

Sensors

1.Flame/fire sensors:

Sensitive to normal light.

Detects 760-1100 nm.

Pin description:

4 pins : VCC, GND,DOUT,AOUT.

Features:

Fast response time

Operating voltage-3.3 to 5V.

Analog and Digital voltage output

Applications:

Industrial Heating

Fire detection

Hydrogen stations

2.HC-SR04 ultrasonic sensor:

Includes transmitter and receiver.

Used to find out the distance from the object.

High accuracy and stable rate.

Pin description:

4 pins : VCC ,trigger,Echo, Ground.

Features:

Power supply:+5V DC

Input pulse width:10 myus

Measuring angle:30°.

Working principle:

$$S=(V*T)/2$$

3.Sound Sensors:

Detects sound

3 pins: Power supply,GND,O/P pin.

Applications:

Security

Monitoring

Provides input to buffer, amplif,peak detector.

Features:

Simple to use.

Analog output.

Specifications

Operating current=4-5mA

Frequency=1620KHz

Operating voltage=3%V

4 .MQ2 gas sensor:

Used for sensing concentration of gases such as LPG, hydrogen, carbon monoxide, smoke.

Pin description:

3 pins: VCC, GND, Digital/Analog.

5.IR sensors:

Detects IR radiation.

Consists of IR photodiode and IR LED.

(Together called photocoupler)

Pin description:

3 pins-GND,VCC, Digital o/p.

Applications:

Night vision camera.

Radiation thermometer.

IR imaging devices.