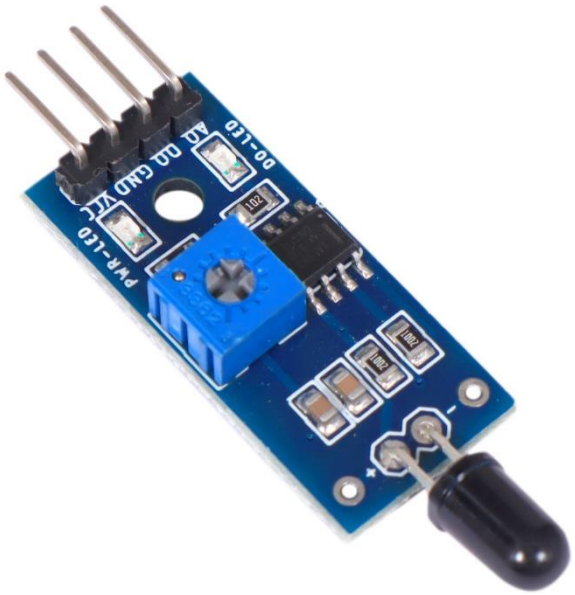
Flame Sensor Module



Description:

A flame sensor definition is a type of detector that is used to detect as well as react to the occurrence of a fire or flame. A flame sensor frequently responds faster & more precisely as compared to a heat or smoke sensor because of the mechanisms it utilizes to notice the flame. These sensors are also used in an ignition system to get precise actions otherwise to inform the operator.

In safety equipment, flame sensors, fire alarms, and smoke sensors play a major role because these sensors assist us in maintaining our offices, homes, or stores very safe from fire accidents. Generally, safety equipment is used in almost all apartments, modern homes, cinema halls, offices, and shopping malls, and in some regions, it is compulsory to fire security devices. To overcome this problem, a flame sensor is used to protect all these from fires or flames.

Features:

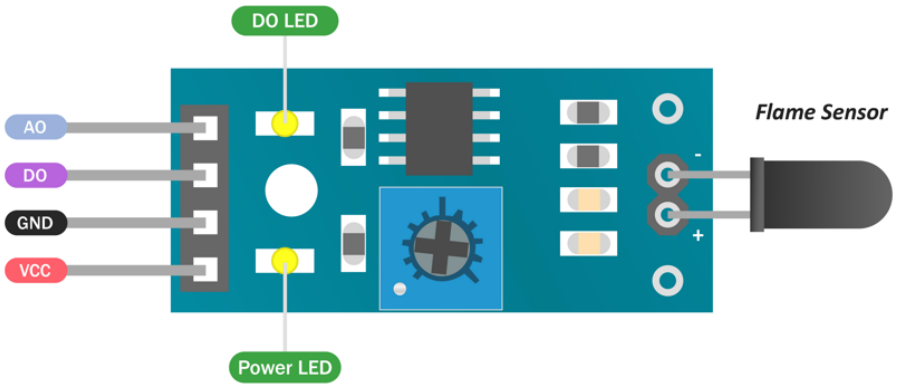
1. Indicator light: a green one for the switch, a red one for power.
2. Built in a potentiometer for sensitivity control.
3. On-board signal output indication, output effective signal is high, at the same time the indicator light up, the output signal can directly connect to microcontroller IO.

4. Can detect fire or wavelength in 760 ~ 1100 nm nano within the scope of the light source.
5. Detection angle about 60 degrees, the flame spectrum especially sensitive.
6. The flame of the most sensitive sensors flame, the regular light is also a response, generally used for fire alarm purposes.

Specifications:

- The range of operating voltage ranges from 3.3V to 5V.
- The operating current is 15 mA.
- The comparator chip used is LM393.
- The type of sensor is YG1006 Photo Transistor.
- Sensitivity can be adjusted by a potentiometer.
- The output type is Digital o/p or Digital & Analog output.
- Red LED is for power and green LED is for output.
- The range of the spectrum is from 760nm to 1100nm
- The detection angle is from 0 to 60 degrees.
- Operating temperature ranges from -25°C to 85°C.

Pin function:



VCC: 5V Power supply
GND: Ground
DO: Digital Output
AO: Analog Output

Advantages:

- These sensors have High-speed response.
- These sensors are resistant to fake alarms.
- This sensor frequently & more accurately respond faster as compared to a heat or smoke sensor because of the mechanisms it utilizes for detecting the flame.
- It has a long detection distance, environmental adaptability is good & high reliability.

Applications:

- A flame-sensor is mainly used to detect & react to the occurrence of a flame/fire.
- Flame sensors are used in fire alarms, fire detection, drying systems, firefighting robot, industrial heating, hydrogen stations, domestic heating systems, industrial gas turbines, gas-powered cooking devices, etc.
- These are used in MDF factories, pharmaceuticals, fume cupboards, coal handling, spray booths, nuclear industry, fabrication of metal, clothing dryers, aircraft hangars, gas fuelled cookers, domestic heating systems, heating & drying systems in industries, generators & storage tanks.

Package includes:

1x Flame sensor infrared receiver module ignition source detection module