

Aosong (Guangzhou) Electronics Co., Ltd. is the world's leading Humidity sensor manufacturer. Aosong provides highly reliable solutions that are not only easy to install and use, but also extremely cost-effective.

Located in Guangzhou, China, Aosong has been supplying Humidity and Temperature (RH&T) Sensors, Condensation sensors, RH&T Transmitters, RH&T Monitors, Dew point Mirror Meter since 2003. With Aosong's capacitive humidity sensor, state-of-the-art test equipments, and our quality system which is certified to ISO 9001:2015, we can therefore offer all our products with a generous warranty, guaranteeing reliability and unique performance.



Supply voltage: DC 3.3 to 5.5V

Measuring range (T) : -20 to +60 Celsius(-4 to +140 Fahrenheit)

Measuring range (RH): 5 to 95% relative humidity

Typ. Temperature accuracy: ± 2 Celsius

Typ. Humidity accuracy: $\pm 5\%$ RH at 25 Celsius

Long term drift(T): < 1 Celsius/year

Long term drift(RH) : $< 1\%$ RH/year

Resolution(T): 0.1 Celsius

Resolution(RH): 1%RH

Sensor Type: Capacitive sensor

Interface: One line digital

Housing material: ABS

Net weight: 1g

Description:

DHT11 output calibrated digital signal. It applies exclusive digital-signal-collecting-technique and humidity sensing technology, assuring its reliability and stability. Its sensing elements are connected with 8-bit single-chip computer.

Every sensor of this model is temperature compensated and calibrated in accurate calibration chamber and the calibration-coefficient is saved in type of programme in OTP memory, when the sensor is detecting, it will cite coefficient from memory.

Small size & low consumption & long transmission distance(100m) enable DHT11 to be suited in all kinds of

harsh application occasions. Single-row packaged with four pins, making the connection very convenient.

Model	DHT11
Power supply	3.3-5.5V DC
Output signal	Aosong 1-wire bus digital signal
Sensing element	Polymer humidity resistor
Measuring range	humidity 20-90%RH; temperature 0~50Celsius
Accuracy	humidity +-5%RH; temperature +-2Celsius
Resolution or sensitivity	humidity 1%RH; temperature 1Celsius
Repeatability	humidity +-2%RH; temperature +-1Celsius
Humidity hysteresis	+ -1%RH
Long-term Stability	+ -1%RH/year
Interchangeability	fully interchangeable