

Battery cabinet current detection method





Overview

What is a current sensor fault detecting method for electric vehicle battery management?

This study presents a current sensor fault-detecting method for an electric vehicle battery management system. The proposed current sensor fault detector comprises the nonlinear battery cell model, the Luenberger-type state estimator, and a disturbance observer-based current residual generator.

What does a battery sensor measure?

For a typical battery, current, voltage and temperature sensors measure the following parameters, while also protecting the battery from damage: The current flowing into (when charging) or out of (when discharging) the battery. The pack voltage. The individual cell voltages. The temperature of the cells.

What is a current sensor?

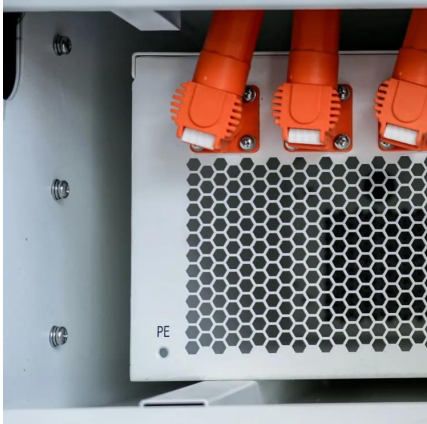
Current sensors are the main source of information for charging and discharging cycle information by reporting the status of battery SOH to the battery management system. They may be located onboard or externally. With the increase of battery capacities in HEVs/EVs, the requirements on higher current ranges are increasing.

Why is a battery current sensor important?

Battery performance, lifetime, safety and reliability play a vital role in HEVs/EVs. A battery current sensor and its accuracy over a wider range are extremely important in order to achieve the required parameters. TI's battery current-sensing portfolio enables you to achieve these specifications easily and simply.



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Current detection method and device based on intelligent charging cabinet

A technology of intelligent charging and current detection, applied in battery circuit devices, measuring devices, circuit devices, etc., can solve the problems of reducing the charging ...



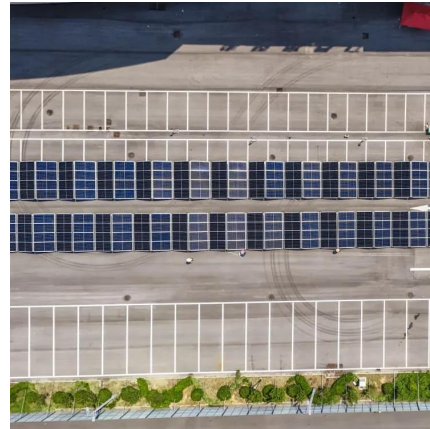
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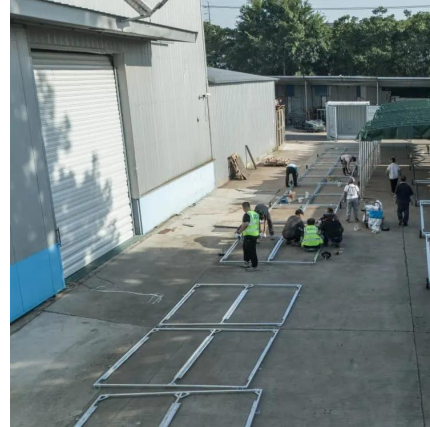
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