SEN0385

INTRODUCTION

This is an SHT31 Temperature & Humidity sensor housed in a weather-proof enclosure. The sensor is designed to be waterproof so you can use it safely in outdoor projects. Please note that although the sensor is waterproof, it is not suggested to submerge it in water. For in-water measurement, the DS18B20 Sensor is highly recommended.

Thanks to Sensirion's CMOSens® technology, highly integrated capacitive humidity sensing components, and band-gap temperature sensing components, the SHT31 offers high reliability and long-term stability with low power consumption, fast response, and strong anti-interference ability. The sensor supports I2C communication and is compatible with 3.3V/5V controllers like Arduino, micro: bit, and ESP32.

SHT31 is the standard version of the SHT3x series. It provides humidity accuracy ± 2%RH@0% RH~100% RH (at 25°C), and temperature accuracy±0.2°C@ 0°C ~90°C (typical).

Note: Although the temperature measurement range of the sensor is - 40 ~ 125 ℃, we recommend NOT to place the sensor at a temperature higher than 80 ℃ since its shell is made of PE material.

FEATURES

Weather-proof

High precise, internal auto-calibrated, digital output

Low power consumption, fast response, and strong anti-interference

SPECIFICATION

Operating Voltage: 3.3~5V

Operating Current: <1.5mA

Humidity Detection Range: 0%RH~100%RH

Humidity Accuracy: ±2%RH@0%RH~100%RH(at 25℃)

Temperature Detection Range: -40℃~125℃

Temperature Accuracy: ±0.2℃@0℃~90℃ (Typical)

Communication: I2C

Cable Length: about 1m

SHIPPING LIST

SHT31 Outdoor Temperature & Humidity Sensor (-40℃~125℃) - I2C x1