

**Media Release**

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## Sensirion Inside: CO<sub>2</sub> traffic lights rely on Sensirion's CO<sub>2</sub> sensor technology

**Sensirion, the expert for environmental sensors, is pleased to announce that ISIS IC GmbH has chosen Sensirion's SCD30 CO<sub>2</sub> sensor for its CO<sub>2</sub> signal lights for classrooms, thus enabling reliable and accurate measurements in schools. The SCD30 is the ideal solution for determining air quality and for applications in the heating, ventilation, and air conditioning (HVAC) sector.**



Scientists have proven that SARS-CoV-2 and other viruses are mainly spread by aerosols exhaled by infected people. In enclosed indoor spaces (classrooms, offices, gyms, theaters, etc.), the main source of aerosols and CO<sub>2</sub> is the human body itself. High CO<sub>2</sub> concentrations in rooms are therefore accompanied by high aerosol levels, which in turn indicate inadequate ventilation and also increase the risk of infection. Measuring CO<sub>2</sub> is therefore a useful method for assessing air quality with respect to CO<sub>2</sub> and aerosol concentration, and enables simple, clear, and feasible ventilation recommendations to be made. In the cold season in particular, it is possible to achieve a balance between preventing the building becoming too cold through ventilation, and reducing the risk of viral infection.

"As the expert in environmental sensor technology, Sensirion is the ideal partner for our CO<sub>2</sub> traffic lights. Thanks to its high accuracy, compact size, and excellent performance, Sensirion's SCD30 CO<sub>2</sub> sensor met all our requirements", says Dirk Unsenos of ISIS IC GmbH. "In the meantime, we have already been able to gain important insights during our pilot projects in schools, which are significant with regard to safety and acceptance in daily classroom use."

"While larger respiratory droplets sink quickly to the ground, aerosols can float in the air for a long time. It is therefore especially important to monitor and optimize air quality in classrooms. We are convinced that the CO<sub>2</sub> signal light with its reliable measurement and instructive traffic light colors can help to monitor air quality and thus minimize the risk of infection and improve students' concentration", says Pascal Gerner, Director Product Management at Sensirion.

Sensirion's SCD30 sensors, based on CMOSens® Technology, enable high-accuracy carbon dioxide measurements at an attractive price-performance ratio. In addition to the CO<sub>2</sub> sensor, a first-class humidity and temperature sensor is used on the same sensor module.

More about the CO<sub>2</sub> sensor: [www.sensirion.com/scd30](http://www.sensirion.com/scd30)

More about the CO<sub>2</sub> signal light: [www.co2ampel.online](http://www.co2ampel.online)

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### About ISIS IC

ISIS IC, as a German company, offers its expertise in the field of sensor technology combined with Internet of Things. ISIS IC offers both the full service in the development of IoT products as well as its own products such as the HELIA series of assistance systems and CO2AMPEL, e.g.

The development portfolio ranges from the special sensor, over the radio link with hardware and embedded software, to operation and visualization through an Internet portal and to the smartphone. And for actuator purposes it works of course from the smartphone to the actuator (actuators are usually drive units that convert an electrical signal into mechanical movements or changes in physical parameters such as pressure or temperature and thus actively intervene in the controlled process).

The company is also involved in various international research projects. Topics include medical technology solutions for digital health care or civil drone technology.

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### 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 (CO<sub>2</sub>) and particulate matter (PM2.5). 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.