

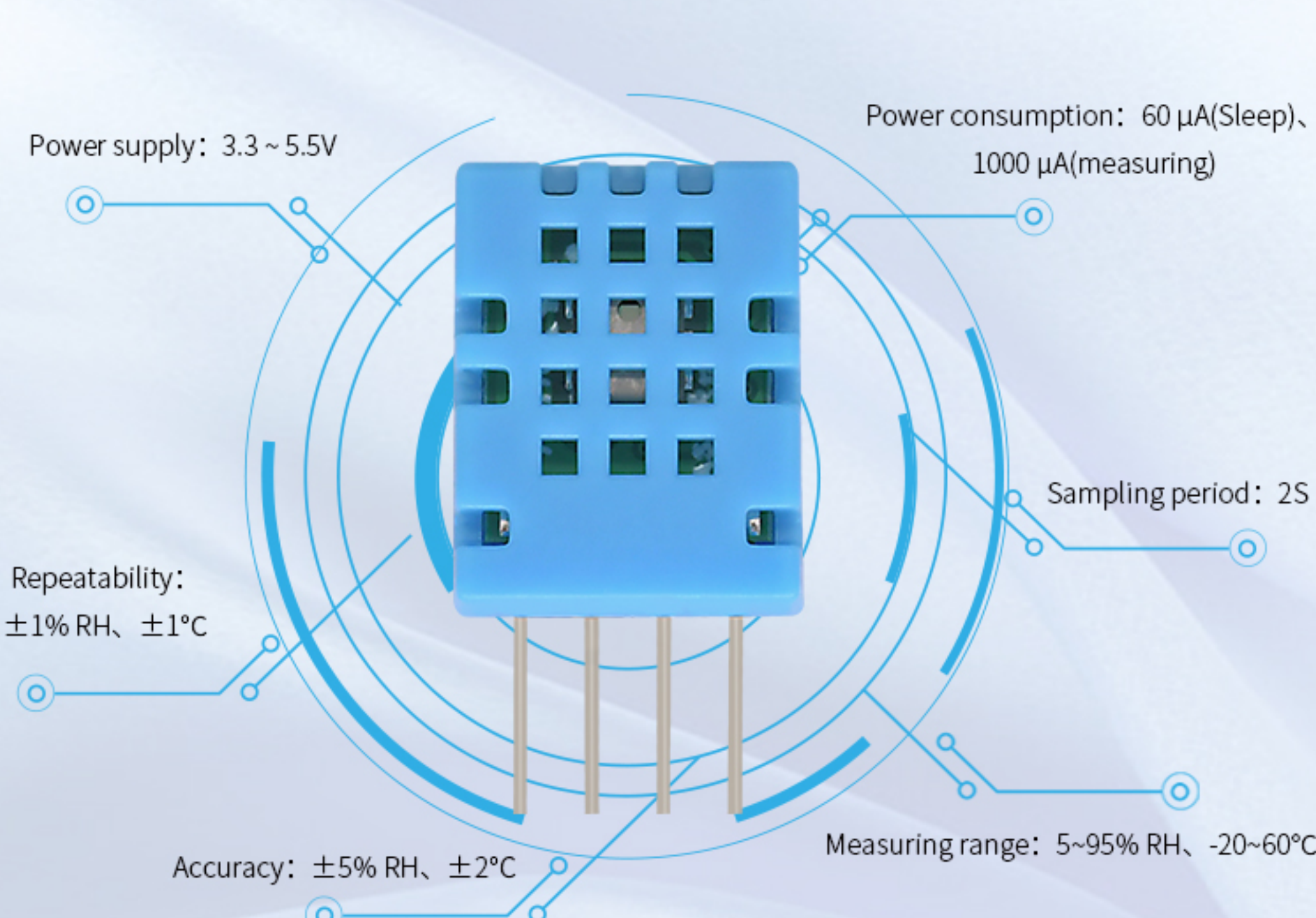
TEMPERATURE AND HUMIDITY MODULE

- ✓ Long-term stability
- ✓ Digital signal output
- ✓ Fast response, strong anti-interference ability

DHT11 Temperature and humidity module

Low cost, precise calibration

DHT11 digital temperature and humidity sensor is a composite sensor contains a calibrated digital signal output of the temperature and humidity. Application of a dedicated digital modules collection technology and the temperature and humidity sensing technology, to ensure that the product has high reliability and excellent long-term stability. The sensor includes a resistive sense of wet components and an NTC temperature measurement devices, and connected with a high-performance 8-bit microcontroller.

