

## Hall Current 16 Click



PID: MIKROE-5784

**Hall Current 16 Click** is a compact add-on board that contains a precise solution for AC/DC current sensing. This board features the ACS37002, a 400kHz high-accuracy current sensor from [Allegro Microsystems](#). This sensor features pin-selectable gains that can be used to configure the device to one of the four defined sensitivities and corresponding current ranges, increasing design flexibility. In addition, an adjustable overcurrent fast fault provides short-circuit detection. This Click board™ makes the perfect solution for the development of applications requiring a combination of high-current monitoring and high isolation voltage between the primary high-current and low-voltage sides.

Hall Current 16 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 the development of applications requiring a combination of high-current monitoring and high isolation voltage between the primary high-current and low-voltage sides
On-board modules	ACS37002 - 400KHz high-accuracy current sensor from Allegro Microsystems ADC122S101 - 12-bit A/D converter from Texas Instruments
Key Features	Externally configurable gain settings, adjustable fast overcurrent fault, differential sensing for high immunity to external magnetic fields, high accuracy, high operating bandwidth for fast control loops, low internal primary conductor resistance, highly isolated device, and more
Interface	SPI
ClickID	Yes
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

[Hall Current 16 click example on Libstock](#)

[ACS37002 datasheet](#)

[ADC122S101 datasheet](#)

[Hall Current 16 click 2D and 3D files](#)

[Hall Current 16 click schematic](#)

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