

Time-saving embedded tools

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# Hall Current 7 Click





#### PID: MIKROE-4420

Hall Current 7 Click is a compact add-on board that provides economical and precise solutions for AC or DC current sensing. This board features the ACS770, a thermally enhanced, fully integrated, Hall effect-based high precision linear current sensor with  $100\mu\Omega$  current conductor from Allegro MicroSystems. Applied current flows directly into the integrated conductor generating a magnetic field, and an integrated low-hysteresis core concentrates the magnetic field sensed by the Hall element with a typical accuracy of  $\pm 1\%$  and 120 kHz bandwidth. This Click board<sup>TM</sup> is suitable for applications like motor control, load detection and management, DC-to-DC converter control, and similar applications that require accurate and reliable current sensing.

Hall Current 7 Click is supported by a mikroSDK compliant library, which includes functions that simplify software development. This Click board<sup>™</sup> 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.



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).



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## Specifications

Туре	Current sensor,Measurements
Applications	Can be used for applications like motor control, load detection and management, DC- to-DC converter control, and similar applications that require accurate and reliable current sensing.
On-board modules	Hall Current 7 Click is based on the ACS770, a thermally enhanced, fully integrated, Hall effect-based high precision linear current sensor with $100\mu\Omega$ current conductor from Allegro MicroSystems.
Key Features	Ultralow-power loss, high precision, improved total output error, high reliability, high accuracy, extremely stable output offset voltage, and more.
Interface	12C
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

### Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board<sup>™</sup> Catalog

Click boards<sup>™</sup>

### Downloads

Hall Current 7 click 2D and 3D files

ACS770 datasheet

Hall Current 7 click example on Libstock

Hall Current 7 click schematic

MCP3221 datasheet

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