

Large-capacity all-vanadium liquid flow battery





Overview

What is the capacity of the world's largest vanadium flow battery?

It has a capacity of 175 MW/700 MWh. On December 5, 2024, Rongke Power (RKP) completed the installation of the world's largest vanadium flow battery . With a capacity of 175 MW and 700 MWh, this innovative energy storage system, located in Ushi, China, sets a new standard in long-duration energy storage solutions.

How much energy can a vanadium flow battery store?

A press release by the company states that the vanadium flow battery project has the ability to store and release 700MWh of energy. This system ensures extended energy storage capabilities for various applications. It is designed with scalability in mind, and is poised to support evolving energy demands with unmatched performance.

How long can a vanadium flow battery last?

Vanadium flow batteries provide continuous energy storage for up to 10+ hours, ideal for balancing renewable energy supply and demand. As per the company, they are highly recyclable and adaptable, and can support projects of all sizes, from utility-scale to commercial applications.

What is a vanadium redox flow battery?

To address this specific gap, Vanadium Redox Flow Batteries (VRFBs) have emerged as a powerful and promising technology tailored for large-scale energy storage , . The defining characteristic of a VRFB is the unique decoupling of its power and energy capacity.



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