

CO 2 Click



PID: MIKROE-3196

CO 2 click is a very accurate, carbon-monoxide-gas-sensor Click board™, equipped with the SPEC amperometric, 3SP CO 1000 gas sensor which electrochemically reacts with the carbon monoxide (CO). It is supported by the LMP91000, a high-precision integrated analog front-end IC (AFE), perfectly suited for use in electrochemical, sensing applications. The Click board™ also provides the reference voltage required by the sensor and it offers a choice between the analog output from the AFE IC buffered with the low noise op-amp, and the digital output from the 12-bit SAR A/D converter.

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	CO, Gas
Applications	It can be used for various air quality applications, air purification and conditioning, carbon-monoxide warning applications, and similar.
On-board modules	3SP CO 1000, a CO gas sensor, by SPEC sensors, LMP9100SD, an integrated AFE for chemical sensing applications, MCP3221, a 12-bit SAR ADC from Microchip, OPA344, an operational amplifier from Texas Instruments, MCP1501, a high precision buffered reference, from Microchip
Key Features	High accuracy and repeatability of the measurements, ability to obtain measurement data in both analog and digital form, low cross-sensing for other gases, rapid response time, long lifecycle of the CO sensor
Interface	Analog, I2C
ClickID	No
Compatibility	mikroBUS™
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

Downloads

[LMP91000 datasheet](#)

[MCP3221 datasheet](#)

[CO SPEC sensor datasheet](#)

[CO 2 click 2D and 3D files](#)

[CO 2 click schematic](#)

[CO 2 click example on Libstock](#)

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