

Power Rating:
1 – 2.5 MW











Energy Rating:
2.5 – 5 MWh

Enclosure Style:
Outdoor rated



Reference image of SBE Block with 1-1.5 MW inverter

Codes and Standards

- UL 1642
- UL 1973
- UL 9540A
- UL 1741 SB
- UL 9540
- 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 SBE Block is our latest addition to a portfolio of products and technologies helping commercial and industrial (C&I) customers to meet their current and future energy goals.

SBE energy storage systems enable C&I 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.

Modular and scalable using common building blocks

DC Block

- Up to 5 MWh/block
- LFP, Liquid cooled
- IP55 enclosure
- Single DC output
- Dry pipe & sprinkler system
- Aerosol fire suppression (option)
- Emergency-Stop
- Dehumidification

Controls Cabinet

- Controls – Unit & Microgrid
- Fire alarm control panel
- Connectivity & Monitoring
- Auxiliary power equipment
- Type 3R enclosure
- UPS

Inverter

- Bi-directional inverter
- IP55 enclosure
- Grid following and forming capability
- Outdoor rated enclosure

Reference image of SBE Block with 1-1.5 MW inverter

BESS SPECIFICATIONS

DC Block (Battery)				
Nameplate DC energy	5,016 kWh	4,180 kWh	3,344 kWh	2,508 kWh
Battery racks/container	6	5	4	3
DC voltage range	1,165 – 1,498 VDC			
DC nominal voltage	1,331 VDC			
Max C-rate	0.5C			
Dimensions (WxDxH)	19.9 ft x 8.0 ft x 9.5 ft (6.1 m x 2.4 m x 2.9 m)			
Weight (approx.)	99,200 lb (45,000 kg)	86,900 lb (39,400 kg)	74,500 lb (33,800 kg)	62,200 lb (28,200 kg)
Operating temperature (ambient)	-22 °F to 131 °F (-30 °C to 55 °C)			

Inverter

Power	1,000 kW	1,300 kW	1,500 kW	1,600 kW	2,000 kW	2,500 kW
AC Voltage	480 V	600 V	690 V	480 V	600 V	800 V
Frequency	60 Hz					
AC Connection	3-wire (3P3W)					
Overload capacity	105% for 5 min; 115% for 2 s			120% for 10 s		
Power factor	Full 4-quadrant operation					
Inverter efficiency	Up to 98.5 %			Up to 98.7%		
Dimensions w/ Controls Enclosure (WxDxH)	4.5 ft x 5.7 ft x 7.5 ft (1.4 m x 1.7 m x 2.3 m)			8.2 ft x 4.1 ft x 6.6 ft (2.5 m x 1.2 m x 2.0 m)		
Weight w/ Controls Enclosure (approx.)	3,520 lb (1,597 kg)			4,909 lb (2,230 kg)		
Operating temperature (ambient)	-4 °F to 104 °F (-20 °C to 40 °C) -40 °F (-40 °C) option; power derate above +104 °F (40 °C)			-22 °F to 140 °F (-30 °C to 60 °C) Power derate above +113 °F (45 °C)		
Altitude before power derate	3,280 ft (1,000 m)			3,280 ft (1,000 m)		
Noise	<70 dB @ 9.8 ft (3 m)			<80 dB @ 3.3 ft (1 m)		

STANDARD FEATURES

CONTROLS

- Battery (unit) controller

ELECTRICAL SYSTEMS

- Ground fault monitoring
- BESS control panel
- Auxiliary power equipment

BIDIRECTIONAL INVERTER

- Grid forming
- Grid following
- 4 quadrant operation

FIRE PREVENTION AND SUPPRESSION SYSTEM

- **NFPA 69 compliant:** gas detection and ventilation
- **NFPA 68 compliant:** deflagration panels on all models; NFPA 68 on select models
- Dry pipe and sprinkler system
- Smoke detector
- Audible/visual alarms
- Fire alarm control panel
- Door mounted Emergency-Stop
- UPS capable of 24 hrs in standby and 2 hrs in alarm

ENCLOSURES

- DC Block: Lifting points
- Inverter: Lifting eyebolts
- Controls Cabinet: Lifting eyebolts and forklift pockets

OPTIONS

EMS & MICROGRID COMPONENTS

- EMS & Microgrid controller (MGC)
- Protective relay cabinet (PRC / SEL-751)
- Load control center (LCC)
- Generator connect cabinet (GCC)
- Revenue meter cabinet (RMC)

ELECTRICAL SYSTEMS

- Isolation transformer

CONTROLS CABINET

- HMI screen

FIRE PREVENTION AND SUPPRESSION SYSTEM

- Aerosol fire suppression

O&M

- Extended warranty up to 20-years
- Long-term service contract

CONTROL SYSTEM

- USE CASES (WITH MGC)**

 - Peak shaving
 - Arbitrage
 - Backup power
 - Black start
 - Renewable energy shifting
 - Voltage regulation
 - