

## Current 5 Click



PID: MIKROE-4953

**Current 5 Click** is a compact add-on board that provides a precise and accurate current sensing solution. This board features the [INA381](#), a high-speed current-sense amplifier with an integrated comparator from [Texas Instruments](#). This device has selectable operating modes (transparent or latched) and detects overcurrent conditions by measuring the voltage developed across a current shunt resistor. Then it compares that voltage to a user-defined threshold limit set by the comparator reference potentiometer. The current-shunt monitor can measure differential voltage signals on common-mode voltages that vary from  $-0.2V$  to  $26V$ , independent of the supply voltage. This Click board™ delivers higher performance to applications such as test and measurement, load and power supplies monitoring, low-side phase motor control, and many more.

Current 5 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	Current sensor, Measurements
Applications	Can be used for applications such as test and measurement, load and power supplies monitoring, low-side phase motor control, and many more
On-board modules	INA381 - high-speed current-sense amplifier with an integrated comparator from Texas Instruments
Key Features	Common-mode input range: -0.2 V to +26 V, high-accuracy amplifier, integrated comparator, 200V/V amplifier gain, alert threshold selection, supports transparent and latching modes, and more
Interface	SPI
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

[ADC121S021 datasheet](#)

[INA381 datasheet](#)

[Current 5 click 2D and 3D files](#)

[Current 5 click schematic](#)

[Current 5 click example on Libstock](#)

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