



## HSM-800

### Current Sensor Module

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The HSM-800 combines a Hall current sensor and a shunt current sensor into one module to provide highly accurate, redundant, and reliable current measurement. This dual sensing module allows for fail safe current sensing that ensures the state of health for battery powered equipment.



#### Redundant Sensors to Enhance Current Measurement

This repetitive current sensor module combines precise Cu-Mn shunt-based current measurement and a fully redundant, galvanically isolated Hall sensor module. Not only does this enhance current sensing capabilities, but this also targets safety-relevant applications with non-heterogeneous redundancy supporting ASIL C and D standards.



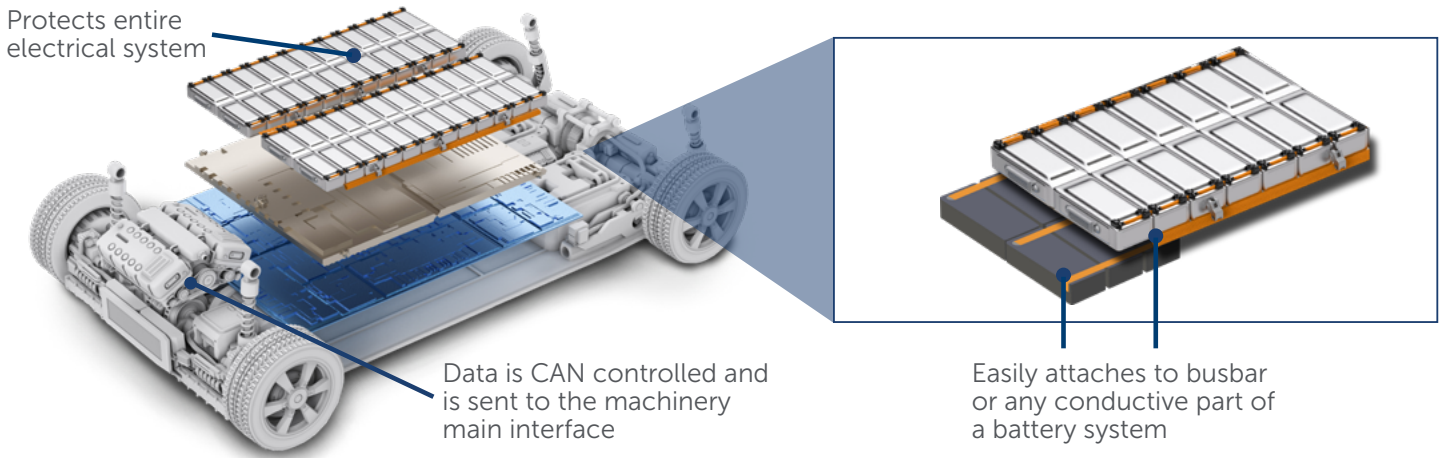
#### Additions and Customization

This module is complemented with an ambient temperature sensor allowing to determine the state-of-charge (SOC), state-of-health (SOH), and state-of-function (SOF) of modern battery-powered equipment. Cost effectiveness and flexibility are no limitations due to our modular approach. Solutions can be customized to ensure the best possible fit for a given application.

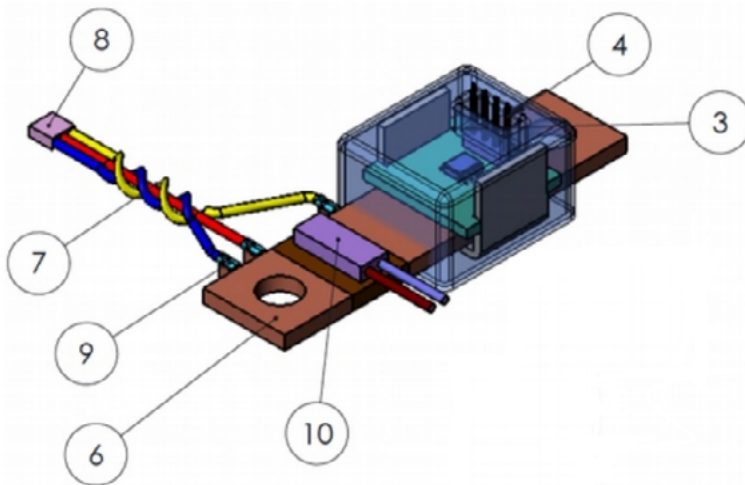


#### Designed for High Powered Applications

Adept at monitoring high powered machines, this system was curated to target safety-relevant applications according to ASIL standards and ISO26262. Applications include monitoring systems BMS, junction box, batter disconnect unit BDU, present in PHEV, HEV and EV.



## Module Parts



## Technical Specifications Table:

Parameter	Value
Peak Input Current Range	±800 A
Continuous Input Current	±380 A
Cu-Mn Shunt Resistance	100 μOhm
Hall Sensor Sensitivity	2.50 mV/A
Operating Temperature Range	-50° to +150 °C
PT100 Temperature Sensor	100 Ohm

## Module Parts:

Position	Description
3	Housing
4	Hall sensor connector
6	Copper busbar with shunt
7	Shunt wires
8	Shunt connector
9	Shunt to wire joint
10	Temperature sensor

## Years Of Automotive Experience

CTS Corporation began expanding into the automotive market in the early 1970's, when the U.S. government first issued requirements for controlling automotive emissions.

Today, we are a leading provider of sensing solutions, smart actuators, and pedals. As a former leader in providing soft ferromagnetic cores, shields, and shunts, we have grown into providing full current sensing solutions for high power and industrial applications.

## Contact Information

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