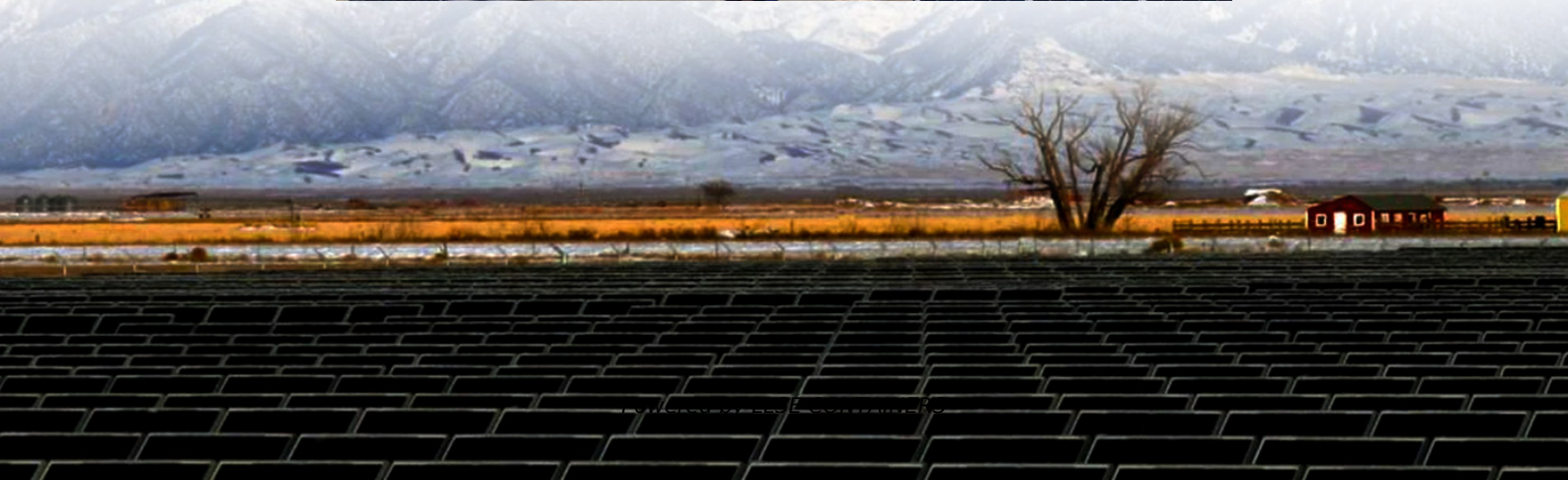


# **High-voltage mobile energy storage containers for data centers**





## Overview

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What is a high-voltage energy storage system?

A high-voltage energy storage system (ESS) offers a short-term alternative to grid power, enabling consumers to avoid expensive peak power charges or supplement inadequate grid power during high-demand periods. These systems address the increasing gap between energy availability and demand due to the expansion of wind and solar energy generation.

What is battery energy storage in AI data centers?

Battery energy storage solutions (BESS) in AI data centers see improved charge/discharge efficiency and system reliability with SiC technology. Additionally, UPS incorporating SiC-based inverters and converters enhance performance and response times, crucial for ensuring high availability in AI workloads.

Why do data centers need strategic power solutions?

By adopting strategic power solutions, data centers can achieve greater scalability, reduce energy costs, and prepare for the future demands of AI, LLMs, and ML. The proliferation of AI has significantly reshaped data center infrastructure, pushing the limits of power systems to meet unprecedented demands.

Why do data centers use AC power?

AC power remains the dominant method of power distribution in data centers due to existing infrastructure and standardization. (Figure 1) However, as AI workloads drive unprecedented energy consumption, the inefficiencies of AC power systems become increasingly evident.



## High-voltage mobile energy storage containers for data centers

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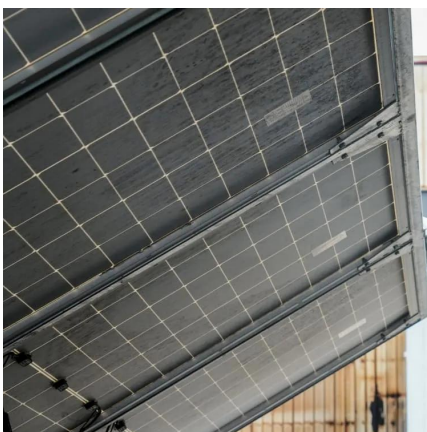
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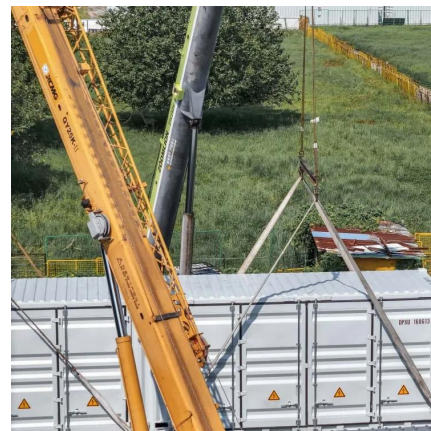
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HC1720L Liquid Cooling Energy Storage Container Rated at 1720kWh with a voltage range of 648-864V, ideal for data centers, heavy industry, and other high-demand energy storage needs.



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