New Energy Battery Cabinet Module

What is a battery module made of?

The external casing is made of metalcovered by insulating materials. For example,the top cover is made of PP,the bottom base is made of aluminum. The copper bars and screws are connected internally to prevent short circuit to ensure the electrical safety of the battery module. Each battery module has 8 temperature detectors.

How many temperature detectors does a battery module have?

Each battery module has 8 temperature detectors. There are 2 racks that fit in a single battery cabinet,9 slots in each battery rack to accommodate 8 battery modules and total 1 BSPU (Battery Switch &Protective Unit). Racks are connected in parallel and paired with a system BMS to meet the power and energy requirements of the application at hand.

What is included in a battery management system?

In addition to battery cells, there are switch-disconnectors, contactors, sensors, sampling lines, battery management systems, as well as control units being integrated into the same battery rack. BESS employs a sophisticated, multilevel battery management system (BMS) for system monitoring and control. Each battery management system including:

What is a battery management system (BMS)?

BESS employs a sophisticated, multilevel battery management system (BMS) for system monitoring and control. Each battery management system including: At the lower level is the Module BMS (BMU), which is designed to detect voltage, temperature, and execute cell balance functions for cells.

How many battery cells are in a battery rack?

All wire connections are placed on the front side of the rack to allow easy installation and maintenance. Since each battery rack hosts 8 battery modules and each battery module has 52 battery cells,each battery Rack has a total of 416 battery cellsconnected in series.

What is a battery connection panel (BCP)?

Battery Connection Panel (BCP) is a piece of crucial equipment in our BESS design. It serves several functions in the system: Battery Combiner: The main function of the BCP is to combine multiple racks of batteries to one DC bus,then connect to the DC input of PCS with necessary protections.

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