



The Yocto-CO2 device will let you measure the quantity of carbon dioxide (CO2) 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 precisely monitor the air quality in residential, commercial and industrial spaces, as well as potentially dusty air ducts used in HVAC (Heating Ventilation and Air Conditioning) systems. The sensor used in this device uses non-dispersive infra-red absorption (NDIR), and requires no maintenance. It provide precise measurements already within the first minute after power on.

The expected CO2 concentration in fresh air varies between 360 and 390 ppm depending on the location. Industry consensus standard rate maximal admissible CO2 between 1'000 and 2'500 ppm in ventilated buildings. Around 10'000 ppm, some people feel dizziness. The standard version of this sensor is capable to measure up to 10'000 ppm (vol), or 1%.

The same device can be built with a 30'000 ppm sensor (3%) on demand, at a higher price but without minimal quantity. The 300'000 version (30%), based on SenseAir K-33 sensor, can be built on demand for orders of 100 pieces or more.

### Specifications

Product ID	YCO2MK01
USB connector	micro-B
Thickness	12 mm
Width	57 mm
Length	58 mm
Weight	18.6 g
Sensor	SenseAir K-30
Refresh rate	1 Hz
Measuring range	0-10000 ppm (vol)
Accuracy	30 ppm 5%
Sensitivity	20 ppm 1%
IEC protection class	class III
Normal operating temperature	5...40 °C
Extended operating temperature <sup>‡</sup>	0...50 °C
RoHS	Yes
USB Vendor ID	0x24E0
USB Device ID	0x0027
Suggested enclosure	YoctoBox-CO2-Black
Harmonized tariff code	8542.3190
Made in	Switzerland

<sup>‡</sup> 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-co2](http://www.yoctopuce.com/EN/products/yocto-co2)