

# Air Flow Click



PID: MIKROE-4677

**Air Flow Click** is a compact add-on board that contains a flow-based 2-in-1 differential pressure sensor. This board features the [LHDULTRAM012UB3S](#), LHD ULTRA series micro-flow differential pressure sensor from [First Sensor \(part of TE Connectivity\)](#). This pressure sensor is based on thermal flow measurement of gas through dual micro-flow channels integrated within the silicon sensor chip to effectively maximize the dynamic range of the sensor ranging from 0 to 1250Pa. An on-board MCU with an accurate 24-bit ADC provides signal processing, including response from the two sensing elements, linearization, barometric compensation and temperature correction. This Click board™ is ideal for air flow monitoring and medical applications that demand high precision, extended measurement range, and the convenience of a single device.

Air Flow 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	Pressure
Applications	Can be used for industrial and medical applications that demand high precision, extended measurement range, and the convenience of a single device
On-board modules	LHDULTRAM012UB3 - LHD ULTRA series flow-based 2-in-1 differential pressure sensor from TE Connectivity Measurement Specialties
Key Features	Low power consumption, ultra-low pressure ranges, based on thermal microflow measurement, high flow impedance, outstanding long-term stability, on-chip temperature sensor and barometer, SPI/I2C interfaces, and more
Interface	I2C,SPI
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

## Downloads

[Air Flow click 2D and 3D files](#)

[Air Flow click schematic](#)

[LHDULTRAM012UB3 datasheet](#)

[Air Flow click example on Libstock](#)

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