SBE1000 | LFP | 1,000 kWh

LITHIUM ION BATTERY ENERGY STORAGE SYSTEM



Power Rating:

250 kW / 500 kW / 1,000 kW

Energy Rating:

1,000 kWh

Enclosure Style:

Custom 20 ft



Codes and Standards

Contact Generac for details.



UL 1642



UL 1973



UL 9540A



UL 1741



UL 9540



CSA 22.2



UN 38.3



IEEE 1547



NFPA 855

The Generac Solution

Energy management today means balancing a combination of carbon reduction, energy savings, and energy resilience goals. Generac's Stationary Battery Energy storage system (SBE) is our latest addition to a portfolio of products and technologies helping commercial and industrial customers to meet their current and future energy goals.

The SBE energy storage systems enable commercial and industrial customers to:

- · Reduce peak demand charges and save on energy costs.
- Pair with on-site solar and lower both carbon footprint and energy costs.
- Provide site resilience during brownouts/power quality issues, back up critical loads during shorter duration blackouts, and pair with our line of gas and diesel generators for full facility resilience during long duration blackouts.
- Earn additional revenue by monetizing the asset to support broader grid resilience.

SBE1000 | LFP | 1,000 kWh

LITHIUM ION BATTERY ENERGY STORAGE SYSTEM



BESS SPECIFICATIONS	250 kW / 1,000 kWh	500 kW / 1,000 kWh	1,000 kW / 1,000 kWh
Nameplate DC energy	1,198 kWh	1,198 kWh	1,198 kWh
DC voltage range	874-1,123 VDC	874-1,123 VDC	874-1,123 VDC
Nominal voltage	998.4 VDC	998.4 VDC	998.4 VDC
AC connection	3-wire (3P3W)	3-wire (3P3W)	3-wire (3P3W)
Nominal AC voltage	480 V	480 V	480 V
Frequency	60 Hz	60 Hz	60 Hz
Overload capacity	110%, 10 min 125%, 10 s	110%, 10 min 125%, 10 s	110%, 10 min 125%, 10 s
Power factor	Full 4-quadrant operation	Full 4-quadrant operation	Full 4-quadrant operation
Inverter efficiency	Up to 98.4%	Up to 98.4%	Up to 98.4%
Dimensions (approx.)	20 ft x 8 ft x 9.6 ft (6.1 m x 2.4 m x 2.9 m)	20 ft x 8 ft x 9.6 ft (6.1 m x 2.4 m x 2.9 m)	20 ft x 8 ft x 9.6 ft (6.1 m x 2.4 m x 2.9 m)
Weight (approx.)	50,500 lb (22,906 kg)	51,150 lb (23,201 kg)	52,000 lb (23,587 kg)
NVIRONMENTAL			
Operating temperature	-13 °F to 113 °F -25 °C to 45 °C	-13 °F to 113 °F -25 °C to 45 °C	-13 °F to 113 °F -25 °C to 45 °C
Enclosure	NEMA 3R (Outdoor)	NEMA 3R (Outdoor)	NEMA 3R (Outdoor)
	3,280 ft (1,000 m)	3,280 ft (1,000 m)	3,280 ft (1,000 m)
Altitude before derate	, , , , ,		

ELECTRICAL SYSTEMS

- Auxiliary load panel
- Lighting
- · BESS controller panel
- · Ground fault monitoring

CONTROLS

· Door open alarm switch

BIDIRECTIONAL INVERTER

- · Dynamic transfer
- · Grid forming
- Grid following
- 4 quadrant operation
- THD < 2%
- · Load imbalance capable

FIRE PREVENTION AND SUPPRESSION SYSTEM

- · Smoke detectors
- · Audible alarm
- · Visual alarm
- · Remote E-Stop
- · Dry solution suppression
- · Remote alarm

ENCLOSURE

- NEMA 3R
- · Structural steel base
- Insulated enclosure and doors
- Reinforced cable cutouts entry points
- · Corner cast lifting provisions



BESS CONTROL SYSTEM

USE CASES

- Peak shaving
- Arbitrage
- · Back up power
- · Black start
- · Renewable energy shifting
- · Voltage regulation
- · Frequency response
- · Grid forming off-grid

FEATURES

- Local data server
- · HMI interface
- · Cloud based monitoring
- Multilevel authentications for security operation
- · Data acquisition and control functions
- · Event reporting
- Remote configuration firmware and software upgrade
- · Ramp rate control demand management

- Modbus TCP
- CAN
- · Ethernet based communication
- Compatibility with 3rd party EMS, SCADA systems

OPTIONS

ELECTRICAL SYSTEMS

- · Automatic transfer switch
- · Isolation transformer
- · LV circuit breaker

HVAC

· Electric reheat with humidity control

CONTROLS

· Custom HMI screen interface

FIRE PREVENTION & SUPPRESSION SYSTEM

· Off gas detection (Li-ion Tamers)

0&N

- 10 year extended warranty
- · Long term service contract

ENCLOSURE

- · Seismic rating
- · Arctic rated

Contact Generac for a one stop solution to integrate our line of generators with our SBE battery system. Contact Generac for partner(s) referral regarding on-site Engineer/Procurement/Construct (EPC) services.