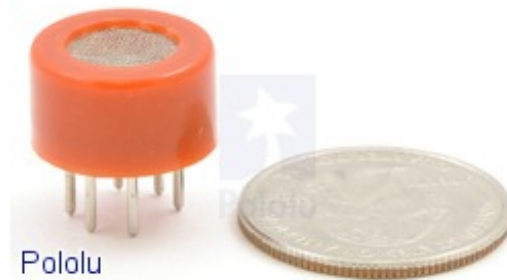


Carbon Monoxide & Flammable Gas Sensor MQ-9



Overview

This Carbon Monoxide (CO) and flammable gas sensor detects the concentrations of CO and combustible gas in the air and outputs its reading as an analog voltage. The sensor can measure concentrations of CO from 10 to 1,000 ppm and flammable gas from 100 to 10,000 ppm. The sensor can operate at temperatures from -10 to 50°C and consumes less than 150 mA at 5 V. Please read the MQ9 datasheet (180k pdf) for more information about the sensor.



Gas sensor with orange plastic case
bottom view.

Connections

Connecting five volts across the heating (H) pins keeps the sensor hot enough to function correctly. Connecting five volts at either the A or B pins causes the sensor to emit an analog voltage on the other pins. A resistive load between the output pins and ground sets the sensitivity of the detector. Please note that the picture in the datasheet for the top configuration is wrong. Both configurations have the same pinout consistent with the bottom configuration. The resistive load should be calibrated for your particular application using the equations in the datasheet, but a good starting value for the resistor is 20 kΩ.

We offer two breakout boards that make it easier to interface with these sensors: a Pololu carrier board and a SparkFun carrier board. The Pololu version is shown below.



Pololu MQ gas sensor carrier with sensitivity-setting resistor soldered in the vertical orientation.

[Documentation on producer website.](#)