

Gravity ENS160 Air Quality Sensor

SEN0514

Product Overview

03/14/2023

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

DFRobot Gravity ENS160 Air Quality Sensor is based on ScioSense's ENS160 sensor chip. This sensor is specifically designed for indoor air quality monitoring and offers detection of multiple IAQ data (TVOC, eCO₂, AQI). The innovative TrueVOC™ technology combines the Metal Oxide (MOX) technology that brings this sensor superior accuracy, fast response, and anti-interference.



With intelligent on-chip algorithms, the ENS160 sensor can directly output rich and easy-to-understand environmental data. Preheat the sensor three minutes before use, then you can obtain accurate data more quickly. The built-in automatic baseline correction algorithm ensures the long-term stability of the sensor.

Features

- Multiple IAQ outputs (TVOC, eCO₂, AQI), various environmental data
- Less than 3 minutes warm-up time and get the data faster
- Built-in algorithm for more accurate output
- Automatic baseline correction for more stability and for long-term use

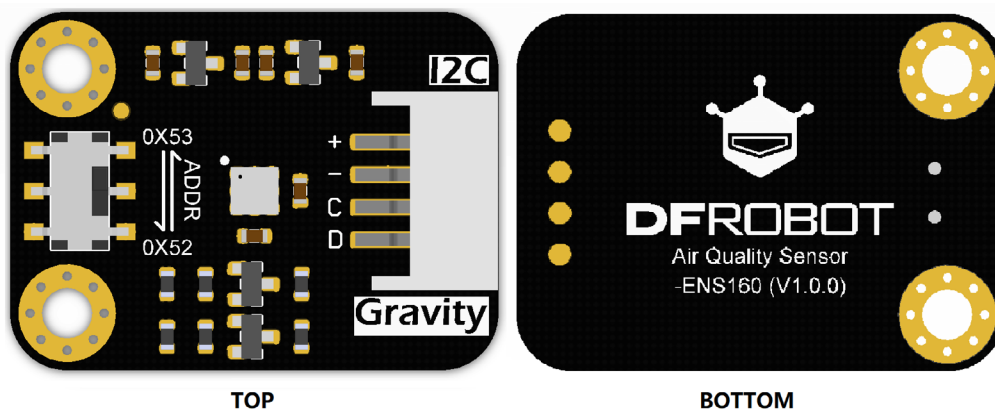
Specifications

- 3.3V ~ 5.5V power supply voltage
- 29mA working current
- I2C interface mode
- 0x52 and 0x53 I2C address
- -40°C to 85°C operating temperature range
- 5%RH ~ 95%RH working humidity range
- 400ppm ~ 65000ppm eCO₂ measurement range
- 0ppb ~ 65000ppb TVOC measuring range
- 30mm x 22mm/1.18inch x 0.87inch product size

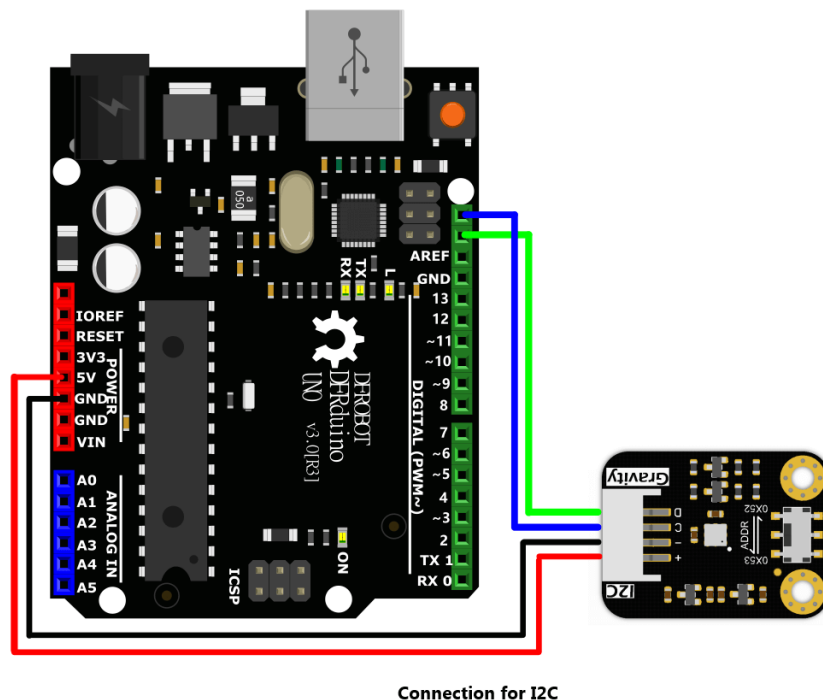
Applications

- Air purification/home automation device
- Environmental pollution detection
- HVAC/Ventilation system
- Building automation/smart thermostat
- Electrical appliances/ range hoods

Board Overview



Connection Diagram



Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-gravity-ens160-air-quality-sensor/>