

What does battery management system BMS mean





Overview

What is battery management system (BMS)?

Battery Management System (BMS) is the “intelligent manager” of modern battery packs, widely used in fields such as electric vehicles, energy storage stations, and consumer electronics.

How do battery management systems work?

Battery management system (BMS) is technology dedicated to the oversight of a battery pack, which is an assembly of battery cells, electrically organized in a row x column matrix configuration to enable delivery of targeted range of voltage and current for a duration of time against expected load scenarios.

How do battery management systems protect batteries from dangerous conditions?

Battery management systems are the critical intelligence behind modern battery technologies, especially when you have lithium-ion chemistries that just need constant monitoring for safety. In this piece, we got into how BMS technology protects batteries from dangerous conditions while optimizing their performance and extending their lifespan.

Why do lithium batteries need a BMS?

The BMS prevents your lithium battery’s voltage from going too high (causing overheating and gas release) or too low (leading to permanent damage). Damage occurs if you overcharge (cell voltage gets too high) or over-discharge (cell voltage gets too low) a lithium-ion battery cell. Overcharging occurs when recharging exceeds a battery’s safe range.



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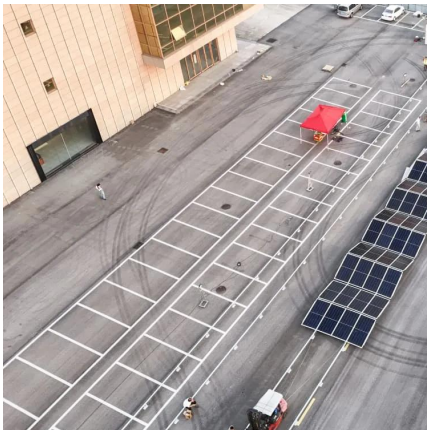
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