

BRES-260-125 Immersion-Cooled Energy Storage Cabinet



Overview

The BRES-260-125 integrates a bidirectional PCS with an immersion-cooled LFP battery system. It delivers intelligent peak-shaving, microgrid operation, and multi-energy optimization, combining grid and load for high-efficiency, reliable, and safe power.



Key Features

- Efficient Thermal Management
- Immersion liquid cooling improves battery heat dissipation.
- String-level design supports cluster SOC balancing.
- Robust Off-Grid & High-Power Performance
- 100% unbalanced load support in off-grid mode.
- 110% rated output power for continuous operation.
- Scalable & Intelligent
- Supports parallel connection of multiple BRES systems for capacity expansion.
- Redundant AC/DC input ensures stable control power.

Parameter

Model		BRES-260-125
Battery Parameters		
Battery Capacity		261 kWh
Rated Voltage		832 V
Voltage Range		DC650 ~ DC949 (2.5V ~ 3.65V)
Battery Chemistry		LFP
Cycle Life		≥ 6000 cycles (@0.5P, 25±2°C, 100%DOD, 80%EOL)
Maximum Efficiency		93% (0.5P)
PCS Parameters		
Voltage Range		650 ~ 950 Vdc
DC Channels		1
Max Current per Channel		211 A
Output Wiring		3W+N+PE
Rated Power		125 kW
Rated Voltage		AC 400 V / 380 V
Rated Current		181 A
Voltage Range		-15% ~ +10%
Rated Frequency		50/60 Hz
Frequency Range		±2 Hz
Power Factor		± 1
Output Harmonics		≤ 3%
AC Current Distortion		<3% (at rated power)
Input Reverse Polarity Protection		Yes
Output Overcurrent Protection		Yes
Output Overvoltage Protection		Yes
Operating Temperature		-20°C ~ 55°C (PCS derating above 45°C); Battery system: Charge 0~50°C; Discharge -10~55°C
Storage Temperature		-20°C ~ 45°C
Relative Humidity		0% RH ~ 95% RH, non-condensing
Operating Altitude		≤ 4000 m (derating above 2000 m)
Noise Level		<75 dB
Communication Interface		RS485 / LAN
Isolation Method		None
Protection Rating		IP54
Cooling Method		PCS intelligent air cooling, battery immersion liquid cooling
Fire Suppression		Aerosol
Dimensions (W×D×H)		1050 × 1300 × 2500 mm
Weight		3000 kg

DC Side Parameters

AC Grid-Tied Parameters

Protection

Environmental Conditions

Others