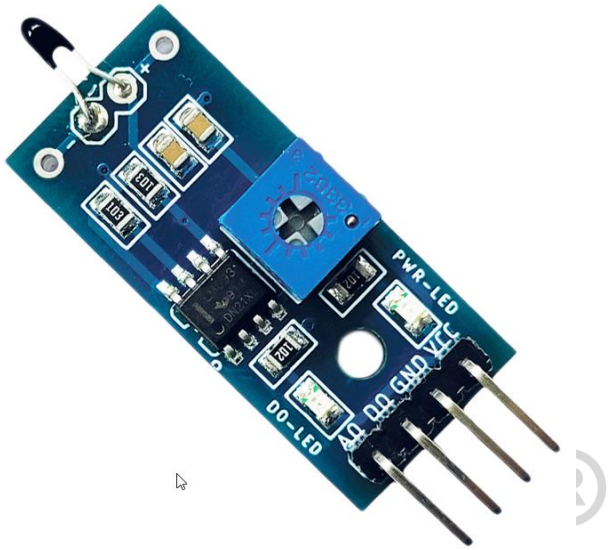
ADIY NTC

Thermistor Temperature Sensor Module



Description:

NTC Thermistor temperature sensor module is low cost, small size module. It is very sensitive to ambient temperature. It is generally used to detect the temperature of the surrounding environment. Through potentiometer adjustment, it is possible to change the temperature detection threshold.

NTC Sensors are a semiconductor ceramic made with various metal oxides. **Their electrical resistance decreases with increasing temperature.** This resistance is processed by an electronic circuit to provide temperature measurement.

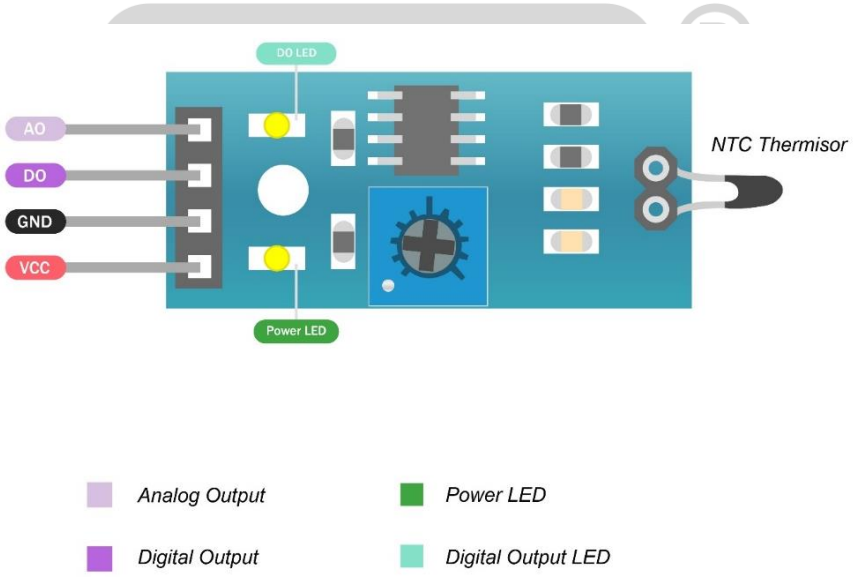
Features:

1. Using the NTC thermistor sensor, good sensitivity
2. The comparator output signal clean waveform is good, driving ability than 15mA
3. Adjust the temperature distribution bit detection threshold
4. The output format: Digital switching output (0 and 1)
5. With bolt holes for easy installation
6. Using a wide voltage LM393 comparator

Specification:

- Operating voltage :- 3.3~5V
- Temperature range :- -25 ~ +80 ºC
- Output type :- Both analog and digital
- Voltage Comparator :- LM393

Pin configuration:

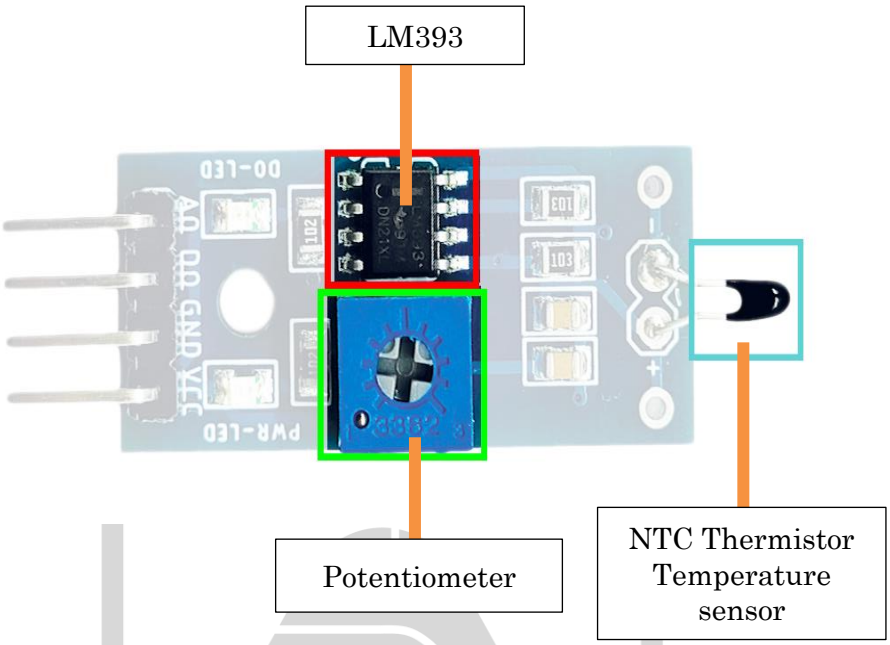


VCC input is connected to 3.3 - 5V DC

DO output can be attached directly to the single-chip microcomputer, through single-chip microcomputer to detect the high and low levels, thus detecting the temperature of the environment change. It can also be directly driven by our relay module, which can form a temperature control switch and control related equipment operating temperature, also can connect the fan used for cooling, etc.

AO output is analog output which varies according to temperature.

Ground pin is connected to the ground.



NTC Thermistor temperature sensor is a temperature sensor that uses the resistance properties of ceramic/metal composites to measure the temperature. Their electrical resistance decreases with increasing temperature.

LM393 based voltage comparator chip features a clean and stable digital output signal and has driving ability of 15mA.

Potentiometer can change the temperature detection threshold (i.e., temperature control).

- Clockwise rotation for increasing sensitivity towards temperature.

- Counter-Clockwise rotation for decreasing sensitivity towards temperature.

Application:

- Temperature Measurement
- Medical Laboratories
- Industrial Process Monitoring