keyestudio MQ135 Air Quality Sensor

Introduction:

MQ135 adopts SnO2 as its gas sensitive material because SnO2 has low electrical conductivity in the clean air. So when surrounded by polluted air, the electrical conductivity of MQ135 will increase with the increase of pollutants, and the change in electrical conductivity can be converted to corresponding output signal.

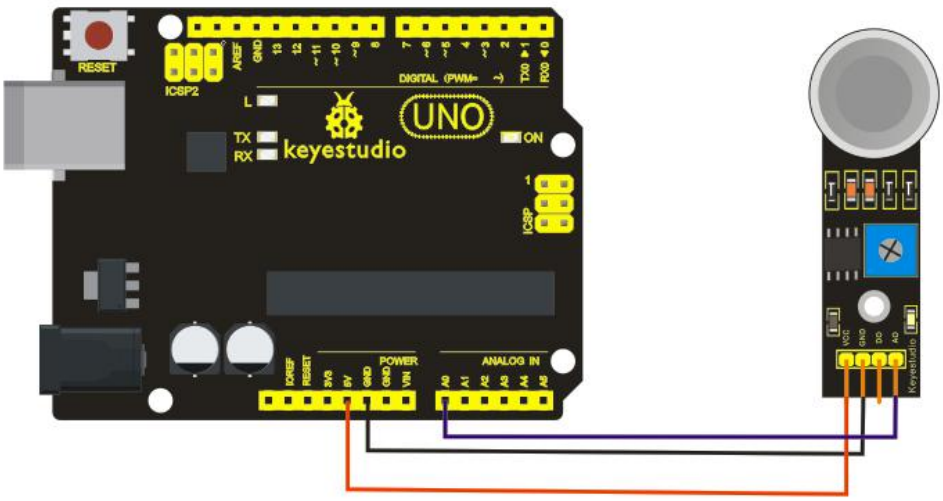
MQ135 has a high sensitivity to Ammonia, sulfide, benzene vapor, smoke and other harmful gas. It can detect various harmful gases, making it a cost-effective choice suitable for multiple applications.

Specification:

- Product model: MQ135
- Product type: Semiconductor gas sensor
- Standard Package: Bakelite (Black Bakelite)
- Target gas: Ammonia; methylbenzene; hydrogen
- Standard circuit: Loop voltage Vc ≤24V DC
- Heater voltage: VH 5.0V±0.2V AC or DC
- Load resistance: Adjustable RL
- Features of sensitive components under standard test condition: Heating resistor RH 31Ω±3Ω (room temperature)
- Heater power consumption: PH ≤900mW

- Surface resistance of sensitive material: Rs 2KΩ-20KΩ(in 100ppm NH3)
- Sensitivity: S Rs(in air)/Rs(100ppmNH3)≥5
- Concentration slope: α ≤0.6(R100ppm/R50ppm NH3)
- Standard testing temperature/humidity : 20℃±2℃/65%±5%RH
- Standard testing circuit: Vc:5.0V±0.1V
- VH: 5.0V±0.1V
- Preheating time: ≧48H

Connection Diagram:



Sample Code:

```
/*
  AnalogReadSerial
 Reads an analog input on pin 0, prints the result to the serial monitor

 This example code is in the public domain.
 */

void setup() {
  Serial.begin(9600);
}

void loop() {
  int sensorValue = analogRead(A0);
  Serial.println(sensorValue, DEC);
```

```
}
```

Phenomenon:

Open the serial monitor to check the pollution index of the air surrounding you: