

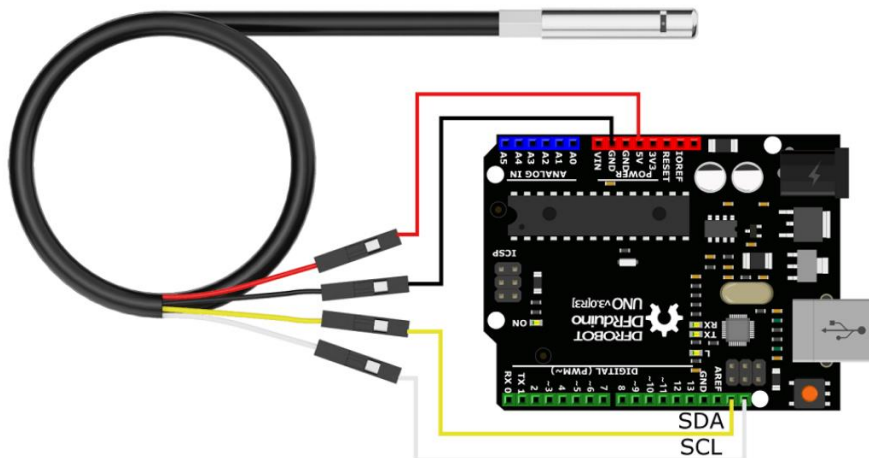
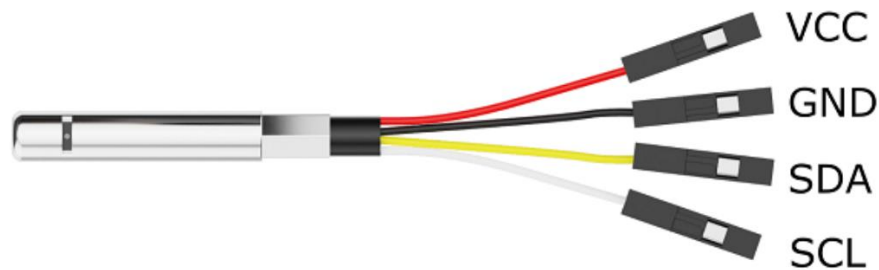
SEN0546

INTRODUCTION

This I2C digital temperature & humidity sensor offers high accuracy of $\pm 3.0\text{RH}\%$ for humidity and $\pm 0.5^\circ\text{C}$ for temperature and features a user-programmable humidity & temperature alarm function.

Its housing is made of 304 stainless steel to ensure good impact resistance, heat resistance, low temperature, and chemical resistance. The sensor output is designed as DuPont 2.54 connector for easy wiring. Also, there are two built-in 4.7K pull-up resistors and one 100nF filtering capacitor so the sensor can be directly used with microcontrollers like Arduino.

This temperature & humidity sensor can be applied to electronic, medical, automotive, industrial, weather, and other fields, including home appliances like HVAC, dehumidifiers and refrigerators, testing & inspection equipment, and other relevant temperature & humidity measurements and controls.



FEATURES

304 stainless steel, good impact resistance

Low power consumption, high accuracy

User-programmable temperature & humidity alarm response address (ARA)

APPLICATIONS

HVAC

Dehumidifiers and refrigerators

Testing & inspection equipment

Other relevant temperature & humidity measurements and controls

SPECIFICATION

Operating Voltage: 2.5V~5.5V

Standby Current: 0.05uA (Typical), 0.3uA (Max)

Average Operating Current: 1.5uA (Typical), 3.0uA (Max)

Temperature Measurement Range (°C): -40°C~125°C

Temperature Measurement Accuracy (°C): $\pm 0.5^{\circ}\text{C}@0^{\circ}\text{C}\sim 50^{\circ}\text{C}$

Humidity Measurement Range (%RH): 0%RH~100%RH

Humidity Measurement Accuracy (%RH): $\pm 3.0\% \text{RH}@20\% \text{RH}\sim 80\% \text{RH}$

Communication: I2C

Connector: DuPont 2.54

Reserved DuPont Wire Length: 5cm

Wire Length: 1.5m

Housing: 304 stainless steel

Wire Sequence: red VCC; black GND; white SCL; yellow SDA

SHIPPING LIST

I2C Temperature & Humidity Sensor (Stainless Steel Shell) x1

