

Fermion: MEMS Gas Sensor - MiCS-2714 (Breakout)

SEN0441

Product Overview

01/25/2023

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

Description

DFRobot Fermion: MEMS Gas Sensor - MiCS-2714 (Breakout) is a hydrogen and nitrogen oxide gas concentration sensor. This sensor uses MEMS technology to support gas concentration detection of NO, NO₂ and H₂. The MEMS gas sensor supports 5V power supply, analog voltage output, and has power supply enable/disable pins for low power consumption. The matching sample code integrates the concentration conversion formula of various gas to facilitate the testing and use of sensors. Typical applications include gas leak detection, gas safety equipment, and air environment detection.



Features

- Integrates the concentration conversion formula
- Low power consumption

Specifications

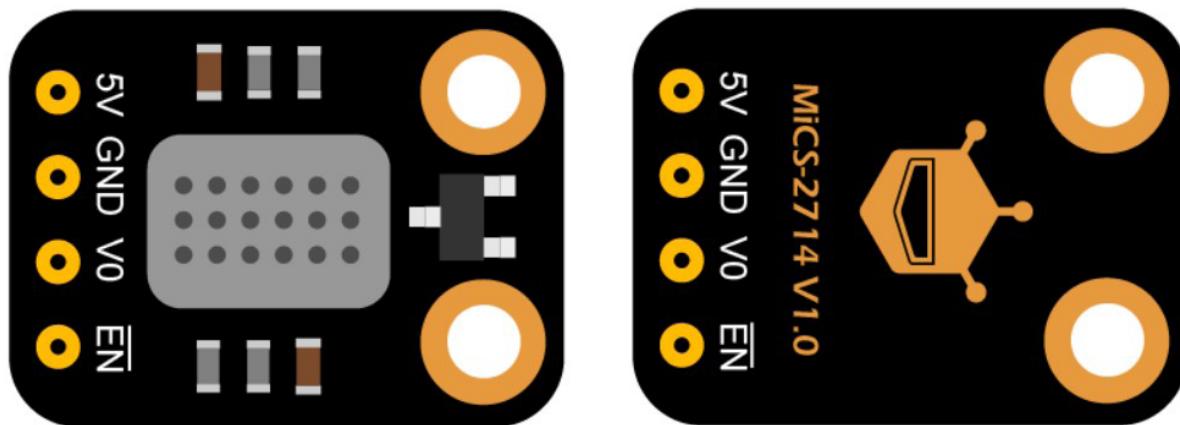
- Detection of physical quantities:
 - Gas concentration or gas leakage of NO, NO₂, and H₂
- 4.9V_{DC} to 5.1V_{DC} operating voltage range
- 0.45W power dissipation
- Analog output signal
- Measuring range:
 - 1ppp to 1000ppm (Hydrogen H₂)
 - 0.05ppm to 10ppm (Nitrogen dioxide NO₂)
- -30°C to 85°C working temperature range
- 5%RH to 95%RH working humidity (No condensation)
- -40°C to 85°C storage temperature range
- Lifespan:
 - >2 years (in the air)

- Circuit board size:
 - 12mm × 16mm
- Mounting hole size:
 - 2mm inner diameter
 - 4mm outer diameter

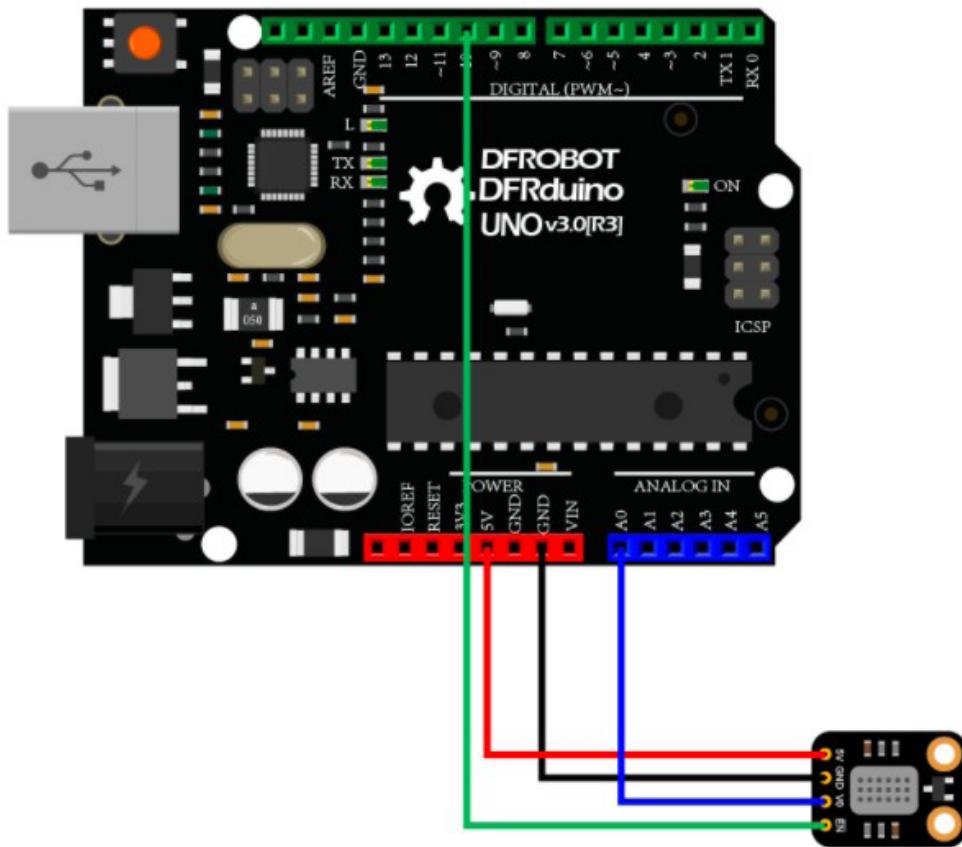
Applications

- Gas leak detection
- Gas safety equipment
- Air environment detection

Board Overview



Connection Diagram



Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-fermion-mems-gas-sensor-mics-2714/>