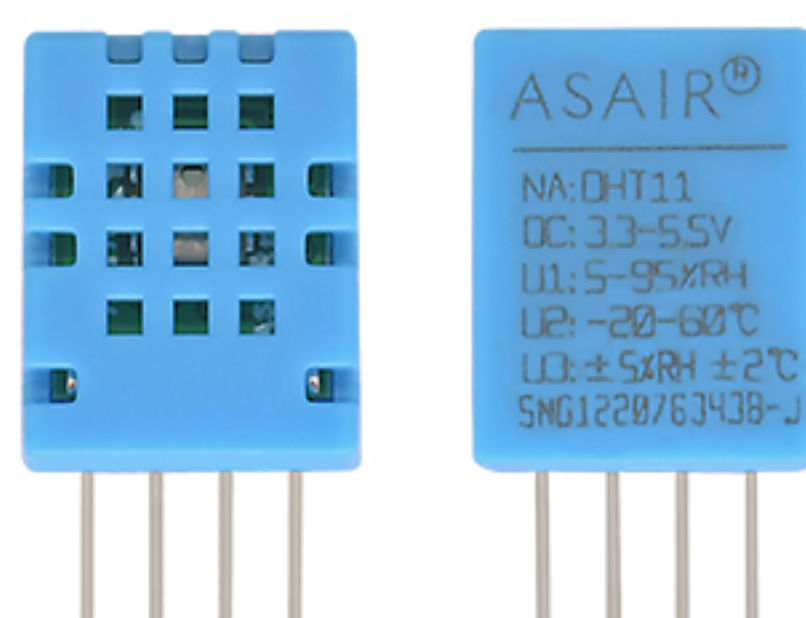


ASAIR APPLICATIONS >>

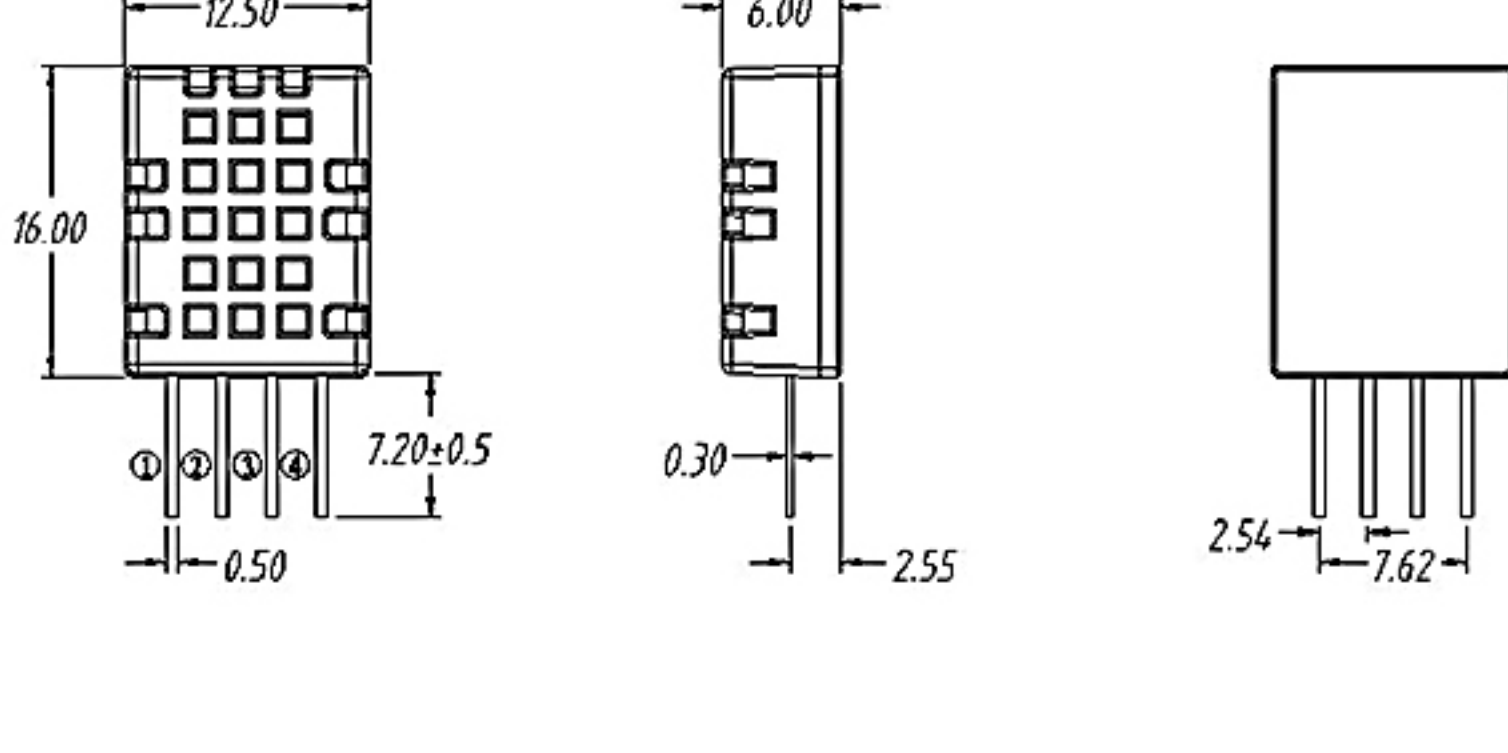
HVAC, dehumidifier, testing and inspection equipment, consumer goods, automotive, automatic control, data loggers, weather stations, home appliances, humidity regulator, medical and other humidity measurement and control.



