

# Temperatuur sensoren

- DHT22 temperatuur en vochtigheid sensor
- DS18B20 temperatuur sensor

# DHT22 temperatuur en vochtigheid sensor

DHT22-Sensor-Pinout.png

## Pin Identification and Configuration

No:	Pin Name	Description
<b>For DHT22 Sensor</b>		
1	Vcc	Power supply 3.5V to 5.5V
2	Data	Outputs both Temperature and Humidity through serial Data
3	NC	No Connection and hence not used
4	Ground	Connected to the ground of the circuit
<b>For DHT22 Module</b>		
1	Vcc	Power supply 3.5V to 5.5V
2	Data	Outputs both Temperature and Humidity through serial Data
3	Ground	Connected to the ground of the circuit

DHT22-pcb.jpg

## DHT22 Specifications

- Operating Voltage: 3.5V to 5.5V
- Operating current: 0.3mA (measuring) 60uA (standby)
- Output: Serial data
- Temperature Range: -40°C to 80°C
- Humidity Range: 0% to 100%
- Resolution: Temperature and Humidity both are 16-bit
- Accuracy:  $\pm 0.5^{\circ}\text{C}$  and  $\pm 1\%$

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# DS18B20 temperatuur sensor

DS18B20-pinout.jpg

DS18B20-ESP8266.jpg

DS18B20-Circuit-Diagram.png

## DS18B20 Sensor Specifications

- Programmable Digital Temperature Sensor
- Communicates using 1-Wire method
- Operating voltage: 3V to 5V
- Temperature Range: -55°C to +125°C
- Accuracy:  $\pm 0.5^{\circ}\text{C}$
- Output Resolution: 9-bit to 12-bit (programmable)
- Unique 64-bit address enables multiplexing
- Conversion time: 750ms at 12-bit
- Programmable alarm options
- Available as To-92, SOP and even as a waterproof sensor

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