

Why does the new energy battery cabinet balance the voltage

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Why is battery balancing important?

Without proper balancing, your batteries can become imbalanced, reducing their lifespan and performance. This guide explores what battery balancing is, the causes of imbalance, and how to fix it, addressing both individual cells and battery groups. What causes batteries to imbalance?

What happens if a battery is not balancing?

During discharge, it's limited to 425 kWh (85%), resulting in a 15% capacity loss. Without balancing, this discrepancy grows, locking away more energy and accelerating cell degradation. In parallel configurations, voltage mismatches cause circulating currents, forcing clusters with lower resistance to charge or discharge faster.

How does a battery balancer work?

The balancer regulates the charging current for individual cells, reducing charging for cells with higher voltages and increasing it for those with lower voltages. This mechanism extends the charging time and increases the system's chargeable capacity, thus improving its usable capacity.

What if the voltage of individual battery cells becomes imbalanced?

If the voltage of individual battery cells becomes imbalanced, the following steps can be taken to restore balance: 1. Disassemble the Battery Pack Open the battery casing carefully to access the individual cells. Ensure all safety precautions are followed, such as wearing insulated gloves and working in a well-ventilated area. 2.

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their chemistry, voltage, and specific energy. The chemistry refers to the type of ...

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