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## Analog Gas Sensor(MQ4) (SKU:SEN0129)

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### Introduction

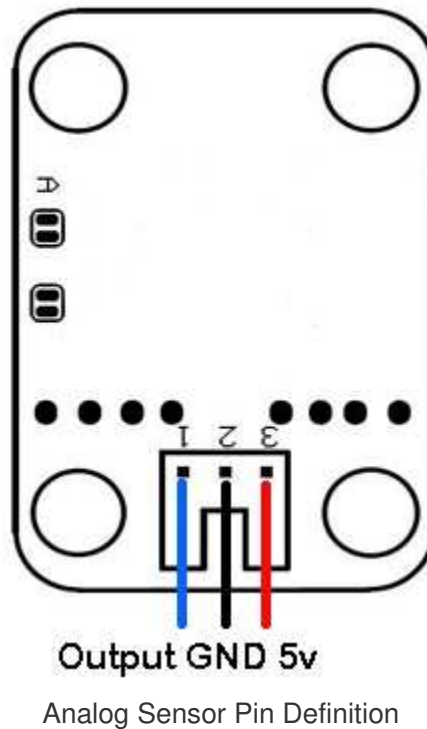
The MQ4 is used in gas leakage detecting equipment in consumer and industry markets, this sensor is suitable for detecting CH<sub>4</sub>, Natural gas, LNG, avoid exposure to alcohol, cooking fumes, and cigarette smoke. The sensitivity can be adjusted by the potentiometer.

### Specification

- Power supply needs: 5V
- Interface type: Analog
- Pin Definition: 1-Output 2-GND 3-VCC
- High sensitivity to CH<sub>4</sub>—Natural gas
- Small sensitivity to alcohol, smoke
- Fast response
- Stable and long life
- Simple drive circuit
- Size: 40x20mm

## Pin Definition

1. Signal Output
2. GND
3. Power



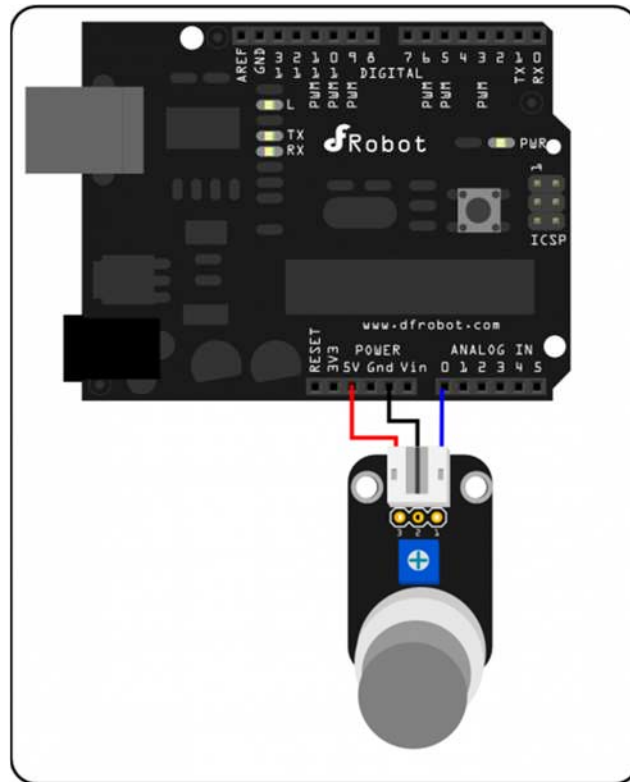
## Potentiometer

Potentiometer is used to calibrate the readings from this sensor as stated on the datasheet:

### *SENSITIVITY ADJUSTMENT*

*Resistance value of MQ-4 is difference to various kinds and various concentration gases. So, When using this components, sensitivity adjustment is very necessary. we recommend that you calibrate the detector for 5000ppm of CH<sub>4</sub> concentration in air and use value of Load resistance (  $R_L$  ) about 20K $\Omega$ (10K $\Omega$  to 47K $\Omega$ ). When accurately measuring, the proper alarm point for the gas detector should be determined after considering the temperature and humidity influence.*

## Connection Diagram



Analog sensor connection diagram

## Sample Code

```
///  
//Arduino Sample Code  
void setup()  
{  
  Serial.begin(9600); //Set serial baud rate to 9600 bps  
}  
void loop()  
{  
  int val;  
  val=analogRead(0);Read Gas value from analog 0  
  Serial.println(val,DEC); //Print the value to serial port  
  delay(100);  
}
```