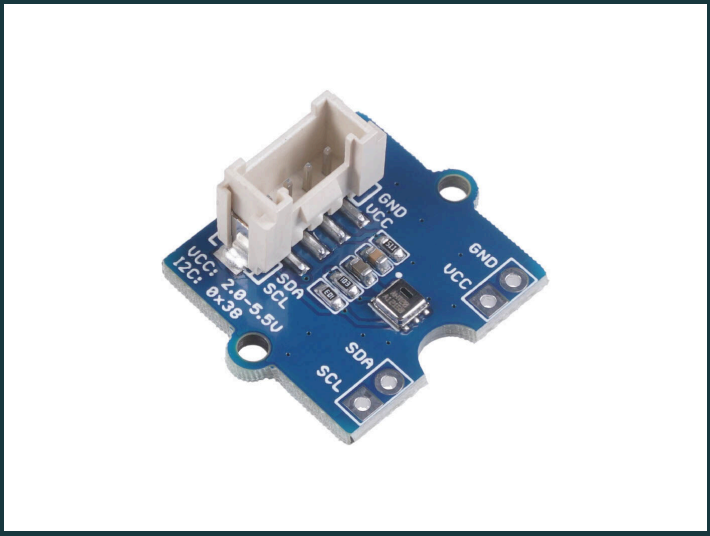
seeed studio

INDUSTRIAL PRODUCT DATASHEET

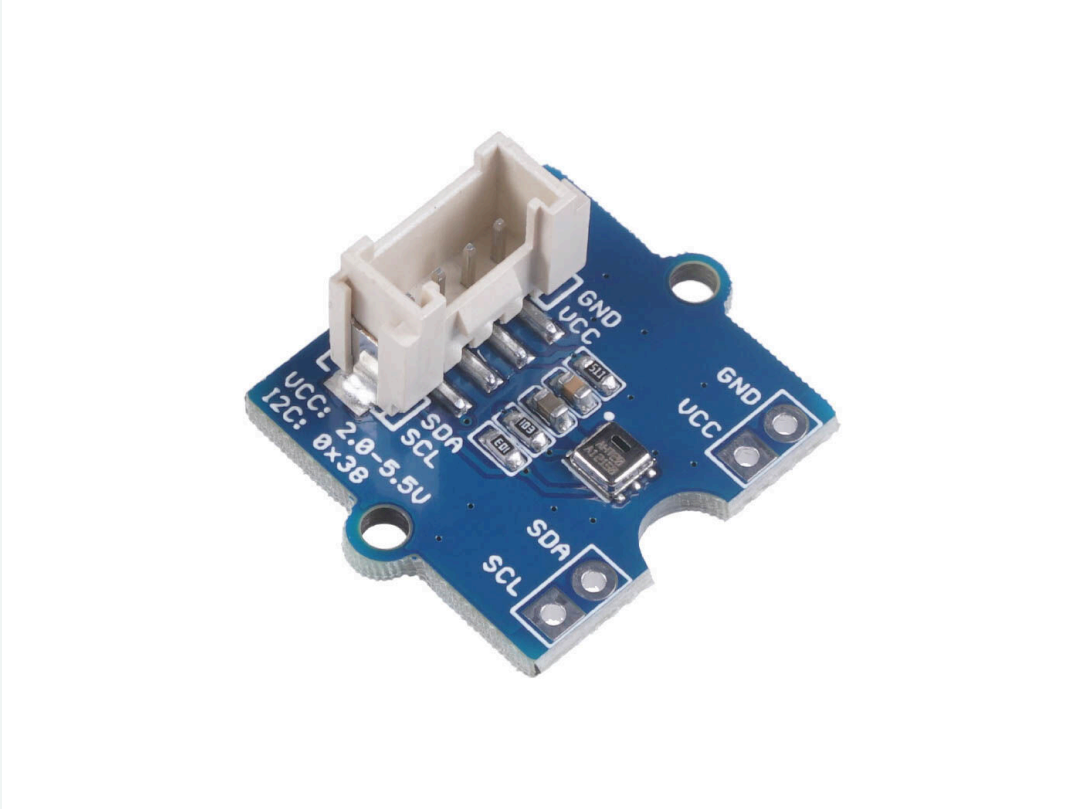
Grove - AHT20 I2C Industrial Grade Temperature and Humidity Sensor

Industrial-grade Grove I2C temperature and humidity sensor with long-term stability, -40 to 85°C and 0-100% RH ranges, ASIC chip with MEMS capacitive humidity sensing, and starter-friendly Arduino support.