ASAIR SPECIFICATIONS >>

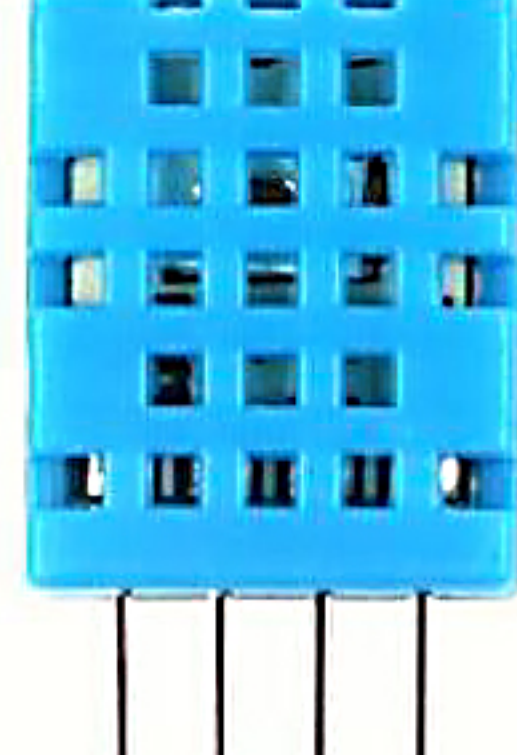


Model	DHT11
Supply Voltage	3.3~5.5V
Power consumption	60 μ A(sleep)、1000 μ A(measuring)
Low level output voltage	0~300mV
High level output voltage	90%~100%VDD
Low level input voltage	0~30%VDD
High level input voltage	70%~100%VDD
Sampling period	2S
Measuring range	5~95%RH、 $-20\sim 60^\circ$ C
Accuracy	$\pm 5\%$ RH、 $\pm 2^\circ$ C
Repeatability	$\pm 1\%$ RH、 $\pm 1^\circ$ C
Response time	<6S(Relative humidity)、5~30S(Temperature)
Hysteresis	$\pm 0.3\%$ RH、 $\pm 0.3^\circ$ C
Drift	<0.5%RH/yr、<0.5 $^\circ$ C/yr



DHT11 Dimensions (Unit: mm)

ASAIR INTERFACE DEFINITION >>



DHT11 Pin diagram

Pin	Name	Description
1	VDD	power supply 3.3~5.5V DC
2	DATA	serial data, a single bus
3	NC	empty pin
4	GND	ground, the negative power