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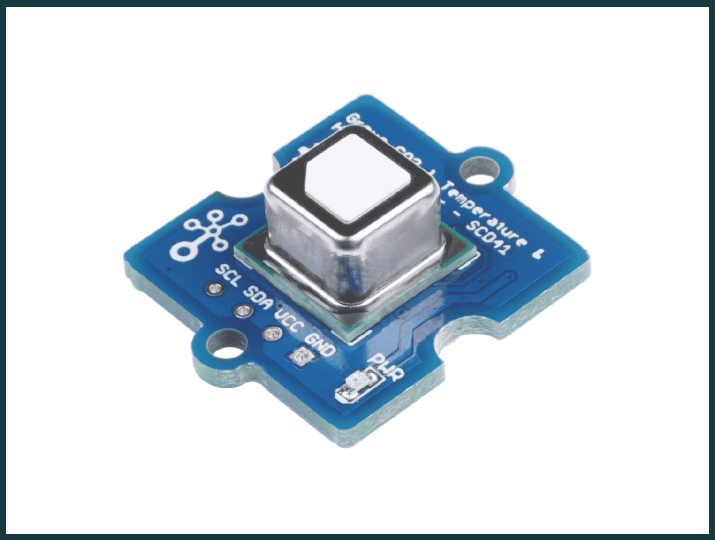
INDUSTRIAL PRODUCT DATASHEET

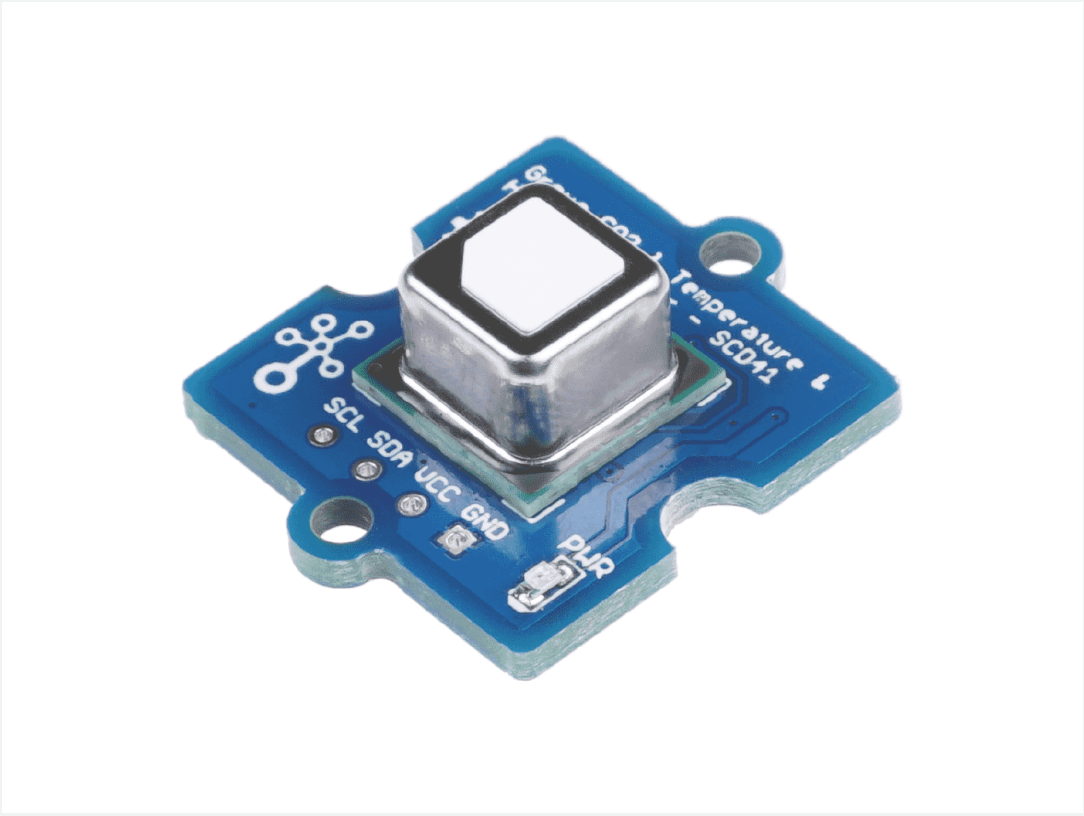
Grove - CO2 & Temperature & Humidity Sensor（SCD41）- photoacoustic NDIR technology, algorithms, ideal for Smart Ventilation System

The Grove - SCD41 is a compact yet powerful 3-in-1 environmental sensor for CO2, Humidity and Temperature measurement.

SKU	UPDATED	PRICE
101020952	2026-11-11 08:42:26	$52.90(Excl. VAT)



Overview



The Grove - SCD41 is a compact yet powerful 3-in-1 environmental sensor for CO2, Humidity and Temperature measurement. Based on Sensirion SCD41, the photoacoustic NDIR sensor technology enables high accuracy and wide measurement range. Its miniture size, large supply voltage, high robustness and adjustable power consumption allow it to perfectly integrate into a variety of environmental monitoring applications such as Smart Ventilation System.

Key Features

01 **Photoacoustic NDIR sensor technology PASens®：Embedded Sensirion SCD41 enables real-time CO2 detection with a high accuracy of up to ±(40 ppm + 5 %) and a wide measurement range of 400 to 5,000 ppm**

02 **3-in-1 environmental sensor**

Integrated humidity and temperature sensor comes with algorithm that enables superior on-chip signal compensation and addition RH and T outputs

03 **Compact size**

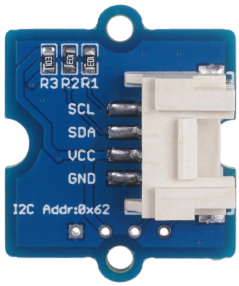
the smallest form factor of 10.1 x 10.1 x 6.5 mm3 allows space-effective integration

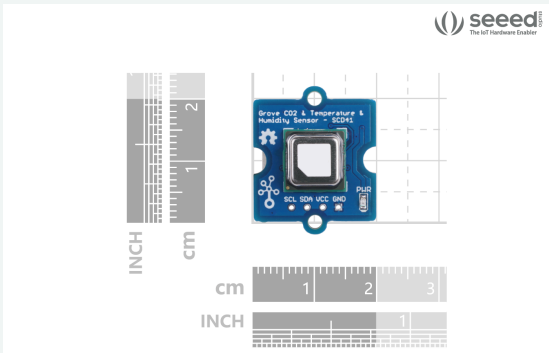
04 **Fit for various applications base on uses' need**

Supports large supply voltage of 2.4 V – 5.5 V, robustness towards external stresses and the adjustable power consumption down to < 0.4 mA avg

Product Gallery







Resource Links

- https://www.seeedstudio.com/Grove-CO2-Temperature-Humidity-Sensor-SCD41-p-5025.html
- Sensirion CO2 Sensors SCD4x Datasheet
- STEP of Sensirion CO2 Sensors SCD4x
- Grove - CO2 & Temperature & Humidity Sensor - SCD41 Board File
- Community Innovations: A Showcase of Sensirion-Based Grove Projects

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