

**Power Rating:**

125 kW / 250 kW / 500 kW

**Energy Rating:**

576–864 kWh

**Enclosure Style:**

Custom 10 ft



## Codes and Standards

Contact Generac for details.



UL 1642



UL 1973



UL 9540A



UL 1741 SB



UL 9540



CSA 22.2



UN 38.3



IEEE 1547



NFPA 855



NFPA 69



NFPA 68  
(select models)

## 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.

### BESS SPECIFICATIONS

DESIGNATION

Gen 1 Models	SBE-599-125	SBE-599-250	SBE-599-500
Power	125 kW / 500 kWh	250 kW / 500 kWh	500 kW / 500kWh
Nameplate DC energy	599 kWh		
DC voltage range	874-1,123 VDC		
Nominal voltage	998.4 VDC		
AC connection	3-wire (3P3W)		
Nominal AC voltage	480 V		
Frequency	60 Hz		
Overload capacity	120%, 10s	110%, 10 min; 125%, 10 s	
Power factor	Full 4-quadrant operation		
Inverter efficiency	Up to 98.7%	Up to 98.4%	
Dimensions (approx.)	12.3 ft x 8 ft x 9.6 ft (3.8 m x 2.4 m x 2.9m)		13.8 ft x 8 ft x 9.6 ft (4.2 m x 2.4 m x 2.9m)
Weight (approx.)	24,944 lb (11,314 kg)	25,500 lbs (11,567 kg)	27,062 lb (12,275 kg)

Gen 2 Models	SBE-576-125	SBE-864-125	SBE-576-250	SBE-864-250
Power	125kW		250 kW	
Nameplate DC energy	576 kWh	864 kWh	576 kWh	864 kWh
DC voltage range	1,008-1,296 VDC			
Nominal voltage	1,152 VDC			
AC connection	3-wire (3P3W)			
Nominal AC voltage	480 V			
Frequency	60 Hz			
Overload capacity	120%, 10s		110%, 10 min 125%, 10 s	
Power factor	Full 4-quadrant operation			
Inverter efficiency	Up to 98.7%		Up to 98.7%	
Dimensions (approx.)	12.3 ft x 8 ft x 9.6 ft (3.8 m x 2.4 m x 2.9 m)			
Weight (approx.)	22,042 lb (9,998 kg)	27,719 lb (12,573 kg)	22,590 lb (10,247 kg)	26,959 lb (12,228 kg)

\*Gen 1 models: NFPA 855 compliance via NFPA 68 & 69. Gen 2 models: NFPA 855 compliance via NFPA 69.

### ENVIRONMENTAL

Operating temperature	-13 °F to 113 °F -25 °C to 45 °C
Enclosure	NEMA 3R (Outdoor)
Altitude before derate	3,280 ft (1,000 m)
Noise (approx.)	<65 dB @ 3.3 ft (1 m)

STANDARD FEATURES

ELECTRICAL SYSTEMS

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

CONTROLS

- Battery (unit) controller
- Door open alarm switch

BIDIRECTIONAL INVERTER

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

HVAC

- Electric reheat with humidity control

FIRE PREVENTION & SUPPRESSION SYSTEM

- Gas (H2) and dual zone smoke detectors
- Audible/visual alarms for gas, smoke
- Dry solution fire suppression
- Door mounted E-Stop (remote available)
- **NFPA 69 compliant:** dedicated H2 fan, dedicated UPS for 2 hr H2 fan runtime and 24 hr monitoring
- **NFPA 68 compliant:** deflagration panels on all models; NFPA 68 compliance on select models

ENCLOSURE

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

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

OPTIONS

EMS & MICROGRID COMPONENTS

- EMS & Microgrid controller
- SL-751 protective relay cabinet
- Load control center
- Genset control center
- Site power meter

ELECTRICAL SYSTEMS

- Automatic transfer switch
- Isolation transformer
- LV circuit breaker

FIRE PREVENTION & SUPPRESSION SYSTEM

- Off gas detection (Li-ion Tamers)

O&M

- 10 year extended warranty
- Long term service contract

ENCLOSURE

- Arctic rated

SEISMIC CERTIFIED

- Certified to: ASCE 7-16, IBC (International Building Code) 2021, CBC (California Building Code) 2022
- Design parameters: Site Class: D; Seismic Design Category (SDC): D, Risk Category = III; Importance Factor (Ip): 1.0; Design Spectral Acceleration (Sds): 2.0

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 Engineering/Procurement/Construction (EPC) services.