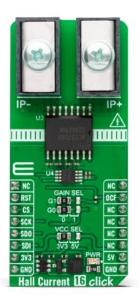
MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia VAT: SR105917343 Registration No. 20490918

Phone: + 381 1178 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com

## 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  $\underline{\mathsf{mikroSDK}}$  compliant library, which includes functions that simplify software development. This  $\underline{\mathsf{Click}}\ \mathsf{board}^{\mathsf{TM}}$  comes as a fully tested product, ready to be used on a system equipped with the  $\underline{\mathsf{mikroBUS}^{\mathsf{TM}}}$  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.





health and safety management system.

MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia VAT: SR105917343 Registration No. 20490918 Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com www.mikroe.com

## **Specifications**

Туре	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

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.



