

# Software for testing new energy battery competition

What is Altair battery design & simulation software?

From battery manufacturing to multiphysics system optimization, Altair's battery design and simulation software provides a holistic approach to battery-powered mobility. Connected multidisciplinary workflows enable product developers to balance competing technical requirements with performance, safety, and sustainability demands.

How can EV & battery development be a technology race?

Specifically, companies can perform combined thermal analysis and strength simulations at the system level to account for battery weight and structural integrity, which are crucial to protecting vehicle occupants and the battery in the event of a crash. "The Future of EV and battery development is going to be a technology race."

Are NI battery emulation solutions regenerative?

Furthermore, NI battery emulation solutions are regenerative, meaning any power flowing into the system is recycled into clean, usable facility power. EV powertrains are evolving and have new testing challenges. Voltage and power levels are changing because of fast charging and vehicle performance.

Are NI battery emulators compatible with existing test platforms?

All NI battery emulators can be easily integrated into existing test platforms or used as the power stage for new test platforms. To achieve this, NI provides fully documented drivers using either IVI or SCPI languages along with examples, applications, and integration support.

Why should you choose NI battery emulation systems?

The battery emulation systems from NI are modular, meeting the voltage and current levels required by your testing needs. Higher-power models provide dual ranges, allowing the equipment to emulate today's batteries and providing the right tool that grows along with increases in battery voltage and power.

How to choose a battery emulation solution?

Battery capacity and battery performance are always improving, suggesting that engineers must consider flexibility and programmability in selecting a battery emulation solution. In particular, test engineers will not want to compromise by using no resistance or fixed resistance values.

BMS testing requires emulating a large set of battery cells and varying battery output based on simulated environmental parameters. In addition, the system must emulate the inputs and ...

Battery cell testing. A new experience of battery testing. More insights, higher quality and faster results. ... We generate our own solar energy (>500kW) ... Thermal behavior vs. competition...

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Battery research currently focuses on new and ... Battery Energy Storage Testing for Safer, Better Batteries ... International competition is hard and as a result Europe faces big challenges to ...

Battery Testing Solutions QA & EOL Tests in Fuel Cell and Electrolyzer Production Test Cell Upgrades for Alternative Propulsion Systems Ammonia Measurement for Mobility Applications ...

Battery Testing Products List; Energy Feedback Power Module Platform. ... E-Drive General Automation Test Software; New Energy Storage System Turnkey Solution for Automotive ...

Chinese electric vehicles (EV) manufacturer Nio is collaborating with a UK AI software startup, Monolith, to enhance electric car battery packs using real-time testing.

Accelerate EV battery development With AI-guided test . Engineers can circumvent many of the challenges of traditional battery testing to get new products to market faster and with greater ...

Explore Energy Storage Device Testing: Batteries, Capacitors, and Supercapacitors - Unveiling the Complex World of Energy Storage Evaluation. ... Energy ...

As the new energy industry continues to progress, the health management of power batteries has become the key to ensuring the performance and safety of automobiles. ...

Run multiple concurrent tests regarding performance and durability of battery cells and packs with ease using our test automation software for battery testing. The STARS Battery application can define and perform tests on battery packs ...

The study focuses on the comprehensive testing of power batteries for new energy vehicles. Firstly, a life decline prediction model for LB is constructed using PSO. The ...

Web: <https://www.vielec-electricite.fr>