

# Humidity Sensor Module - HR202

## Overview:

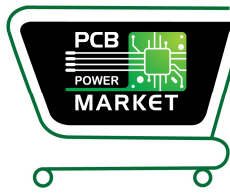
The HR202 Humidity Sensor Module can be used with your storage compartment, indoor air quality control, building automation, medical, industrial control systems wide range of applications and research fields. Easy to interface with your micro controller.

Photos

## Detailed Description:

- This module is based on HR202 resistive humidity sensor, which exposes excellent linearity, has wide measurement range and low power consumption. The module features both a power output indicator LED and a digital output indicator.
- This module is ideal for custom humidity sensing applications, and can be used in fields like meteorology, storage facility humidity control, textile industry and other applications which need ambient humidity monitoring.
- The output is available both as an analog output and as a digital output obtained using a comparator based on LM393 integrated circuit.





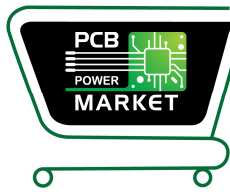
### **Module Description:**

- humidity sensor module is very sensitive to humidity, generally used to detect ambient humidity.
- through the potentiometer adjustment, you can change the humidity detection threshold That control humidity , Such as the need to control humidity of 60%, the corresponding module in the humidity adjusted its green light, DO output is high, the humidity falls below the set value, the output high, green light does not shine.
- Do output can be And is directly connected to the micro-controller through the micro-controller to detect high and low, thereby detecting the humidity changes in the environment;
- Do output of the relay module can directly drive the shop, which can be composed of a humidity switch, control-related device to operate at a suitable environment.

### **Instructions/Manuals/Technical details:**

#### **Technical Detail:**

- Technical Specification:
- Operating range:
- humidity(20-95%RH)
- Temperature(0-60Celsius)
- Power supply: 1.5V AC(Max sine)
- Operating frequency: 500Hz-2kHz
- Rated power: 0.2mW(Max sine)
- Central value: 31k $\Omega$ (at 25Celsius, 1kHz ,1V AC, 60%RH)
- Impedance range: 19.8-50.2k $\Omega$ (at 25Celsius, 1kHz ,1V AC, 60%RH)
- Accuracy: +-5%RH



- Hysteresis:  $\pm 1\%RH$
- Long-term stability:  $\pm 1\%RH/year$  Response time:

### **Technical datasheet:**

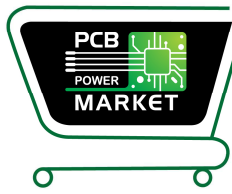
- <https://www.elecrow.com/download/HR202%20Humidity%20Sensor.pdf>

### **Key Features:-**

- Using high-quality HR202 humidity sensor ;
- The comparator output signal is clean, good waveform , driving ability , more than 15mA;
- Adjust the temperature distribution position detection threshold;
- The working voltage 3.3V-5V;
- A fixed bolt holes for easy installation;
- Using a wide voltage LM393 comparator.

### **Specifications:-**

- Operating Voltage: 3.3V to 5V DC
- Operating Current: 15ma
- Humidity Range: 20 to 95%RH
- Output Digital - 0V or 5V, Adjustable trigger level from preset
- LEDs indicating output and power
- LM393 based design
- Pin details
- VCC = 3.3V to 5V DC
- GND = Ground
- DO = Digital Output.



**Kit Includes :**

- On Board components only.

**Accessories :**

- Connecting wire