

Solar Storage Container Solutions

Pack battery quality inspection





Overview

What is battery module and Pack testing?

Battery module and pack testing involves very little testing of the internal chemical reactions of the individual cells. Module and pack tests typically evaluate the overall battery performance, safety, battery management systems (BMS), cooling systems, and internal heating characteristics.

Why do batteries go through an acceptance inspection?

Batteries go through an acceptance inspection before they are put together into modules and packs. This is because things like vibrations during shipping and even the passing of time can cause batteries to defect. It is necessary to keep the electrodes and enclosure (case), insulated from each other.

What are the fundamentals of battery testing?

Key fundamentals of battery testing include understanding key terms such as state of charge (SOC); the battery management system (BMS) which has important functions including communication, safety and protection; and battery cycling (charge and discharge) which is the core of most tests.

What is a battery pack?

Introduction to the assembly of battery packs and their inspection. The smallest unit of a battery is called a cell. The three common shapes of cells are cylindrical, prismatic, and pouch. The state in which the cells are connected is called a module, and the state in which the modules are connected is called a pack.

How do you test a battery management system (BMS)?

Testing the BMS software and hardware is typically done at the pack level to ensure that all parts of the battery work together and that the BMS performs safely and accurately. Engineers need to test the BMS to meet industry standards such as ISO 26262 and IEC 62304. Temp. Sensors BMS interfaces



include pack inputs and outputs.

What are the different types of battery testing?

Battery cells, modules, and packs involve diferent types of testing depending on their function. Module and pack testing is application-focused.



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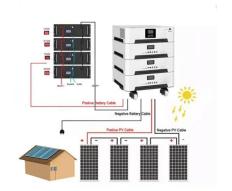


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