

# Temperature and Humidity Sensor DHT21



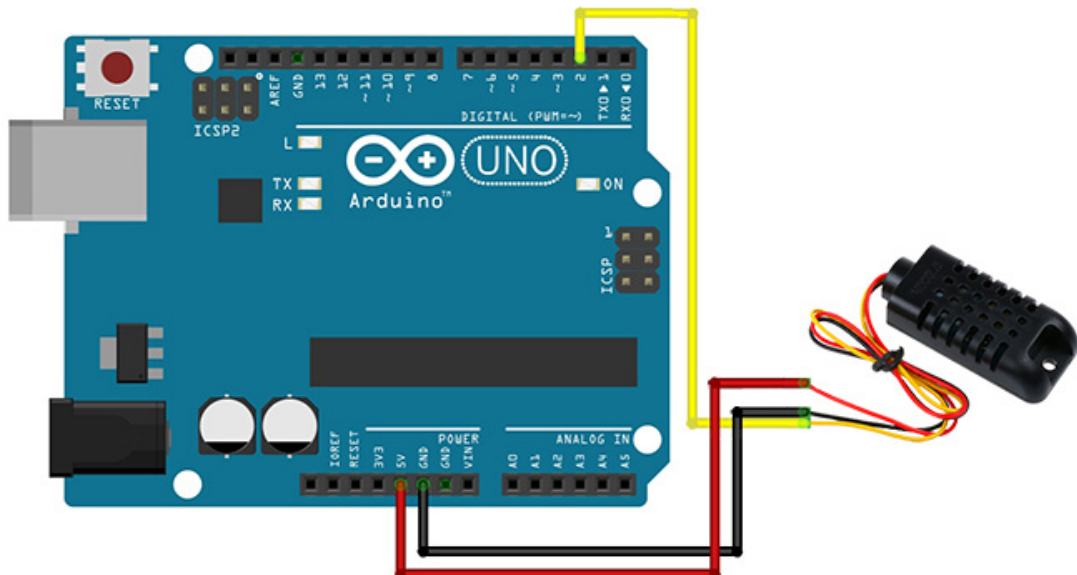
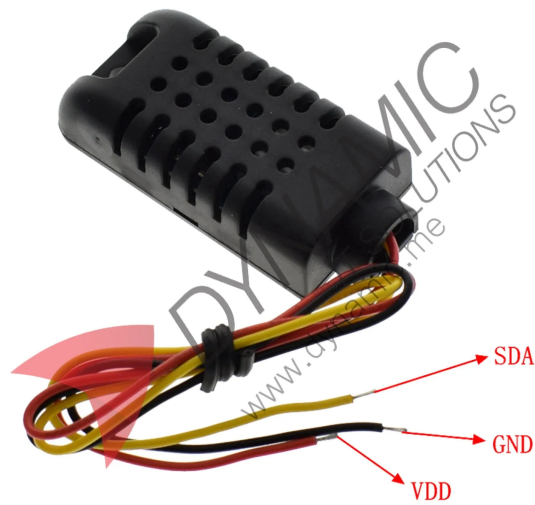
## **Feature**

The DHT21 (AM2301) is a fully calibrated digital sensor that accurately measures temperature and humidity using capacitive and NTC technology. It offers high reliability, fast response, and long-term stability. The sensor includes a built-in microcontroller with factory-calibrated coefficients for precise measurements. It operates on a single-wire digital interface, supports low power consumption, and transmits signals over distances up to 20 meters. Its robust design ensures strong anti-interference performance, making it ideal for demanding applications.

Specifications	
Model	DHT21 (AM2301)
Humidity Range	0% – 100% RH
Humidity Accuracy	±3% RH
Humidity Resolution	0.1% RH
Temperature Range	-40°C – 80°C
Temperature Accuracy	±0.5°C
Temperature Resolution	0.1°C
Response Time	≤2 s
Interface	Single-wire serial (up to 20 m)
Supply Voltage	3.3 V – 5.2 V (recommend 5 V)
Operating Current	~1.5 mA during sampling
Package	3-pin single-row (VDD, SDA, GND)
Use Cases	Weather stations, HVAC controls, data loggers, environmental monitoring

### Pinouts:

Pin Name	Type	Description
VDD	Power Input	Supply voltage (3.3 V – 5.2 V)
SDA	Digital I/O	Single-wire data bus (read/write)
GND	Power Ground	Common ground



**Product Pictures:**

