



The Yocto-CO2-V2 device lets you measure the quantity of carbon dioxide (CO₂) in ambient air as well as the relative humidity, temperature and atmospheric pressure via an USB connection. It can record the measurements 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 provides accurate measurements already within the first minute after power on.

The expected CO₂ concentration in fresh air varies between 360 and 400 ppm depending on the location. Industry consensus standard rates maximal admissible CO₂ between 1'000 and 2'500 ppm in ventilated buildings. Around 10'000 ppm, some people feel dizziness. This sensor is capable to measure up to 40'000 ppm (vol) or 4%, with a well-defined accuracy in the range 0...10'000 ppm (25°C).

Specifications

Product ID	YCO2MK02
USB connector	micro-B
Thickness	9 mm
Width	58 mm
Length	50 mm
Weight	13.5 g
Sensor	SCD30 (Sensirion), ICP-10100 (TDK)
Refresh rate	0.5 Hz
Measuring range	0-40000 ppm (vol)
Accuracy	30 ppm + 3%
Accuracy (H)	3 % RH
Accuracy (P rel)	0.01 mbar
Accuracy (T)	0.5 °C
Sensitivity	10 ppm
IEC protection class	class III
Normal operating temperature	5...40 °C
Extended operating temperature [‡]	0...50 °C
RoHS compliance	RoHS III (2011/65/UE+2015/863)
USB Vendor ID	0x24E0
USB Device ID	0x008B
Suggested enclosure	YoctoBox-CO2-V2
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-co2-v2