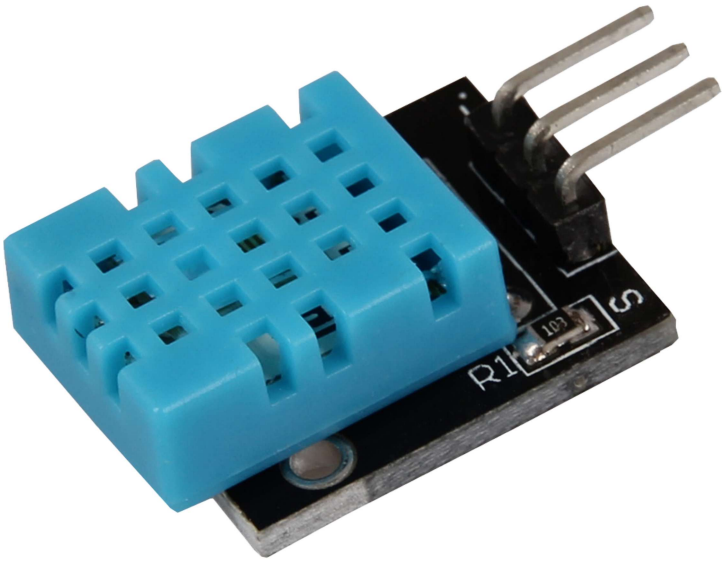
KY-015 COMBI-SENSOR (TEMPERATURE & HUMIDITY)

This sensor is a mixture of temperature sensor and humidity sensor in a compact design.

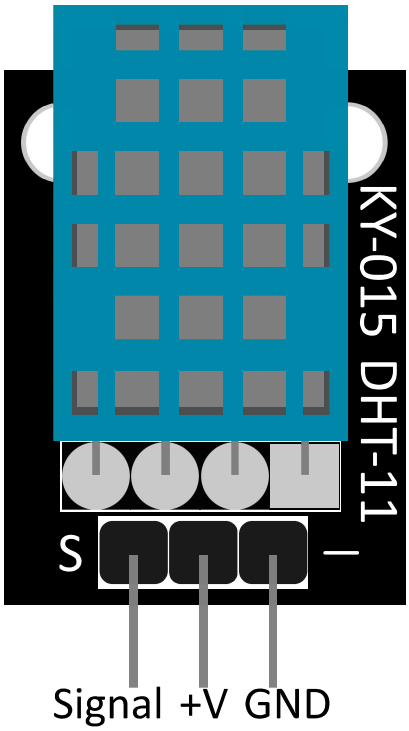
Arduino **Raspberry Pi** **Micro:Bit**



This sensor is a combination of temperature sensor and humidity sensor, united in a compact design. The disadvantage is the low sampling rate of the measurement, so that only every 2 seconds a new measurement result is available. This sensor is therefore particularly suitable for long-term measurements.

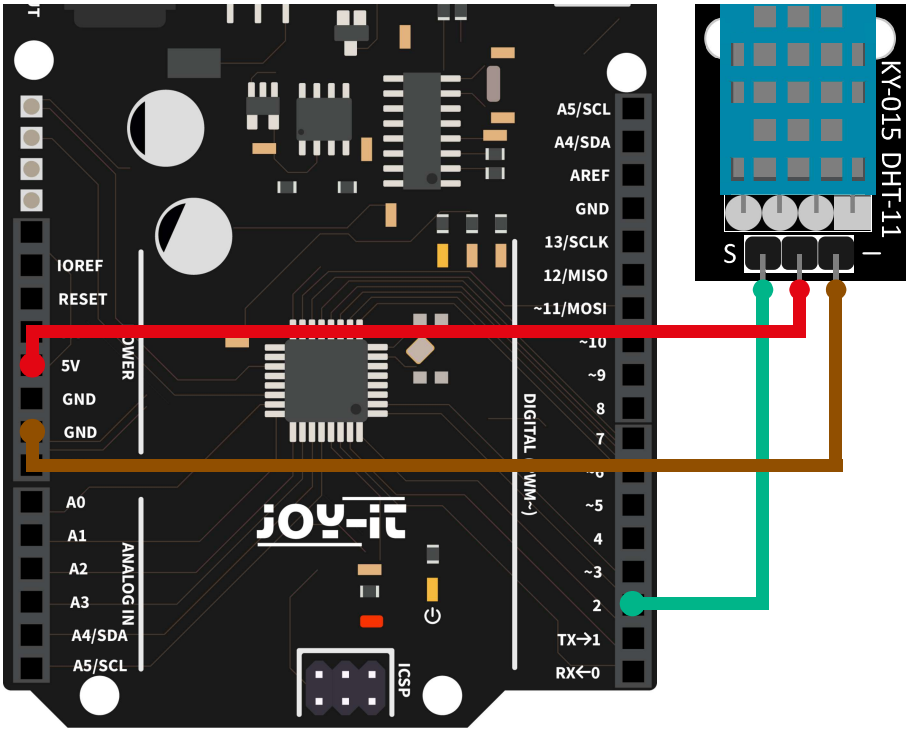
Chipset	DHT11
Communication Protocol	1-Wire
Measuring range	0 °C to 50 °C
Measurement accuracy	±2 °C
Measurement Accuracy	±5%RH
Measurable humidity	20-90%RH

PIN ASSIGNMENT



CODE EXAMPLE ARDUINO

PIN ASSIGNMENT ARDUINO



ARDUINO	SENSOR
Pin 2	Signal
5 V	+V
GND	GND

For the following code example an additional library is needed:

DHT-sensor-library by Adafruit | published under the **MIT License**.

This sensor does not output its measurement result as an analog signal to an output pin, but communicates it digitally encoded.

The example below uses the mentioned library. Therefore, download the library and unpack it into your Arduino library folder, which by default is located at (C:\User[username]\Documents\Arduino\libraries). Alternatively, it is also included in the download package below.

```
// Adafruit_DHT library is inserted
#include "DHT.h"

// Here the respective input pin can be declared
#define DHTPIN 2
```

```
DHT dht(DHTPIN, DHTTYPE);

void setup()
{
  Serial.begin(9600);
  Serial.println("KY-015 test - temperature and humidity test:");

  // Measurement is started
  dht.begin();
}

// Main program loop
// The program starts the measurement and reads out the measured va
// There is a pause of 2 seconds between measurements,
// so that a new measurement can be acquired on the next run.
void loop() {

  // Two seconds pause between measurements
  delay(2000);

  // Humidity is measured
  float h = dht.readHumidity();
```