SHT31 Temperature And Humidity Sensor Breakout

SEN0331
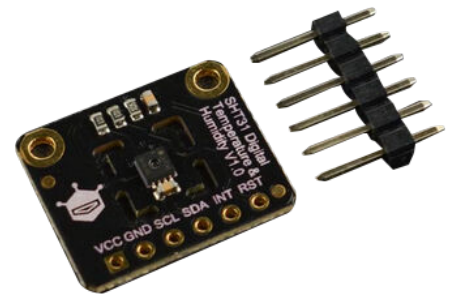
Product Overview

Description

DFRobot SHT31 Digital Temperature and Humidity Sensor Breakout is based on Sensirion SHT31 sensor IC that features CMOSens® technology. This SHT31 sensor breakout provides high reliability and long-term stability with low power consumption, fast response, and strong anti-interference ability. The sensor breakout features highly integrated capacitive humidity sensing components and band-gap temperature sensing components. The SHT31 sensor supports I²C communication and is compatible with 3.3V/5V controllers like Arduino, micro:bit, and ESP32. Typical applications include urban environment monitoring, intelligent buildings, industrial automation, smart home, and other Internet of Things (IoT).

Features

- Highly precise and internal auto-calibrated digital output
- Low power consumption, fast response, and strong anti-interference
- Compatible with 3.3V/5V controllers

Specifications

- 2.15V to 5.5V operating voltage range
- <1.5mA operating current
- 0%RH to 100%RH humidity detection range
- ±2%RH @ 0%RH to 100%RH (at 25°C) humidity accuracy
- -40°C to 125°Ct temperature detection range
- ±0.2°C @ 0°C to 90°C (typical) temperature accuracy
- I²C communication
- 19mm x 16mm/0.75" x 0.63" outline dimension
- 2mm/0.08" mounting hole size
- 15mm /0.59" mounting hole pitch

Applications

- Urban environmental monitoring
- Intelligent building, smart home
- Grain storage
- Plant and animal breeding system

Mouser Part Number

View Part

To learn more, visit https://www.mouser.com/new/dfrobot/dfrobot-sht31-digital-temp-humidity-sensor/