



Colswe-VOC-V2

Art. No. 13010

Colswe-VOC-V2 measures the quantity of volatile organic compounds (VOCs) in ambient air. Measurements can be read directly via an USB connection or they can be stored in its internal flash memory for later retrieval via the USB connection.

Colswe-VOC-V2 is ideal to monitor the air quality in residential, commercial and industrial spaces. The MEMS metal oxide sensor used in this device measures the variation of total volatile organic compounds in ambient air. The measurements are used to estimate the concentration in ppm CO₂ equivalents (relative). **Colswe-VOC-V2** detects alcohols, aldehydes, aliphatic hydro-carbons, amines, aromatic hydro-carbons (petrol vapors, etc.), carbon oxides, CH₄, LPG, ketones and organic acids. Be aware that the first estimation is only available 5-6 minutes after powering on **Colswe-VOC-V2**.

The initial estimated value measured by **Colswe-VOC-V2** is 450 ppm CO₂ equivalents (theoretical value for fresh air). The sensor measures relative variations of volatile organic compounds to provide an estimated ppm value, with an automatic baseline correction. The absolute value must therefore be interpreted with great care, as it is subject to drift. It is not comparable with the absolute value measured by a **Colswe-CO₂** but it has the advantage of including a broader range of volatile organic compounds than a simple CO₂ sensor.

The sensor part can be split from the main USB board and moved several meters away using ribbon cable, soldered on the designed contact pads. This may be useful to move the sensor close by to HVAC ducts.

Colswe-VOC-V2 can be connected directly to an Ethernet network with a Colswe-Hub-Ethernet, to a WiFi network with Colswe-Wireless-g or to a GSM network with a Colswe-HUB-GSM.

Parts:

- Yocto-VOC-V2 (Art. No. 23010).
- YoctoBox-Long-Thin-Transp-Vents (Art. No. 25020).
- USB-A-MicroB-30, right angle (Art. No. 36010) or left angle (Art. No. 36020) or straight (Art. No. 36030).
- Power Supply 1xUSB-A port white, 100-240V to 5V USB, 2,4A, 12W.

Technical data:

Yocto-VOC-V2 (Made in Switzerland)	YVOCMK01
Sensor:	iAQ-core C (MEMS sensor)
Measuring range:	450 ... 65000ppm equiv.
Accuracy:	n/a (relative estimate)
Sensitivity:	20 ppm 1%
Refresh rate:	1Hz
Normal operating temperature:	5 ... 40°C
Extended operating temperature:	0 ... 50°C
Max temperature:	50°C
Min temperature:	0°C
USB connector:	Micro-B
Drivers:	No driver needed
Supported Operative systems:	Windows (PC + IoT) Linux (Intel + ARM) Mac OS Android



API / SDK / Libraries (USB+TCP):	C++, Objective-C, C#, VB.NET, UWP, Delphi, Python, Java, Android
API / SDK / Libraries (TCP only):	Javascript, Node.js, PHP
RoHS:	yes
Enclosures:	YoctoBox-Long-Thin-Transp-Vents
USB Cables:	USB-A-MicroB-30, right angle USB-A-MicroB-30, right angle USB-A-MicroB-30, straight
Power supply:	1xUSB-A port white 100-240V to 5V USB, 2,4A, 12W
Thickness:	6mm
Width:	20mm
Length:	60mm
Weight:	5.6g