

Solar container battery constant temperature





Overview

Is temperature uniformity a problem in battery energy storage systems?

The temperature uniformity of batteries was analyzed under a wide range of supply liquid temperatures within a limited operation cycle. The conventional liquid cooling system carries the risk of dew condensation and air cooling has poor thermal management performance for battery energy storage systems.

Does a two-phase liquid cooling system affect containerized battery thermal management?

To comprehensively analyze the effect of the two-phase liquid cooling system on containerized battery thermal management, several key parameters were tested, including the battery temperature, cooling system, and climate conditions: the temperature of the battery cells, the cold plate temperature, and the outdoor temperature and humidity.

Can a liquid cooling system be used for battery energy storage systems?

The conventional liquid cooling system carries the risk of dew condensation and air cooling has poor thermal management performance for battery energy storage systems. To address these issues, a novel two-phase liquid cooling system was developed for containerized battery energy storage systems and tested in the field under mismatched conditions.

What is a containerized lithium-ion battery energy storage system?

Container information A containerized lithium-ion battery energy storage system was used for the test, as shown in Fig. 1. Its overall dimensions are 6058 mm (length) \diamond 2438 mm (width) \diamond 2896 mm (height), with a total battery energy capacity of 2.75 MWh.



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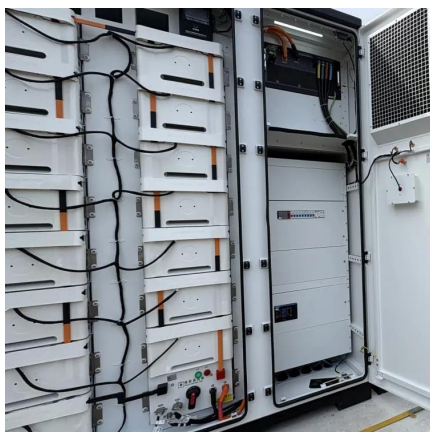


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[containerized battery storage , SUNTON POWER](#)

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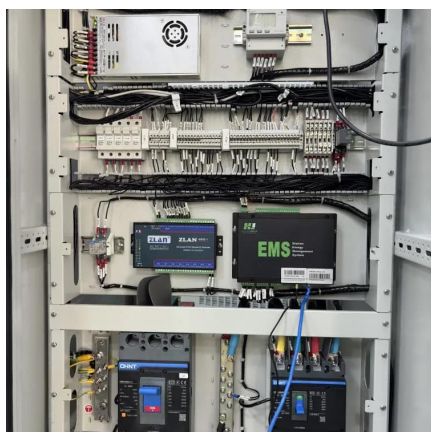
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Field study on the temperature uniformity of containerized batteries

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