

# ESAI-125/233 (NA)

125 kW 233 kWh 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.

### Integrated EMS

- An integrated energy management system enables centralized monitoring, control, and optimization, simplifying operations while supporting predictive maintenance and system insights.

### Flexible Applications

- Supports a wide range of operating modes and load profiles, enabling seamless deployment across grid-connected, off-grid, and hybrid energy storage applications.

### Liquid Cooling

- Advanced liquid-cooling improves system efficiency, enhances thermal stability, and extends battery life under demanding operating conditions.

### Built-in Safety

- Multiple layers of DC protection and intelligent battery management enhance system safety, reduce operational risk, and support reliable long-term performance.

### Long-Term Reliability

- Designed for continuous operation with durable components and intelligent system controls, ensuring consistent performance and reduced maintenance over the system lifespan.

### Scalable System Architecture

- A modular architecture supports parallel system expansion, enabling capacity to scale efficiently as energy demands grow without replacing core infrastructure.





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### System Specifications

Model numbers shown as X/Y indicate rated power (X) and energy capacity (Y).  
e.g. 125/233 = 125 kW, 233 kWh.

Battery Specifications	
Model Number	ESAI-125/233 (NA)
Battery Chemistry	Lithium Iron Phosphate
Cell Type	3.2 V / 314 Ah
Capacity	233 kWh
Nominal Voltage	832 Vdc
Operating Voltage Range	761 - 923 Vdc
Cycle Life	> 8000 cycles
PCS Specifications	
Rated AC Power	125 kW
Max AC Power	137.5 kW
Rated Output Voltage	480 Vac
Output Voltage Range	408 - 528 Vac
Rated Grid Frequency	50 / 60 Hz
Rated Current	165.4 A
Power Factor	>0.99
THDi	≤3%
General Specifications	
Thermal Control Method	Liquid cooling
Fire Safety Configuration	Aerosol Extinguishing
Communication	CAN, RS485, Wi-Fi, LTE
Standards/Certification	IEC62619, UL1973, UL9540A, UL9540, EN 61000-6-1/2/3/4, EN 62109-1/2, UN38.3
IP Rating	IP54
Operating Temperature	-4°F (-20°C) to 131°F (55°C)
Operating Humidity	0 - 95%
Dimensions L x W x H	1100 x 1455 x 2320 mm 43.0 x 57.0 x 91.0 in
Weight	~ 2860 kg ~ 6305 lbs
Warranty	10 year battery performance 5 year parts



## Integrated Energy Management System (EMS)

Smarter Control. Greater Uptime. Total Visibility. EVESCO's advanced EMS is engineered for real-time energy intelligence, empowering operators with control, insight, and automation at every level of the system. Whether on-site or in the cloud, you get precision management, proactive alerts, and unmatched flexibility.

### Real-Time Monitoring & Alerts

- Continuously tracks battery health, cooling, PCS, fire suppression, and system performance. Enables instant alerts and data-driven decision-making.

### Enterprise-Grade Security

- Multi-layered cybersecurity architecture with encryption, user access control, and audit trails to protect critical infrastructure and data integrity.

### Scalable, Modular Architecture

- Supports cabinet-level to station-level EMS deployment. Easily add new systems or expand capacity without reconfiguring your control strategy.

### Proactive Maintenance & Diagnostics

- Delivers predictive insights and fault detection to reduce downtime, streamline service cycles, and maximize asset life.

**With EVESCO's EMS, you don't just store energy, you manage it with confidence, precision, and real-time visibility.**



**Ready to take control of your  
energy strategy?**

Contact us at  
**[evesco@power-sonic.com](mailto:evesco@power-sonic.com)**  
to explore how EVESCO can accelerate your storage goals.

