

Media Release

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Breaking the size barrier in CO₂ sensing: SCD4x Evaluation Kit available now

Sensirion, the expert in environmental sensing, proudly presents the SEK-SCD41 CO₂ sensor evaluation kit. The SEK-SCD41 evaluation kit has been designed for easy and cost-efficient evaluation of Sensirion's revolutionary SCD4x CO₂ sensor.

High levels of carbon dioxide (CO₂) compromise humans' cognitive performance and well-being. Thanks to new energy standards and better insulation, houses have become increasingly energy efficient. However, CO₂ produced by the human metabolism can accumulate rapidly. Therefore, CO₂ is a key indicator for indoor air quality. Measuring indoor CO₂ concentration enables smart ventilation systems to regulate ventilation in the most energy-efficient and human-friendly way. Moreover, indoor air quality monitors and other connected devices can help to maintain a low CO₂ concentration for a healthy, productive environment.



The SCD4x is Sensirion's next-generation miniature CO₂ sensor series that offers an unmatched price-to-performance ratio. The sensor is built on the photoacoustic sensing principle and Sensirion's patented PASens® and CMOSens® Technology to enable unmatched small sensor size combined with high performance. SMD compatibility and the small footprint allow cost- and space-effective integration to boost freedom of design for customers. The integrated best-in-class humidity and temperature sensor enables superior on-chip signal compensation and additional RH and T outputs. Finally, the large supply voltage range (2.4 V – 5.5 V), the robustness to external stresses and the adjustable power consumption make the SCD4x the perfect fit for varying customer needs.

SEK-SCD41 Evaluation Kit / Source: Sensirion

"Our disruptive SCD4x makes CO₂ sensing accessible for new applications and enables customers to use novel design-approaches. The SEK-SCD41 evaluation kit represents the perfect tool kit for effective SCD4x sensor evaluation and efficient prototyping", says Marco Gysel, Product Manager CO₂ Sensors at Sensirion. The evaluation kit contains a SCD41 CO₂ sensor mounted on a development board with a JST connector and through-hole pins. The included adapter cable (JST-Ethernet) connects to Sensirion's SEK-SensorBridge for easy evaluation of the sensor via the SEK-ControlCenter viewer software. Finally, the kit contains a 4-pin jumper wire cable that enables fast prototyping, e.g. through integration into existing platforms (like Arduino, Raspberry Pi and so on).

Start evaluating the SCD4x CO₂ sensor; the kit is now available worldwide through Sensirion's distribution network. The SCD40 and SCD41 sensor components will be available soon.

Learn more about the SCD4x CO₂ sensor at: www.sensirion.com/scd4x

More information about Sensirion's evaluation kits for environmental sensors can be found here: www.sensirion.com/sek

About Sensirion – Experts for Environmental and Flow Sensor Solutions

Headquartered in Stäfa, Switzerland, Sensirion AG is a leading manufacturer of digital microsensors and systems. Its product range includes gas and liquid flow sensors, differential pressure sensors and environmental sensors for the measurement of humidity and temperature, volatile organic compounds (VOC), carbon dioxide (CO₂) and particulate matter (PM_{2.5}). An international network with sales offices in the USA, Europe, China, Taiwan, Japan and Korea supplies international customers with standard and custom sensor system solutions for a wide range of applications. Sensirion sensors are commonly used in the medical, industrial and automotive sectors, and in analytical instruments, consumer goods and HVAC products.

One of the hallmark features of Sensirion products is the use of its patented CMOSens® Technology, which allows for intelligent system integration of the sensor element, logic, calibration data and digital interface on a single chip. Sensirion's credentials as a reliable supplier are evident from its loyal customer base, reputation for quality (ISO/TS 16949) and excellent customer pedigree.