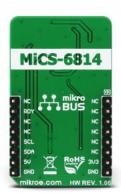


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Air quality 5 Click





PID: MIKROE-3056

Air quality 5 click is a triple MOS sensor on a single Click board[™], which can detect gas pollution for a number of different gases. The onboard sensor is specially designed to detect the pollution from automobile exhausts, as well as the gas pollution from the industrial or agricultural industry. This Click board™ uses the MiCS-6814, a compact MOS sensor with three fully independent sensing elements in one package: RED sensor, OX sensor, and NH3 sensor. Each of these sensors reacts with the specific type of gases, providing gas readings that including carbon monoxide (CO), nitrogen dioxide (NO2), ethanol (C2H5OH), hydrogen (H2), ammonia (NH3), methane (CH4), propane (C3H8), and isobutane (C4H10). Measurement conversion is handled by the onboard 12bit ADC converter and it is available via the I2C interface.

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.





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Specifications

Туре	Gas
Applications	Various environmental pollution measurement and detection applications, or various types of gas alarms in the automotive industry or production/manufacturing chambers with a high risk of gas poisoning.
On-board modules	MiCS-6814, a compact triple MOS sensor from SGX Sensortech; ADS1015, a low-power 12bit ADC with Internal reference and programmable comparator, from Texas Instruments.
Key Features	Increased robustness for harsh environments, low noise 12bit onboard ADC converter, reasonably high accuracy, three separate sensors on the same die for sensing of the number of different types of gases.
Interface	I2C
ClickID	Manifest,No
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

Air quality 5 click example on Libstock

Air quality 5 click 2D and 3D files

ADS1015 datasheet

MiCS-6814 datasheet

Air quality 5 click schematic

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