

Media Release

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Sensirion launches SCD43 CO₂ sensor with stringent building standard compability

Sensirion launches the SCD43 CO₂ sensor, now available through its global distribution network. Designed for a wide range of applications, the SCD43 delivers precise and reliable measurements, supporting energy-efficient operation, environmental monitoring, and user comfort.



The SCD43 achieves a best-in-class accuracy of $\pm(30 \text{ ppm} + 3\% \text{ m.v.})$ and meets stringent building standards, including ANSI/ASHRAE 62.1-2022 Draft Addendum d, California Title 24, RESET® Grade B, and WELL v2. It features an extended range up to 5,000 ppm, single-shot operation, and integrated SHT4x humidity and temperature sensing for on-chip compensation. Built on Sensirion's proven SCD4x platform, it uses photoacoustic NDIR technology in a compact, fully encapsulated $10.1 \times 10.1 \times 6.5 \text{ mm}^3$ package, SMD solderable and tape-and-reel ready.

The sensor is robust, long-lasting, and easy to integrate, with on-chip self-calibration, long-term drift compensation, multiple power modes, and a digital I²C interface. Its small footprint and reliable performance make it suitable for a variety of designs and environments.

The SCD43 is particularly suited for commercial or residential HVAC systems, wall-mounted thermostats, air purifiers, and indoor air quality monitors, providing accurate CO₂ measurements to maintain energy efficiency, comfort, and healthy indoor environments.

Key features:

- Photoacoustic NDIR sensing technology
 - Small footprint of 10.1 × 10.1 × 6.5 mm³
 - Fully encapsulated sensor package
 - SMD solderable, tape & reel packaging
 - On-chip compensation and self-calibration
 - Supply voltage range of 2.4–5.5 V
 - Multiple operation and reduced power modes
 - Digital I2C interface
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About Sensirion – Experts for Environmental and Flow Sensor Solutions

Sensirion is one of the world's leading developers and manufacturers of sensors and sensor solutions that improve efficiency, health, safety, and comfort. Founded in 1998, the company now employs around 1'200 people at its headquarters in Stäfa, Switzerland and in numerous international subsidiaries. Their sensors can be used to measure a wide range of environmental parameters and flow rates precisely and reliably. As a pioneer in innovation, Sensirion develops solutions for the specific needs of customers and partners from the automotive, industrial, medical, HVAC and consumer electronics markets, as well as high-quality products for cost-efficient mass production. More information and current key figures are available at www.sensirion.com.