ESAI-1000/2064

1 MW 2 MWh All-in-One BESS

All-in-One Battery Energy Storage.

Fast Deployment. Proven Reliability.

System Features

All-in-One Design

- Integrates the PCS, batteries, and control systems into a single pre-assembled unit, reducing installation time, lowering costs, and simplifying on-site deployment.

Advanced BMS

- Provides multi-layer protection and real-time active balancing to enhance safety, optimize performance, and ensure reliable long-term system operation.

Independent Battery Strings

- Allows each battery string to operate independently, simplifying maintenance, reducing system interaction, and improving overall operational efficiency.
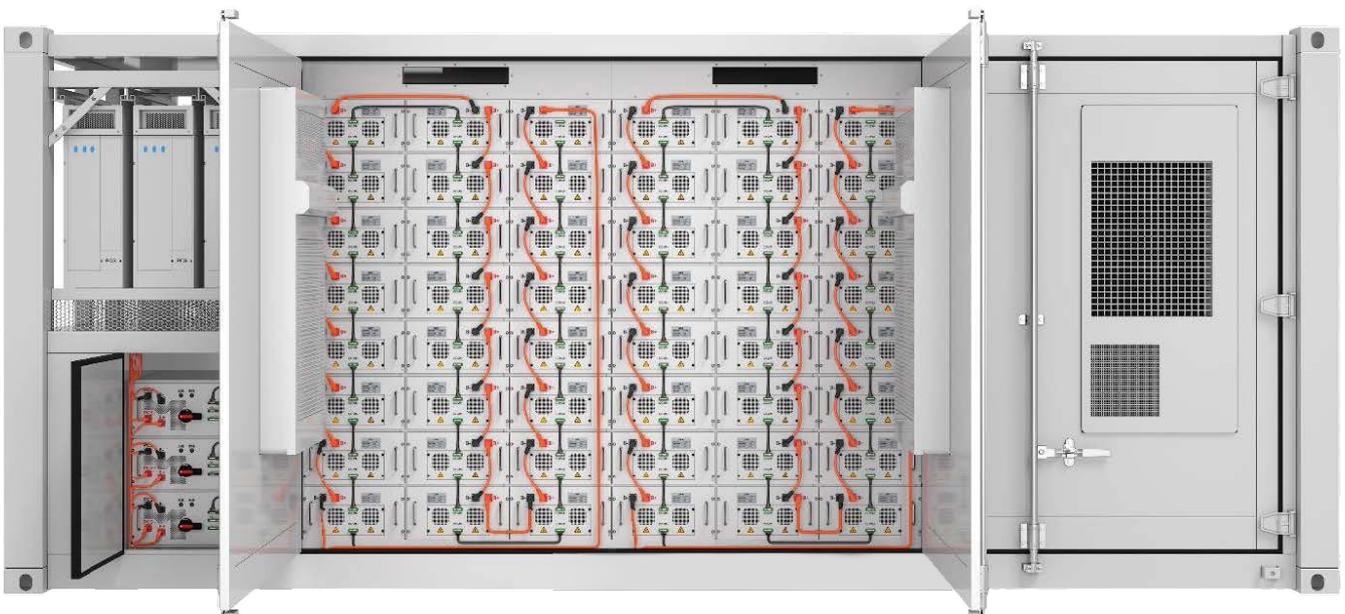
Global Safety Compliance

- Certified to UL 9540 and NFPA 855, ensuring safe, reliable operation across diverse applications while meeting the expectations of regulators, insurers, and customers.

Bi-Directional PCS

- Supports efficient charging and discharging with multiple operating modes, enabling optimized energy flow, islanding detection, and reliable off-grid operation.

Scalable System Architecture

- Supports parallel system operation, enabling capacity expansion as energy needs grow without redesigning or replacing core system components.

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System Specifications

Model numbers shown as X/Y indicate rated power (X) and energy capacity (Y).
e.g. 1000/2064 = 1000 kW, 2064 kWh.

Battery Specifications	
Model Number	ESAI-1000/2064
Battery Chemistry	Lithium Iron Phosphate
Cell Type	3.2 V / 280 Ah
Capacity	2064 kWh
Nominal Voltage	1228.8 Vdc
Operating Voltage Range	1075.2 - 1363.2 Vdc
DC Side Rated Current	6 x 162.7 A
Cycle Life	6,000 cycles
PCS Specifications	
Rated AC Power	1000 kW
Max AC Power	1320 kW
Rated Output Voltage	690 Vac
Output Voltage Range	586.5 - 759 Vac
Rated Grid Frequency	50 / 60 Hz
Rated Current	836.5 A
AC Power Factor	0.1 ~ 1 leading and lagging (controllable)
Output THDI	≤1.5%
General Specifications	
Thermal Control Method	HVAC
Fire Safety Configuration	Aerosol Extinguishing, five-in-one detection, Perfluorohexanone
Gas Detection / Release	CO/H2 gas detection and release system
Communication	RS485/Ethernet, Modbus RTU/TCP
Standards/Certification	UL 9540, UL 9540A, IEC 62619, EN 50549-2, IEC 61000-28-4, IEC 62477, UL 1973, IEEE 1547, FCC, UN3536, NFPA 855, UN 38.3
IP Rating	IP54
Operatiing Temperature	-4°F (-20°C) to 104°F (40°C)
Operating Humidity	0 - 95%
Dimensions L x W x H	6058 x 2438 x 2591 mm 238.5 x 96 x 102 in
Weight	~ 24000 kg ~ 52911 lbs

Ready to take control of your energy strategy?

Contact us at
evesco@power-sonic.com
to explore how EVESCO can accelerate your storage goals.

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