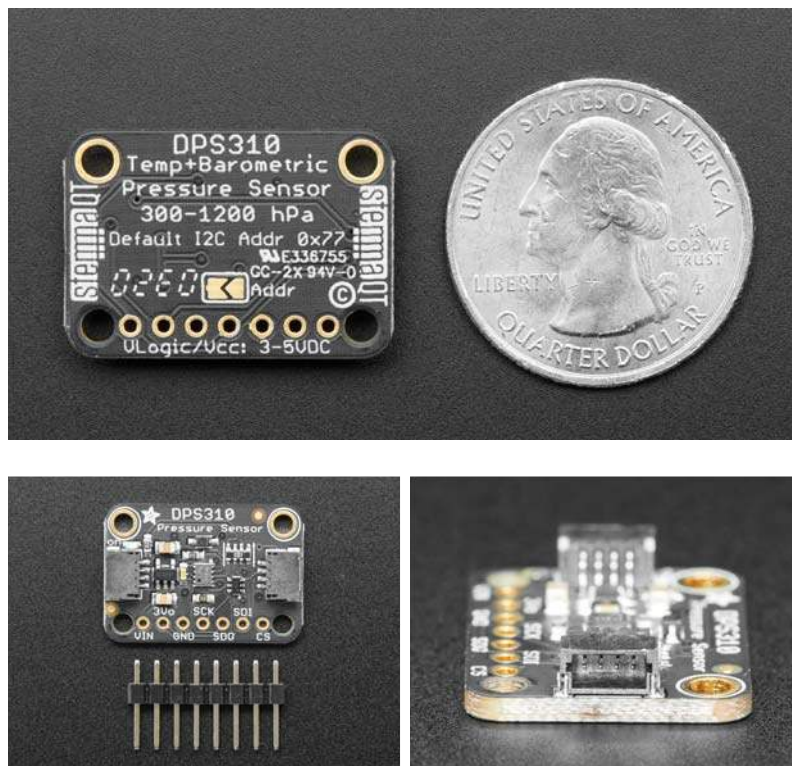
How high are you right now? If you had a precision altitude sensor, you would know for sure! The DPS310 sensor from Infineon is a high precision barometric sensor, perfect for measuring altitude changes with a up to ± 0.002 hPa (or ± 0.02 m) precision high precision mode and ± 1 hPa absolute accuracy. That means you can know your absolute altitude with 1 meter accuracy when you set the sea-level pressure, and measure changes in altitude with up to 2 cm precision. This makes it a great sensor for use in drones or other altitude-sensitive robots. This sensor would also do well in any environmental sensing kit, you can use it to predict weather system changes

You can use this sensor with either I2C or SPI, so its easy to integrate. It also has a temperature sensor built in with $\pm 0.5^\circ\text{C}$ accuracy. For the lowest noise readings, set it up to take multiple measurements and perform a low-pass filter, that capability is built in! You can use it from 300 to 1200 hPa and in ambient temperature ranges from -40 to 85°C .

To make life easier so you can focus on your important work, we've taken the sensor and put it onto a breakout PCB along with support circuitry to let you use it with 3.3V (Feather/Raspberry Pi) or 5V (Arduino/ Metro328) logic levels. Additionally since it speaks I2C you can easily connect it up with two wires (plus power and ground!). We've even included SparkFun qwiic compatible STEMMA QT connectors for the I2C bus so you don't even need to solder! Just wire up to your favorite micro and you can use our CircuitPython/Python or Arduino drivers to easily interface with the DPS310.

TECHNICAL DETAILS

Product Dimensions: 25.5mm x 17.7mm x 4.6mm / 1.0" x 0.7" x 0.2"



<https://www.adafruit.com/product/4480/1-27-20>