

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		
DC Side 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
AC Grid-Tied Parameters	Rated Current	181 A
	Voltage Range	-15% ~ +10%
	Rated Frequency	50/60 Hz
	Frequency Range	±2 Hz
	Power Factor	± 1
	Output Harmonics	≤ 3%
Protection	AC Current Distortion	<3% (at rated power)
	Input Reverse Polarity Protection	Yes
	Output Overcurrent Protection	Yes
Environmental Conditions	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)
Others	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