

Pion Power Liquid Cooling BESS

Product Features

- Precision liquid cooling keeps cell $\Delta T \leq 5^\circ\text{C}$ for stable performance
- High energy density with over 6,000 charge cycles for long lifespan
- Advanced EMS with real-time cluster monitoring and passive balancing
- Reduced IR deviation for higher efficiency and consistent output
- Intelligent safety with pack-level fire suppression and multi-layer protection
- Cluster-level fault isolation and PCS safeguards for reliable operation
- Grid-interactive control supports peak shaving, demand response, anti-backflow, and seamless on/off-grid switching
- Scalable design with built-in EMS; supports up to 10 units in parallel, compatible with 1000V DC systems
- Multi-protocol communication including IEC104, Modbus-RTU/TCP, MQTT, DL/T645
- Direct integration with EMS, SCADA, and smart grids, no converters required, ensuring faster, low-latency operation
- Certified durability: UL certified; IP67 battery pack and IP55 system enclosure for outdoor use
- Low-noise operation (<75 dB), suitable for residential, urban, and industrial environments
- Comprehensive monitoring with smoke, CO, and temperature sensors, plus optional water-based fire suppression



Model

XES-261YB-06-01-UL

DC side

Cell type	Lithium iron phosphate
Cell specification	3.2V,314Ah
System configuration	(1P52S) 5S
System rated capacity (kWh)	261
System nominal voltage (V)	832
System voltage range (V)	750~936
Charge/discharge current (rated) (A)	157 (0.5C)
Charge/discharge current (max.) (A)	183($\leq 0.5P$)

AC side (Grid-Connected)

Rated output power (kVA)	125
Rated current (A)	150
Rated grid voltage (Vac)	277/480Vac, 3W+N+PE
Rated grid frequency (Hz)	60
Power factor range	1.0(Lagging)...1.0(Leading)
Grid-connected current total harmonic distortion THDi	$\leq 3\%$ (rated power)

AC side (Grid-Connected/Off-Grid)

Rated output voltage (Vac)	277/480Vac, 3W+N+PE
Max. output power (kVA)	125
Max. AC current (A)	150(linear load)/100(non-linear load)
Max. unbalanced load (kVA)	22 (linear load)
Output voltage frequency (Hz)	60
Max. allowable crest factor	2.5
Total harmonic distortion rate of output voltage THDv	<3% (rated conditions, resistive balanced load)

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Protection

Protection functions	AC/DC short circuit protection, DC/AC overvoltage/undervoltage protection, AC/DC overcurrent protection, SOC alarm, cell overvoltage/undervoltage protection, high temperature alarm, overload protection
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System parameters

Isolation transformer type	Non-isolated
Number of parallel units (PCS)	10
Auxiliary power per cabinet (kW)	3.5
Fire extinguishing medium	PACK-level/cabinet-level aerosol + water fire suppression
Fire detection type	Heat, CO, smoke detectors

Operating Environment

Permissible ambient temperature	-25°C ~ 50°C (>40°C derating operation)
Permissible ambient humidity	0~95%RH (No condensation)
Altitude	2000m (>2000m derating)

Basic Parameters

Dimensions (W×D×H)	(1350±10)×(1400±10)×(2100±10) mm
Weight	2850kg±2%
Cooling method	Intelligent liquid cooling
Coolant	50% water ~ 50% ethylene glycol solution
Ingress protection(IP)	IP55
Protection degree	NEMA type 3R
Noise	<75dB

Communication Parameters

External communication interface	RJ45
External communication protocol	Modbus TCP, MQTT

Certification

UL1973:2022, UL9540:2023, UL9540A:2025, NFPA69, UL60730, UN38.3