

Time-saving embedded tools

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# Hall Current 12 Click





#### PID: MIKROE-4798

**Hall Current 12 Click** is a compact add-on board that provides economical and precise AC or DC current sensing solutions. This board features the TMCS1100, a galvanically isolated Hall-effect current sensor capable of DC or AC current measurement with high accuracy, excellent linearity, and temperature stability from Texas Instruments. It enables the lowest drift, <1% full-scale error, and highest accuracy over time and temperature. It also provides a reliable 600V lifetime working voltage and 3kVRMS isolation between the current path and circuitry with uni/bidirectional current sensing. Besides, the user is allowed to process the output signal in analog or digital form. This Click board<sup>™</sup> is suitable for AC or DC current-sensing in industrial and commercial systems, motor and load control, power factor correction, overcurrent protection, and many more.

Hall Current 12 Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u><sup>m</sup> comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u><sup>m</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 AC or DC current-sensing in industrial and commercial systems, motor and load control, power factor correction, overcurrent protection, and many more
On-board modules	TMCS1100A4 - galvanically isolated Hall-effect current sensor capable of DC or AC current measurement from Texas Instruments
Key Features	High accuracy and precision, excellent linearity, and temperature stability, 3kVRMS isolation rating, robust 600V lifetime working voltage, bidirectional and unidirectional current sensing, and more
Interface	Analog,I2C
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™

### **Downloads**

Hall Current 12 click example on Libstock

TMCS1100A4 datasheet

LMV321 datasheet

MCP3221 datasheet

Hall Current 12 click 2D and 3D files

Hall Current 12 click schematic

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