

ESPV-30/61 (NA)

30 kW 61 kWh Solar-Ready BESS



Solar-Ready Battery Energy Storage.
Integrated Storage. Smarter Energy Control

System Features

Optimized for Solar

- Built-in MPPT and high-efficiency inverter simplify solar integration, improving energy capture, reducing operating costs, and supporting grid independence and sustainability goals.

Integrated EMS

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

Adaptive Site Flexibility

- Supports centralized or distributed configurations, with or without inverter integration, enabling seamless adaptation to diverse site layouts and technical requirements.

Compact Footprint

- High-density storage and integrated design minimize space requirements, enabling deployment in constrained sites, retrofits, and locations where footprint efficiency matters.

Built-in Safety

- Advanced fire prevention, continuous diagnostics, and multi-layer protection systems ensure safe operation, operational assurance, and long-term system reliability.

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

- Modular system design enables capacity expansion as energy needs increase, minimizing disruption and avoiding replacement of existing infrastructure.





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System Specifications

Model numbers shown as X/Y indicate rated power (X) and energy capacity (Y).
e.g. 30/61 = 30 kW, 61 kWh.

Battery Specifications	
Model Number	ESPV-30/61 (NA)
Battery Chemistry	Lithium Iron Phosphate
Cell Type	3.2 V / 100 Ah
Capacity	61 kWh
Nominal Voltage	307.2 Vdc
Operating Voltage Range	281.3 - 340.8 Vdc
Charge/Discharge Current	95 A / 100 A
Cycle Life	> 8000 cycles
AC Output Specifications	
Rated AC Power	30 kW
Peak Apparent Power	45 kVa (10s)
Nominal Output Voltage	120/208 Vac
Rated Grid Frequency	50 / 60 Hz
Real Power Max. Continuous	30 A
Max. Output Current	83.4 A
Max. Grid Pass-Through Current	200 A
Continuous Grid Pass-Through Current	180 A
Power Factor Output Range	+/- 0.8
Backup Transfer Time	5ms
CEC Efficiency	96.5%
Max. Efficiency	97.5%
Design (DC to AC)	Transformerless DC
THDi	≤3%
PV Input Specifications	
Max. PV Power (STC)	39 kW
MPPT Voltage Range	150 - 500 V
Startup Voltage	180 V
Max. Input Voltage	550 V
Max. Operating Input Current per MPPT	36 A
Max. Short Circuit Current Per MPPT	55 A
Number of MPPTs	4
Number of PV Strings per MPPT	2
Max. AC Coupled Input	30 kW



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System Specifications Continued

General Specifications

Thermal Control Method	Air-cooling
Fire Safety Configuration	Aerosol Extinguishing
Communication	CAN, RS485, Wi-Fi, LTE
Standards/Certification (Battery)	UL 1973, UL 9540A, UL 1741-2021 (incl UL1741SB), IEEE 1547-2018 & 1547a-2020 & 1547.1-2020 (SRD V2.0), UL1699B, UN38.3
Standards/Certification (Inverter)	UL 1741-2021 (UL1741SB), CSA C22.2 No 107.1-16, IEEE 1547- 2018 & 1547a-2020 & 1547.1-2020 (SRD V2.0) UL 1741 CRD-PCS, UL1699B, CEC, SGIP 4
IP Rating	IP55
Operating Temperature	-4°F (-20°C) to 131°F (55°C)
Operating Humidity	0 - 85%
Dimensions L x W x H	750 x 950 x 2280 mm 29.5 x 37.4 x 89.7 in
Weight	~ 1050 kg ~ 2315 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
to explore how EVESCO can accelerate your storage goals.

