JA Energy Storage

JA Planet

All-in-One C&I BESS

JAP-ES-125kW-261kWh-B01

Advantages

Advanced Safety

- No derating at an ambient temperature of 50°C (122°F)
- Uses an F-gas refrigerant with a GWP below 750, in compliance with applicable EU regulations
- Cell-to-System (CTS) full-stack safety design integrating hardware and software
- Dual-channel redundant ventilation design, validated through an NFPA 69 fire safety assessment
- Validated through multi-level UL 9540A testing for enhanced system safety

High Performance

- Long-life battery cells, up to 8000+ cycles
- Cell temperature difference within a single cabinet ⩽ 3°C (5.4°F)
- Intelligent thermal management strategy reducing auxiliary power consumption by 20% compared to conventional systems
- Support black start
- Supports 100% three-phase unbalanced output in backup mode
- SiC-based power devices with 1600V voltage rating and 175°C (347°F) thermal tolerance for reduced power losses.
- Maximum round-trip efficiency of over 90%.

Enhanced Reliability

- Built on IoT, data models, and domain expert knowledge for end-to-end monitoring, diagnostics, early warning, and health management
- Enables early anomaly detection, fault warning, and root cause analysis, shifting O&M from reactive to predictive maintenance
- 3S-integrated control with proactive warning and system-level coordination to ensure reliable operation
- Cloud-based OTA updates enabling fast and efficient remote O&M
- Compatible with static transfer switch (STS) for seamless switching within 20 ms

Technical Specifications

	Model	JAP-ES-125kW-261kWh-B01
DC Side	Rated Capacity	314Ah
	Rated Energy	261.248kWh
	Nominal Voltage	832V
	Rated Charge/Discharge C-rate	0.5P
	Operating Voltage Range	728~936V
AC Side (Grid)	Rated Output Power	125kW
	Max. Apparent Output Power	125kVA
	Rated Grid Voltage	3/N/PE, 220V/380V, 230V/400V
	Rated Grid Frequency	50/60Hz
	Rated Grid Output Current	180A
	Power Factor	-0.99~+0.99, at rated output power
	Adjustable Reactive Power Range	-100~+100%
	THDi	<3% (Linear load)
AC Side (Off-Grid)	Rated Output Power	125kW
	Max. Apparent Output Power	1.1 times long-term, 1.2 times 1min
	Rated Output Voltage	3/N/PE, 220V/380V, 230V/400V
	Rated Frequency	50/60Hz
	THDu	<3% (Linear load)
System Parameters	Fire Suppression System	Temperature, smoke and gas detection integrated with aerosol fire suppression
	Noise	< 75dB
	Thermal Management	Liquid Cooling
	Degree of Protection	IP55
	Corrosion Protection Rating	C4-M
	Max. Operation Altitude	3000m
	Storage Temperature	-30~+60°C (-22~+140°F)
	Operation Temperature Range	-25~+55°C (-13~+131°F)
	Humidity	0~95% (non-condensing)
	EMS Communication	Network topology: linear or ring Communication protocols: IEC 104, Modbus, MQTT
	Max. Quantity of Parallel	On-grid: up to 20; Off-grid: up to 9
	Dimensions (W×H×D)	1000×2400×1500mm (±20mm)
	Weight	Approx. 2700kg
	Certifications	UN 38.3, IEC 62619, IEC 61000, IEC 62040-1, IEC 62477-1:2012, IEC 62933-5-2, NFPA 69, UL 9540A

**Available rated power options: 74kW / 80kW / 82kW / 90kW / 99kW / 100kW / 124kW / 125kW.*
Specifications are subject to change without prior notic.

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