



What is BMS

A Battery Management System (BMS) is an intelligent component of a battery pack responsible for advanced monitoring and management. It is the brain behind the battery and plays a critical role in its safety level, performance, charge rates and longevity.

Inherently lithium-ion is unstable, especially while charging and needs to be managed. However, if certain precautions are met during charging and discharging, Li-ion provides unparalleled advantages compared to other chemistries. Therefore, Battery Management is an essential enabling factor for the evolution of Lithium-Ion battery. Safety, performance, and reliability are some of the key features a Battery Management System should be accountable for.

Why Sensata BMS

We understand that our customers seek the highest possible return on their investments and shape our products to ensure that

- We Make Lithium-ion Batteries Work - Built on LITHIUM BALANCE's market-proven BMS technology
- "Off-the-Shelf" BMS Technology customizable to your application
- Scalable Systems from 24V to 1,000V. Robust technology, tested in lab and market-proven in field applications
- Wide range of BMS product portfolio: Low and High voltage BMS with integrated, centralized and distributed variants
- BMS Creator SW tool to customize and adapt the BMS to the battery pack requirements
- Best in class flexibility and configurability offering highest design freedom in battery designs
- Cell chemistry agnostic: system that can accommodate any Lithium Chemistry (NMC, LFP, LTO...)
- Fast to Market, scale to your application
- One stop shop for battery pack components: contactors, fuses, BMS, current sensor, isolation/insulation monitoring device
- Part of a large corporate with more than 20,000 employees and a global footprint
- Global tech support team for dedicated application support post
- >1,000 BMS customers served
- 15+ years of BMS engineering experience
- >250,000+BMS products shipped/year
- More than 300 man-years of BMS engineering experience
- Certified functional safety

