

Hall current sensor



current is to be measured.

A Hall current sensor measures the magnetic field that surrounds the conductor and transforms it into a voltage that is proportional to the current flowing in the conductor.

The sensor is made up of a magnetic core, placed around the conductor, that concentrates the magnetic field. The Hall element that delivers the measurement signal is mounted in an air gap in the core.

This non-contact technology offers many advantages over shunt type current measurements, mainly related to the fact that no component is inserted in the circuit in which the

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Characteristics

- Non-contact sensing (no break in battery circuit)
- Range: -100 to +100 mA
- Accuracy: $\pm 2\%$
- Response time < 10 ms

- High linearity
- No resistance added to battery circuit
- Interface: 3-wire, PWM or analog output
- Integrated diagnostics
- Can be used on + or - battery terminals

Electricfil knowhow

- Long experience with Hall-effect technology
- Extensive signal-processing expertise

Application domains

Energy management

[Battery](#)