SKU	UPDATED	PRICE
101990644	2026-09-07 02:56:16	$4.50(Excl. VAT)



Overview



The Grove - AHT20 I2C Industrial Grade Temperature and Humidity Sensor offers excellent long-term stability, quick response, and strong anti-interference, making it suitable for most industrial scenarios with a temperature measurement range of -40 ~ 85°C and a humidity measurement range of 0 ~ 100% RH. It features a newly designed ASIC chip with an improved MEMS semiconductor capacitive humidity sensor and standard on-chip temperature sensor, packaged in a dual-row flat lead-free chip package suitable for reflow soldering, and is starter-friendly with Arduino compatibility, detailed tutorials, and abundant resources.

Key Features

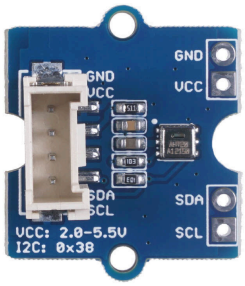
- **Excellent long-term stability:** Quick response and strong anti-interference ability, and normal use in harsh environments
- **Suitable for most industrial scenarios:** temperature measurement range -40 ~ 85°C, Humidity measurement range 0 ~ 100% RH
- **Equipped with newly designed ASIC chip:** improved MEMS semiconductor capacitive humidity sensor and standard on-chip temperature sensor
- **Starter-friendly:** Compatible with Arduino, Detailed start-up tutorials, abundant resources, and projects provided in Wiki and Community
- **SMD package** suitable for reflow soldering

Grove - AHT20 I2C Industrial Grade Temperature and Humidity Sensor is packaged in a dual-row flat lead-free chip package, suitable for reflow soldering. The AHT20 is equipped with a newly designed ASIC chip: an improved MEMS semiconductor capacitive humidity sensor and a standard on-chip temperature sensor.

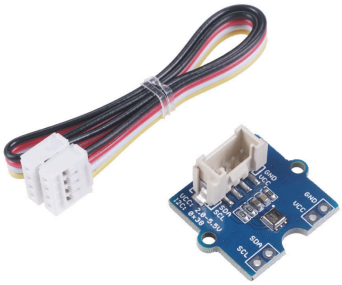
Compared with previous generation temperature and humidity sensors such as Grove-Temperature & Humidity Sensor Pro (AM2302/DHT22), AHT20 has a more stable performance in harsh environments. In fact, AHT20 is suitable for most **industrial scenarios.**

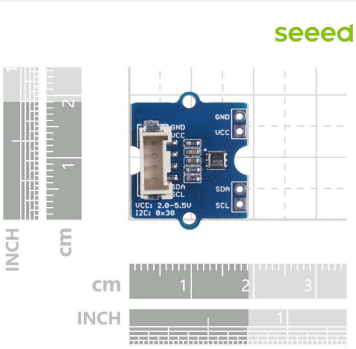
The output is I2C protocol with Grove interface. We have developed more than **400 Grove modules** covering a wide range of applications that can meet various needs. Plug and play, easy to get started!

Product Gallery









Compliance & Logistics



HSCODE	9025900090
USHSCODE	9025900600
UPC	
EUHSCODE	9013101000
COO	CHINA

FCC Requirement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

15.21

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy.

If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Resource Links

- https://www.seeedstudio.com/Grove-AHT20-I2C-Industrial-grade-temperature-and-humidity-sensor-p-4497.html
- Hardware schematic diagram
- Arduino Library
- I2C Wire Library Overview

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