

HVAC Click



PID: MIKROE-4290

HVAC Click is a compact add-on board that contains [Sensirion's](#) next-generation miniature CO2 sensor. This board features the [SCD41](#), a carbon dioxide sensor build on the photoacoustic sensing principle, and Sensirion's patented PASens® and CMOSens® technology to offer high accuracy at a minor form factor. On-chip signal compensation is realized with the build-in humidity and temperature sensor. It operates within a specified range from 400 to 5'000 ppm, configurable through the I2C interface with a single shot mode supported. This Click board™ is also suitable for indoor air quality applications using an additional [SPS30](#) that allows smart ventilation systems to regulate ventilation in the most energy-efficient and human-friendly way, maintaining low CO2 concentration for a healthy, productive environment.

HVAC 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	Environmental, Gas
Applications	Can be used for indoor air quality applications and in smart ventilation systems to regulate ventilation in the most energy-efficient and human-friendly way, maintaining low CO2 concentration for a healthy, productive environment
On-board modules	SCD41 - Sensirion's next-generation miniature CO2 sensor
Key Features	Low power consumption, high accuracy, photoacoustic sensor technology PASens®, integrated temperature, and humidity sensor, additional connection to SPS30 particulate matter sensor, and more.
Interface	I2C, UART
ClickID	No
Compatibility	mikroBUS™
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

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

[SCD41 datasheet](#)

[SPS30 datasheet](#)

[HVAC click schematic](#)

[HVAC click example on Libstock](#)

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