

BLUE ION[®] 2.0

ENERGY STORAGE SYSTEM



15 YEAR PERFORMANCE WARRANTY

SAFE, DURABLE, BEST-IN-CLASS ENERGY STORAGE

Designed, assembled, and tested in Hawaii by Blue Planet Energy, Blue Ion 2.0 is a best-in-class energy storage system that provides unparalleled safety, reliability, and performance. Our company, design process, and craftsmanship are guided by Aloha, a Hawaiian principle that encompasses love, patience, attention, kindness, respect, and a connection to nature.

Blue Ion is precisely engineered to offer simple, fast, and repeatable design and installation. We offer the safety of Lithium Ferrous Phosphate (LFP), the confidence of a 15-year warranty, the durability of 100% depth of discharge with no impact on cycle life, and the freedom to choose a preferred inverter brand. Every Blue Ion system is backed by the coolest and most experienced team in energy storage.



SAFE

Fire-safe, non-toxic
Lithium Ferrous Phosphate
(LFP) cells

Fail-safe system protection

UL 9540A Test Method
Approved, listed to
UL 9540, UL 1642, and
UL 1973

RELIABLE

15-year or 8,000
cycle at 100% depth
of discharge warranty

Performance assurance
via data capture
and validation

Maintenance-free with
no active cell cooling

SCALABLE

Modular cabinet
capacities of 8 kWh,
12 kWh, and 16 kWh

448 kWh maximum
system capacity

Self-contained units
eliminate exposed
interconnect cabling

POWERFUL

High-power 8 kW
continuous BMU

10 kW (30 min.)
11 kW (5 min.)
17 kW (1 sec.)
BMU peak power

98% peak round-
trip efficiency

FLEXIBLE

Compatible with all
leading inverter-chargers

Supports ac and
dc coupled system
configurations

Compatible with 3-phase
commercial electrical
services



DESIGNED TO SCALE

The 16 kWh capacity of the Blue Ion 2.0 cabinet provides an optimal building block for modular high-capacity, low-voltage (50 Vdc nominal) energy storage systems. Integrators can seamlessly parallel cabinets for system capacities of up to 448 kWh, making Blue Ion 2.0 the ideal energy storage solution for high-capacity systems using low-voltage power conditioning equipment.

STAY CONNECTED

Sync up and monitor Blue Ion 2.0 from anywhere with an internet connection.

ELECTRICAL SPECIFICATIONS

Usable capacity	16 kWh (model BI2-16), 12 kWh (model BI2-12), 8 kWh (model BI2-8)
Maximum system capacity	448 kWh
BMU power at 45°C	8 kW continuous
BMU current at 45°C	160 Adc continuous, 200 Adc for 30 minutes, 220 Adc for 5 minutes
Nominal system voltage	50 Vdc
Maximum system voltage	56 Vdc
Overcurrent protection breaker	250 Adc
Communications protocol	Modbus TCP/IP

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 at 100% depth of discharge
Product warranty	10-years, includes BMU

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
Maximum altitude	29,029 ft (8,848 m)
Enclosure type	Indoor (NEMA 1)

MECHANICAL SPECIFICATIONS

Dimensions (H x W x D)	42.5 in x 23.75 in x 24 in (108 cm x 60.4 cm x 61 cm)
Weight (cabinet and individual battery modules packaged separately)	Cabinet: 126 lb (57 kg) Battery module: 59.5 lb (27 kg) 8 kWh unit total: 364 lb (165 kg) 12 kWh unit total: 483 lb (219 kg) 16 kWh unit total: 602 lb (273 kg)
Mounting	Floor Mount

CERTIFICATIONS

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

Every Blue Ion 2.0 system includes a cabinet with preinstalled BMU, battery modules, busbars, communication cabling, dc disconnect and overcurrent protection, monitoring hardware, and online system performance monitoring.

