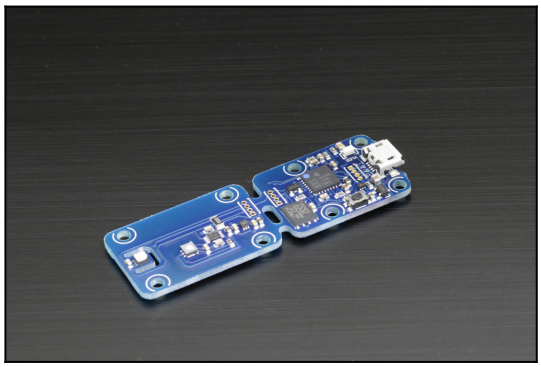
Yocto-VOC-V3



The Yocto-VOC-V3 device lets you estimate via USB the quantity of volatile organic compounds (VOCs) in ambient air, measured in CO2-equivalent ppm and TVOC. It also measures the ambient temperature and humidity. Measurements can be recorded on the 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 CMOSens metal oxide sensor used in this device measures the variation of total volatile organic compounds in ambient air, and uses it to estimate their concentration in ppm CO2 equivalents (relative) and in ppb total volatile organic compounds (TVOC). This sensor only needs 15 seconds to provide the first VOC estimation. The VOC estimation is compensated for humidity changes thanks to the embedded humidity sensor.

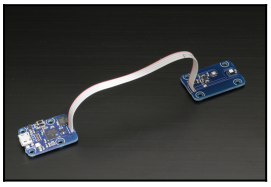
The sensor measures relative variations of volatile organic compounds to provide an estimated ppm value, with an automatic baseline correction. The absolute value must therefore be interpreted with great care, as it is subject to drift. It is not comparable with the absolute value returned by a Yocto-CO2-V2 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

Product ID	YVOCMK03
USB connector	micro-B
Width	20 mm
Length	60 mm
Weight	4 g
Sensor	SGP30, SHT35 (Sensirion)
Refresh rate	1 Hz
Measuring range (CO2 eq.)	0...60000 ppm
Measuring range (TVOC)	0...60000 ppb
Accuracy (H)	1.5 %
Accuracy (T)	0.2 °C
IEC protection class	class III
Normal operating temperature	5...40 °C
Extended operating temperature‡	-30...85 °C
RoHS compliance	RoHS III (2011/65/UE+2015/863)
USB Vendor ID	0x24E0
USB Device ID	0x008C
Suggested enclosure	YoctoBox-Long-Thin-Transp-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-v3