SBE1000 | 1,000 kWh | LFP

LITHIUM ION BATTERY ENERGY STORAGE SYSTEM



Power Rating:

250 kW / 500 kW / 1,000 kW

Energy Rating:

1,000 kWh

Enclosure Style:

20' Custom



Codes and Standards:

Contact Generac for details.



UL 1642



UL 1973



UL 9540A



UL 1741



UL 9540



CSA 22.2



UN 38.3

♦IEEE IEEE 1547



NFPA 855

The Generac Solution:

Energy management today increasingly means balancing a combination of carbon reduction, energy savings and energy resilience goals. Generac's SBE battery energy storage system 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 (C&I) customers to:

- 1) Reduce peak demand charges and save on energy costs.
- 2) Pair with on-site solar and lower both carbon footprint and energy costs.
- 3) 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.
- 4) Earn additional revenue by monetizing the asset to support broader grid resilience.

SPEC SHEET

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LITHIUM ION BATTERY ENERGY STORAGE SYSTEM



20' x 8' x 9'

41,222 lbs

BESS SPECIFICATIONS 250 kW / 1,000 kWh 500 kW / 1,000 kWh 1,000 kW / 1,000 kWh AC port configurations 3-wire (3P3W) 3-wire (3P3W) 3-wire (3P3W) Nominal AC voltage 480, 600V 480, 600V 480, 600V Frequency 60 Hz 60 Hz 60 Hz Overload capacity 110%, 10 mins. 125%, 10s 110%, 10 mins. 125%, 10s 110%, 10 mins. 125%, 10s Unity; Full 4-quadrant Unity; Full 4-quadrant Unity; Full 4-quadrant Power factor Peak efficiency Up to 98.4% Up to 98.4% Up to 98.4% DC voltage range 740-1,475 VDC 710-1,250 VDC 710-1,250 VDC 998.4 V Nominal voltage 998.4 V 998.4 V Max battery C-rate 1C 1C 1C

20' x 8' x 9'

38,367 lbs

Contact Generac for smaller capacities within the 20' enclosure; minimum capacity is 600 kWh.

20' x 8' x 9'

38,229 lbs

ENVIRONMENTAL

Dimensions (approx.)

Weight (approx.)

Operating temperature	-13°F to 113°F	-13°F to 113°F	-13°F to 113°F
	-25°C to 45°C	-25°C to 45°C	-25°C to 45°C
Enclosure	NEMA 3R (Outdoor)	NEMA 3R (Outdoor)	NEMA 3R (Outdoor)
Altitude before derate	3280ft/1,000m	3280ft/1,000m	3280ft/1,000m
Noise (approx.)	65 dB < 1m	65 dB < 1m	65 dB < 1m

STANDARD FEATURES

ELECTRICAL SYSTEMS

- DC combiner
- Auxiliary load panel
- Lighting
- BESS controller panel
- Ground fault monitoring

CONTROLS

 Door open alarm switch

BIDIRECTIONAL INVERTER

- Dynamic transfer
- Grid tie
- Off-grid
- 4 quadrant operation
- THD < 2%
- Single-phase capable

FIRE PREVENTION & SUPPRESSION SYSTEM

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

ENCLOSURE

- NFMA 3R
- Structural steel base
- Drip edge door covers
- Insulated enclosure doors
- · Reinforced cable cutouts entry points
- Lifting eye bolts

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LITHIUM ION BATTERY ENERGY STORAGE SYSTEM



BESS CONTROL SYSTEM

USE CASES

- · Peak shaving
- Arbitrage
- Back up power
- Black start
- · Renewable energy shifting
- Voltage regulation
- Frequency response
- Engineered UPS
- · 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
- Sunspec protocol
- CAN
- Ethernet based communication
- Compatibility with 3rd party EMS, SCADA systems

OPTIONS

ELECTRICAL SYSTEMS

- Automatic transfer switch
- Isolation transformer
- LV circuit breaker

HVAC

- Motorized damper with pressure relief
- Electric reheat with humidity control

CONTROLS

- Custom HMI screen interface
- Larger HMI screen

FIRE PREVENTION & SUPPRESSION SYSTEM

- Off gas detection (Li-ion Tamers)
- Sprinkler system
- Motorized louvers
- Dry pipe
- Deflagration venting panels

0&M

- 10 year extended warranty
- · Long term service contract
- Contact Generac for performance guarantee service products

ENCLOSURE

- · Security camera
- Exterior flood lights
- Sound reduction silencer
- Seismic rating
- Explosion rated exterior pressured doors
- Exterior finishing
- Arctic rated
- Key pad lock

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.

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