# SHT10 Temperature Humidity Sensor Module



## Description

SHTxx series single-chip sensor is a calibrated comprising several digital signal output from the temperature and humidity combined sensor. It uses the patented industrial COMS process micromachining technology (CMOSens®) to ensure that the product has extremely high reliability and long-term stability. Sensor comprises a capacitive element and a polymer humidity measuring a gap-type temperature measuring element, and with a 14-bit A / D converter and a serial interface circuit in the same seamless connection on a chip. Therefore, the product has quality ultra-fast response, strong anti-interference ability, high cost performance and other advantages.

This module based on SHT1x (including SHT10, SHT11, and SHT15) that is Sensirion's family of surface-mountable relative humidity and temperature sensors. The sensors integrate sensor elements plus signal processing on a tiny footprint and provide a fully calibrated digital output. A unique capacitive sensor element is used for measuring relative humidity while the temperature is measured by a band-gap sensor. The applied CMOSens® technology guarantees excellent reliability and long term stability. Both sensors are seamlessly coupled to a 14bit analog to digital converter and a serial interface circuit. This results in superior signal quality, fast response time and insensitivity to external disturbances (EMC).

## Features

Input Voltage: 3.3V

Output Type: Digital

ADC: 14 bit

Two mounting holes diameter: 3mm

Temperature Range: -40°C ~ 123,8°C

Temperature Accuracy: ±0.5°C

Temperature Resolution: 0.01℃

Humidity Range: 0% ~ 100% RH

Humidity Accuracy: ±4.5% RH

Humidity  Resolution: 0.03% RH

Pin Number: 4 Pin