



The Yocto-VOC-V2 device will let you estimate the quantity of volatile organic compounds (VOCs) in ambient air via an USB connection, as well as record it on its internal flash for later retrieval when connected again by USB.

This device 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, and use it to estimate their concentration in ppm CO2 equivalents (relative). The sensor is able to detect 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 the device.

The initial value returned by the sensor is 450 ppm CO2 equivalents (theoretical value for fresh air). The sensor measure 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 returned by a Yocto-CO2 for instance, 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 in close proximity to HVAC ducts.

Specifications

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|---|--------------------------------|
| Product ID | YVOCMK02 |
| USB connector | micro-B |
| Thickness | 6 mm |
| Width | 20 mm |
| Length | 60 mm |
| Weight | 5.6 g |
| Sensor | iAQ-core C (MEMS sensor) |
| Refresh rate | 1 Hz |
| Measuring range | 450..65000 ppm equiv. |
| Accuracy | n/a (relative estimate) |
| IEC protection class | class III |
| Normal operating temperature | 5...40 °C |
| Extended operating temperature [‡] | 0...50 °C |
| RoHS | Yes |
| USB Vendor ID | 0x24E0 |
| USB Device ID | 0x0077 |
| Suggested enclosure | YoctoBox-Long-Thin-Black-Vents |
| Harmonized tariff code | 8542.3190 |
| Made in | Switzerland |

[‡] The extended temperature range is defined based on components specifications and has been tested during a limited duration (1h). When using the device in harsh environments for a long period of time, we strongly advise to run extensive tests before going to production.



For more information: www.yoctopuce.com/EN/products/yocto-voc-v2