

Sensirion inside: Wuerfeli – the revolutionary CO₂ monitor from QE

Picture a classroom filled with children, their eyes heavy, faces reflecting fatigue, and motivation at an all-time low. This scenario is an all-too-common occurrence – not just in classrooms, but in every indoor environment. It highlights the often-overlooked importance of indoor air quality. The team at QE recognizes that the air we breathe has a profound impact on our lives and introduced an intuitive game-changer for everyone – the Wuerfeli. A compact, pyramid-shaped CO₂ monitor that continuously monitors the air you breathe while adjusting its brightness to fade into any scenery.



Stäfa, Switzerland – Fresh air not only heightens your concentration but also significantly reduces the risk of respiratory infections like influenza. Regular ventilation is the key to unlocking numerous benefits such as preventing mold, overall well-being, sharpening your concentration and reaction capabilities significantly, while combating fatigue. But how do you know when indoor air quality is poor, and you need to take a ventilation break? This is where Wuerfeli comes into play.

As the name suggests, the core of Wuerfeli's brilliance is the world's smallest, highly accurate, cube-shaped CO₂ sensor – the SCD40 by Sensirion. With it, the device transforms you into an air quality expert, guiding you through the invisible pathways of air, optimizing your living space's air quality every day. To ensure your indoor air is as oxygen-rich and fresh as outdoors, the Wuerfeli uses four colors to visualize when to open and close your windows. Say goodbye to guesswork and welcome the simplicity of fresh air with a flick of a switch:

wuerfeli

[wür-fe-li] *noun*

a delightful Swiss German diminutive for the word “cube”, adding a dash of charm to the word – a “cubey” or “cubette,” if you will.

- Blue: Close the windows, the air is as fresh as outside
- Green: Good room air quality
- Orange: Ventilation is recommended due to decreased cognitive performance
- Red: Air exchange needed – 1 in 30 breaths consists of previously exhaled air

In addition, Wuerfeli's unique pulsating mode in combination with the blue color helps you reduce ventilation time and minimize energy loss.

“We are thrilled to be partnering with Sensirion for such a meaningful cause. The SCD40 and the SHT40 are a perfect fit for Wuerfeli. High accuracy, unmatched price, and smallest form factors have allowed us to create a compact and affordable CO₂ monitor for everyone and everywhere”, says Laurin Schwitter, Co-founder of QE.

Wuerfeli also plays a central role in two major air quality studies conducted in 100 Swiss schools, where the Swiss-based company was able to prove a 63% reduction in COVID-19 infections in well-ventilated classrooms. Its high-precision measurements provide valuable insights into building design, insulation, ventilation behavior, and, most importantly, the demonstration of the “Wuerfeli Effect”: An apparent improvement in overall indoor air quality thanks to the intuitive color system that turns anyone into a ventilation pro in just a few days. An improvement you will clearly notice.

This partnership highlights both companies' commitment to improving the health and comfort of people worldwide. We want to inspire you to embrace a new level of air quality awareness. Don't just live; thrive with the gift of fresh air.

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, Sensirion now employs around 1'000 people at its headquarters in Stäfa, Switzerland and in numerous international subsidiaries. Sensirion sensors can be used to measure a wide range of environmental parameters and flow rates precisely and reliably. The company's aim is to make the world smarter with pioneering sensor technology. As a pioneer in innovation, Sensirion develops solutions for the specific needs of customers and partners from the automotive, industrial, medical technology and consumer electronics markets, as well as high-quality products for cost-efficient mass production. More information and current key figures at www.sensirion.com.

About QE – Making the invisible visible

QE is a passionate group of young engineers, with a strong background in electrical engineering and a focus on sensor technologies. What initially began as a modest craft project in a living room full of ideas soon turned out to be a competitive start-up with various scientific projects, products, and services. Founded in 2021, the Wuerfeli marks the first serial product available in the market. It was designed from scratch, developed, and refined through indoor air quality studies, leading to the most intuitive solution with maximized effectiveness. Resembling a Swiss mountain peak, the Wuerfeli embodies Swiss-based engineering and production. More information at www.wuerfeli.ch/swissness.