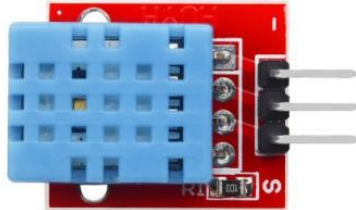


DHT11 Temperature and Humidity Sensor



1. Description

This sensor is a dedicated arduino sensor, and its connection ports are compatible with the arduino sensor shield.

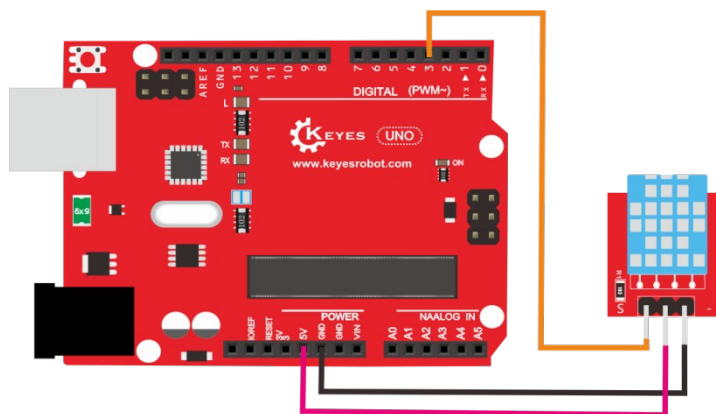
To be specific, it is a temperature and humidity composite sensor with calibrated digital signal output, which applies special digital module acquisition technology and temperature and humidity sensing technology to ensure that the product has high reliability and excellent long-term stability. Importantly, it comes with two positioning holes for us to attach it to other devices.

In a word, the product features premium quality, fast response, strong anti-interference ability as well as high cost performance.

2. Parameters

1. Working voltage: DC 5V
2. Interface: 3PIN
3. Port: Digital bidirectional unibus
4. Temperature range: $0-50^{\circ}\text{C}\pm 2^{\circ}\text{C}$
5. Humidity range: $20-90\%RH\pm 5\%RH$
6. Dimension: $27*16*8\text{mm}$
7. Weight: 2.0g

3. Wiring Diagram



4. Test Code

```
#include <dht11.h>
```

```
dht11 DHT;

#define DHT11_PIN 3

void setup(){

  Serial.begin(9600);

  Serial.println("DHT TEST PROGRAM ");

  Serial.print("LIBRARY VERSION: ");

  Serial.println(DHT11LIB_VERSION);

  Serial.println();

  Serial.println("Type,\tstatus,\tHumidity (%),\tTemperature
(C)");
}

void loop(){

  int chk;

  Serial.print("DHT11, \t");

  chk = DHT.read(DHT11_PIN);  // READ DATA

  switch (chk){

    case DHTLIB_OK:

      Serial.print("OK,\t");

      break;

    case DHTLIB_ERROR_CHECKSUM:

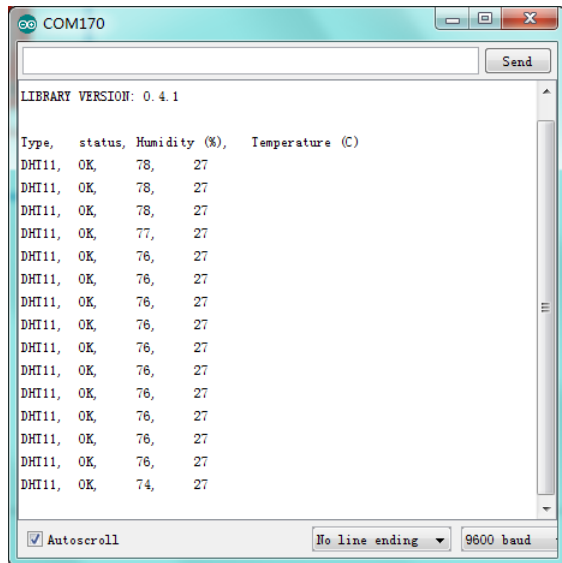
      Serial.print("Checksum error,\t");

      break;
```

```
case DHTLIB_ERROR_TIMEOUT:
    Serial.print("Time out error,\t");
    break;
default:
    Serial.print("Unknown error,\t");
    break;
}
// DISPLAT DATA
Serial.print(DHT.humidity,1);
Serial.print(",\t");
Serial.println(DHT.temperature,1);
delay(1000);
}
```

5. Test Result

Wire the wirings, upload the code and power on, then the ambient humidity and temperature value will be displayed in the serial monitor, as shown below.



6. Download Link:

<https://pan.baidu.com/s/1WGbYih4yH--6moqK9HsKRg>

Code: 9afu