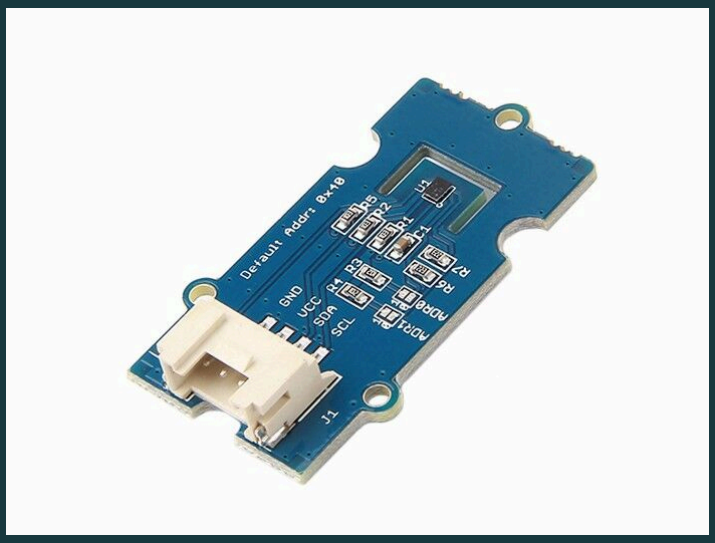
seeed studio

INDUSTRIAL PRODUCT DATASHEET

Grove - Temperature&Humidity Sensor (HDC1000)

A compact, factory-calibrated digital humidity and temperature sensor with high accuracy, low power, and robust design for demanding environments.

SKU	UPDATED	PRICE
101020087	2024-08-09 01:54:46	$14.90(Excl. VAT)



Overview



The Grove - Temperature&Humidity Sensor (HDC1000) integrates a digital HDC1000 sensor from Texas Instruments, providing accurate humidity and temperature measurements with low power consumption. It features a factory-calibrated design with a robust capacitive sensing element, operating over a wide -40°C to +125°C temperature range and 0–100% relative humidity with ±0.2°C and ±3% RH accuracy.

Key Features

This product is retired, please consider **Grove - Temperature and Humidity Sensor Pro(AM2302)** as your alternative choice.

Grove - Temperature&Humidity Sensor (HDC1000) utilizes a HDC1000 sensor, which was designed by Texas Instruments. It is a digital humidity sensor with integrated temperature sensor that provides excellent measurement accuracy at very low power. The device measures humidity based on a novel capacitive sensor. The humidity and temperature sensors are factory calibrated. The innovative WLCSP (Wafer Level Chip Scale Package) simplifies board design with the use of an ultra-compact package. The sensing element of the HDC1000 is placed on the bottom part of the device, which makes the HDC1000 more robust against dirt, dust, and other environmental contaminants. The HDC1000 is functional within the full –40°C to +125°C temperature range, and 0-100% RH range.

Features

- Grove connector compatible
- IIC Interface
- Low Power
- Wide operating voltage range
- I2C Serial Bus Address Configuration

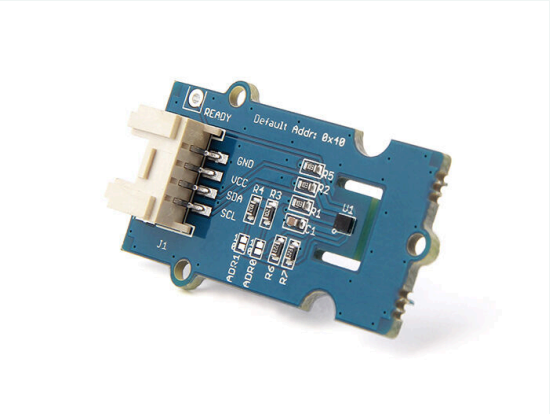
Specification

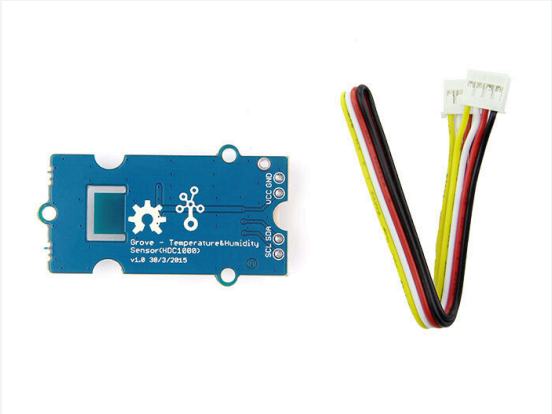
- Supple Voltage: 3~5Vdc;
- Working Current: 0.12~90uA;
- Relative humidity accuracy: ±3%RH；
- Relative humidity operating range: 0~100%RH;
- Temperature accuracy: ±0.2℃；
- Temperature range: -40~125℃；
- Operating temperature: -20~85℃
- Dimension: 40×20mm.

Part List

- 1x PCBA -Grove - Temperature&Humidity Sensor(HDC1000);
- 1x 26AWG Grove Cable; SA206120099A.

Product Gallery





Part List

Grove - Temperature&Humidity Sensor (HDC1000)	1
26AWG Grove Cable; SA206120099A.	1

Compliance & Logistics

HSCODE	9025900090
ROHS	1

Resource Links

- https://www.seeedstudio.com/Grove-Temperature-Humidity-Sensor-HDC100-p-2535.html
- Grove - Temperature&Humidity Sensor(HDC1000) v1.0 sch pcb.zip
- Grove - Temperature&Humidity Sensor(HDC1000) v1.0 sch.pdf
- Demo code
- HDC1000_DataSheet.pdf

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