



Suqian Time Energy Storage Co., Ltd.  
& Jena Flow Batteries GmbH

## 25 kW Stack Vanadium Flow Battery

Stacks are integral components of flow batteries that house multiple cells, facilitating the electrochemical reactions necessary for energy storage and conversion. Each cell within the stack contains electrodes, bipolar plates, and ion exchange membranes, which work together to manage the flow of electrolytes and electrons.

Our battery stack design is engineered for optimal performance and efficiency. Featuring high electrolyte utilization, an optimized plate structure, excellent electrolyte flow characteristics, and high power, they ensure efficiency and reliability in your flow battery application. We offer OEM solutions, allowing you to choose components that best fit your needs. Contact our team to learn how our innovative stacks can enhance your flow battery systems.



### Features

- ✓ High electrolyte utilization for minimal system costs
- ✓ Optimized double-plate structure
- ✓ Annual production capacity of over 500 MW
- ✓ Tailored to your project requirements

### Performance Data

Item	Unit	Value
Size	cm	105 (w) × 68 (h) × 82 (d)
Active Area	cm <sup>2</sup>	2,300
Cells	-	52
Weight	kg	800
Separator	-	Nafion 212
Test Program	-	Constant power cycle
Temperature	°C	30 - 35

### Stack Test Results

Power	Power density	Flow rate	Pressure	Energy efficiency	Coulombic efficiency
18 kW	128 mW/cm <sup>2</sup>	80 L/min	100 kPa	83%	97%
25 kW	180 mW/cm <sup>2</sup>	110 L/min	160 kPa	80%	97%