

VOCOO⁺

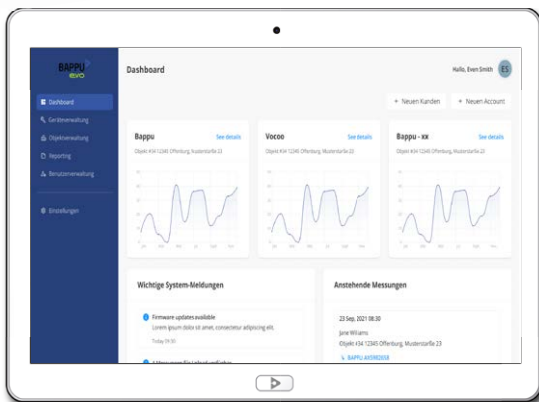
CO₂-IAQ-Monitor

Monitoring indoor ambient air

Technical details:
l=150mm, w=92mm, h=28mm, w= 200 gr.



Always in view; with BAPPUnow



The VOCOO⁺ is an IAQ sensor (Indoor Air Quality) for monitoring the ambient air in indoor environments. It can be used for assessing the concentrations of CO₂, particulate matter, as well as CO present in the ambient air. Moreover, parameters such as air temperature and relative humidity, as well as a TVOC indicator (total volatile organic compounds) round off the types of measurements available. The clearly visible LED “red-amber-green“ evaluation indicator system and display guarantee good readability. In cases where the maximum CO₂ level is exceeded, the VOCOO⁺ will indicate the need to ventilate the room.

Measured variables

- CO₂ (carbon dioxide)
- TVOC indicator
- Particulate matter PM1, PM2.5, PM10 (optional)
- CO (carbon monoxide) (optional)
- Air temperature
- Relative humidity

Features

- 6 measured variables
- Precisely proven measurement technology
- Wifi data interface
- BAPPUnow: modern online application
- Calibration confirmation
- Wall mounting kit
- LED traffic light display and acoustic signal

manufactured by



ELK GmbH Engineering office for Electronics
Gladbacher Str. 232 • D-47805 Krefeld • Germany
fon: +49 2151 788 86-0 • fax: +49 2151 788 86-02
www.elk.de • info@elk.de

www.bappu.de

Technical data sheet for the VOCOO⁺

Measured variables	Measurement range	Tolerance	Sensor	Resolution
Air temperatur	0...40 °C	+/- 1,2 °C	PT 1000 Sensor	0,1°C
Relative humidity	10...90%	+/- 6% rF	Capacitive humidity sensor	0,1%
CO ₂ (carbon dioxid)	0...10.000 ppm	+/- 75 ppm +/- 5% v.M.**	Non-dispersive infrared	1 ppm
TVOC*	Sensor	0...1000 ppm	metalloxid	1 digit
	Indikator (Ausgangssignal)	0...500		
PM (particulate matter)	PM ₁ : 0...1000 µg/m ³	PM ₁ , PM _{2,5} : 0...100 µg/m ³ +/-15 µg/m ³	optical	0,1 µg/m ³
	PM _{2,5} : 0...1000 µg/m ³			
	PM ₁₀ : 0...1000 µg/m ³	PM ₁₀ : 0...100 µg/m ³ +/-30 µg/m ³		
		101...1000 µg/m ³ +/-30% v.M.** bei 0...40 °C; 10...70% rF		
CO (carbon monoxid)	0...500 ppm	+/- 5 ppm +/- 10% v.M.**	electrochemical	1 ppm

*total volatile organic compounds, **From the measured value | Technical data subject to change.

The IAQ-CO₂ sensor for monitoring indoor ambient air hygiene (IAQ) - VOCOO⁺

The room air monitor continuously monitors office, school or living spaces with regard to these important components of the indoor air. The device requests ventilation by simply lighting up the traffic light colors green, yellow and red. A digital display shows CO₂, particulate matter, TVOC, air temperature, rel. humidity and CO. The concept is supported by an acoustic warning. A modern online application for managing the devices and evaluating the measurement data completes this innovative concept.

In terms of air quality, the ASR 3.6 on particulate matter states:

“In enclosed work rooms, healthy breathing air must be available in sufficient quantities. As a rule, this corresponds to the outdoor air quality.” The guidelines for outdoor air, which are essentially based on the EU guideline 2008/50/EG, must therefore be applied. It defines the limit values for the different particle fractions.”

In terms of air quality, ASR 3.6 on CO₂ states:

„If there is a reasonable suspicion that CO₂ concentrations are too high, measurements should be carried out under normal conditions of use and with the usual number of people, e.g. B. over the period of daily use. The instantaneous value is evaluated.

Before the measurement, the room must be ventilated as is usual for work. In rooms with a floor area of up to 50 m², a measuring point at a height of approx. 1.50 m and at a distance of 1 to 2 m from the walls is usually sufficient. In larger rooms, it may be necessary to set up several measuring points. The measuring point should be in the area where people are staying - but at a sufficient distance from people - in order to avoid the measuring result being directly influenced by the breathing air of people.“ (Source: ASR A3.6 Ventilation)

VOCOO⁺ - „Guardian of the indoor air.“