

CO2 3 Click



PID: MIKROE-5646

CO2 3 Click is a compact add-on board that allows for precise and reliable indoor air quality measurements. This board features XENSIV™ PASCO2V01BUMA1, a highly accurate CO2 sensor module from Infineon Technologies that uses photoacoustic spectroscopy technology to measure indoor air quality. The module comprises a gas measuring cell, an IR emitter, a microphone, and a microcontroller for data processing. Its key components are developed in-house, ensuring the highest quality and performance. Other major characteristics include high accuracy, low power consumption, and versatile configuration options. This Click board™ is suitable for various applications in building automation, smart home appliances, and air quality monitoring, such as air purifiers, thermostats, and HVAC (heating, ventilation, and air conditioning) systems.

CO2 3 Click is supported by a [mikroSDK](#) compliant library, which includes functions that simplify software development. This [Click board™](#) comes as a fully tested product, ready to be used on a system equipped with the [mikroBUS™](#) socket.

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system.
ISO 14001: 2015 certification of environmental management system.
OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).

Specifications

Type	Gas
Applications	Can be used for air purifiers, thermostats, and HVAC (heating, ventilation, and air conditioning) systems
On-board modules	XENSIV™ PASCO2V01BUMA1 - CO2 sensor module from Infineon Technologies
Key Features	Based on the photoacoustic spectroscopy principle, high accuracy, compact size, direct ppm readout thanks via onboard MCU, operating range up to 32.000ppm, vast lifetime, selectable communication interface, and more
Interface	Analog,I2C,PWM,UART
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V,5V

Resources

[mikroBUS™](#)
[mikroSDK](#)
[Click board™ Catalog](#)
[Click boards™](#)

Downloads

[CO2 3 click example on Libstock](#)
[CO2 3 click schematic](#)
[CO2 3 click 2D and 3D files](#)
[TLV61046A datasheet](#)
[PASCO2V01BUMA1 datasheet](#)

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system.
ISO 14001: 2015 certification of environmental management system.
OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).