

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

## Hall Current 9 Click





PID: MIKROE-4466

Hall Current 9 Click is a compact add-on board that contains the coreless current sensor corresponding to the safety standards. This board features the CQ3301, a high-speed response coreless current sensor using a Hall sensor that outputs the analog voltage proportional to the AC/DC from AKM Semiconductor. It employs a high sensitive InAs Hall element with the ability to detect both DC and AC with high accuracy and high speed. It has an ultra-fast high response of 0.5µsec, high galvanic isolation, and it is designed for the currents to range from 4.5A to ±44A. This Click board™ is suitable for overcurrent applications and shows good performance in small-sized inverter applications.

Hall Current 9 Click is supported by a mikroSDK compliant library, which includes functions that simplify software development. This <u>Click board™</u> comes as a fully tested product, ready to be used on a system equipped with the mikroBUS<sup>™</sup> 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.

security management system.

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 overcurrent applications and shows good performance in small-sized inverter applications.
On-board modules	CQ3300 - high-speed response coreless current sensor using a Hall sensor that outputs the analog voltage proportional to the AC/DC from AKM Semiconductor MCP3221 - successive approximation A/D converter with a 12-bit resolution from Microchip
Key Features	Low power consumption, high precission, highly sensitive quantum well structure InAs Hall element, characterized by the ability to detect both DC and AC with high accuracy and high speed, and more.
Interface	Analog,I2C
ClickID	No
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	5V

## **Resources**

<u>mikroBUS™</u>

**mikroSDK** 

Click board™ Catalog

Click boards™

## **Downloads**

Hall Current 9 click schematic

MCP3221 datasheet

Hall Current 9 click 2D and 3D files

CQ3300 datasheet

Hall Current 9 click example on Libstock

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.