



OMNI-260 ESS

KEY FEATURES

- High-efficiency bidirectional PCS for seamless charge/discharge
- Rapid response time for dynamic load changes
- Supports both on-grid and off-grid operating modes
- Automated energy scheduling for optimized cost savings
- Redundant safety architecture across battery strings
- Pre-installed wiring and standardized module layout
- Seamless parallel control for multi-cabinet expansion
- Overcharge, over-discharge, and short-circuit protection
- Anti-condensation and humidity-resistant design
- Industrial-grade circuit protection and surge suppression
- Low noise operation with optimized cooling airflow
- Remote firmware upgrades for continuous system improvement
- Secure data encryption for communication and monitoring
- Cloud-based fleet management for multi-site deployments
- Lightweight cabinet structure with reinforced frame
- Adjustable power output settings for various load profiles
- Smooth integration with PV inverters and EV chargers
- High availability with fault-tolerant system architecture
- Automatic islanding and reconnection capability

ABOUT OMNI-260

The OMNI-260, a 260 kWh Industrial and Commercial Integrated Energy Storage Cabinet is a compact, all-in-one power solution that combines batteries, BMS, PCS, EMS, cooling, and fire protection in a single unit.

It offers reliable, high-efficiency energy storage for microgrids, backup systems, and renewable integration.

With intelligent control, modular scalability, and robust outdoor design, it ensures safe, stable, and continuous power delivery.

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FREQUENTLY ASKED QUESTIONS

What applications is this system designed for?

This integrated energy storage cabinet is ideal for microgrids, backup power systems, solar-storage-charging setups, peak shaving and valley filling, and distributed renewable energy integration. It provides reliable power for both commercial and industrial needs.

Can multiple cabinets be connected together?

Yes. Up to 5 cabinets can be connected in off-grid mode and up to 15 cabinets in on-grid mode, enabling flexible energy expansion for large-scale applications.

Does the system include its own fire suppression and cooling?

Yes. It comes with a built-in multi-level fire suppression system (aerosol, explosion-proof exhaust, and emergency sprinkler) and a liquid cooling system to maintain safe and stable battery operation.

PRODUCT SPECIFICATION

OMNI-260 C&I BESS Parameters

	ITEMS	PARAMETERS
DC SIDE	Cell type	LFP 3.2V/314AH
	Pack type	1P52S/52.25KWH
	Configuration	1P260S
	Voltage range	DC 728V ~ DC 949V
	Battery system capacity	261KWH
	Discharge rate	≤0.5P
	Cycle life	≥8000 TIMES@25±3°C,≥70%EOL
AC SIDE	PCS rate	125KW
	PCS cooling method	Liquid cooling
	Grid Frequency	50/60 Hz
	AC side voltage	400V(-15% ~ +10%) 480V(-12%~+10%)
	AC side connection	3W+N+PE
	Power factor	-1 (LEADING) ~1 (LAGGING)
	Incoming mode	AC side bottom incoming wires
SYSTEM PARAMETERS	Fire suppression system	Active early warning + smoke and temperature sensor + combustible gas detection + cabinet level fire suppression + external water fire suppression + explosion-proof exhaust + blow-off valve
	IP rating	IP55
	Permitted ambient temperature	0~55°C(charge)-20~55°C (discharge)
	Permitted ambient humidity	0~95%RH(no condensation)
	Noise	≤64dB(this may be redefined by actual data of the sample)
	Communication method	LAN/CAN /RS485
	Dimensions (Length*Width*Height)	1020mm×1470mm×2250mm(subject to actual product)
	Weight	Around 2700kg(subject to actual product)
	Maximum operating altitude	2000m
	Certifications	UN 38.3, IEEE1547, UL1741SB. UL1973, UL9540A, UL9540, NFPA68, NFPA69, NFPA855, CE

PRODUCT DESCRIPTION

The new generation of industrial and commercial integrated energy storage cabinet launched by BigBattery integrates the design concept of "All In One", integrating battery clusters (5 packs), BMS, PCS, EMS, fire suppression system and thermal management system in a single standardized cabinet, with the advantages of economic space occupation, high reliability, easy installation and flexible expansion, easy operation and high system efficiency. This product is mainly applied to scenarios such as microgrid, back-up power, peak shaving and valley filling, distributed renewable energy consumption, and solar energy charge and storage.

Operating mode

Outdoor cabinet supports two operating modes: on-grid and off-grid.

(1) On-grid operating: at on-grid mode, the AC side of the outdoor cabinet is connected to the power grid, and the DC side is connected to the DC side. According to different application scenarios, DC side can be charged and discharged at constant voltage, constant current or constant power in the appropriate operating mode

(2) Off-grid operating: at off-grid mode, the system can output three-phase AC voltage with fixed frequency (matching with the power grid) to achieve continuous and stable power supply to the load of the AC side.