

SAFE, RELIABLE, COMMERCIAL ENERGY STORAGE

Blue Planet Energy developed the LX-HV for a new application class of microgrid, critical infrastructure and business continuity projects that demand the most reliable and expandable storage solution with the highest build quality.

Designed and field proven in Hawaii by Blue Planet Energy, Blue Ion LX-HV is a best-in-class high-voltage energy storage system that provides unparalleled safety, reliability, and performance. Every Blue Ion LX-HV system is backed by an industry-leading 15-year performance warranty.

Blue Ion offers the industry's safest and most durable Lithium Ferrous Phosphate (LFP) cell chemistry and design. Our system level approach streamlines the integration of high-performance energy storage, with pre-tested and pre-configured power conversion equipment and site-level controls.



WHY CHOOSE BLUE ION LX?

Fire-Safe Lithium Ferrous Phosphate Chemistry | UL 9540A Test Method Approval | 15-Year Performance Warranty
Cobalt- and Nickel-Free Sustainable Material Supply Chain | Best-In-Class Build Quality | Designed, Assembled and Tested in the USA

OUR SERVICES FOR COMMERCIAL AND INDUSTRIAL PROJECTS

PROJECT DESIGN AND SALES SUPPORT. Blue Planet Energy's application engineering team optimizes the design of each project based on customer requirements and site variables, and our sales team assists in the communication of the system's value proposition.

SYSTEM COMPONENT COMPATIBILITY ASSURANCE. Our engineering team pre-tests all power system components, including inverters and site controllers, to ensure the compatibility and optimization of fielded systems.

SYSTEM FINANCING. We have access to a variety of financing options to help you close on your project and optimize its economic potential.

INSTALLATION SUPPORT. Our experienced field technicians are available to provide on-site or remote project installation guidance and pre-commissioning services.

OPERATION AND MAINTENANCE. We offer a variety of programs and options to support deployed systems over their operational lifespans.



PRE-CONFIGURED AND TESTED BATTERY AND INVERTER SYSTEMS

- Pre-configured systems offered in base 125 kW/256 kWh power blocks, expandable in 32 kWh increments.
- All power system components including system inverters and site-level controllers are pre-tested to ensure the compatibility and optimization of fielded power systems.
- Tested battery/inverter systems operate in grid-connected, islanded, and off-grid environments.

DESIGNED TO SAFELY SCALE

The Blue Ion LX-HV uses a 64 kWh dual-cabinet energy storage block that is scalable to 2 MWh+. In addition to the inherent safety of its LFP cell chemistry and design, the LX system adds additional layers of safety through the quality build of components and a unique system architecture, including system-level protection provided by an advanced Battery Management Unit.

BATTERY ELECTRICAL SPECIFICATIONS

Usable capacity (cabinet A+B)	64 kWh (16S2P configuration)
System capacity	Expandable to 2 MWh+
Nominal voltage	819 Vdc
Operating voltage	736–896 Vdc
HV BMU power at 45°C	74 kW
Communications protocol	Modbus TCP/IP

INVERTER ELECTRICAL SPECIFICATIONS

Power @ 45°C	125 kWac
Nominal voltage	480 Vac 3-phase

BATTERY MECHANICAL SPECIFICATIONS

Dimensions per cabinet (H x W x D)	74 in x 25.6 in x 32.2 in (188 cm x 65 cm x 81.8 cm)
Dimensions total (cabinet A + B, H x W x D)	74 in x 57.2 in x 32.2 in (188 cm x 145.3 cm x 81.8 cm)
Weight	2,600 lb (1,179 kg)
Mounting	Floor Mount

BATTERY ENVIRONMENTAL SPECIFICATIONS

Storage temperature range	-4°F to 113°F (-20°C to 45°C)
Discharge temperature range	-4°F to 122°F (-20°C to 50°C)
Charge temperature range	32°F to 113°F (0°C to 45°C)
Operating ambient humidity	10% RH to 90% RH
Enclosure type	Indoor (NEMA 1)

BATTERY PERFORMANCE SPECIFICATIONS

Cell chemistry	Fire-safe, non-toxic Lithium Ferrous Phosphate (LFP)
Depth of Discharge	100%
Peak round-trip efficiency	98%
Performance warranty	15 years or 8,000 cycles to 70% remaining capacity (100% DoD)
Product warranty	10 years, includes HV BMU

BATTERY CERTIFICATIONS

UL 9540A Test Method Approved, Designed to UL 9540 Energy Storage Systems, UL 1642 Lithium Ion Cell, UL 1973 Lithium Ion Battery Modules, IEC 62133, SBA S1101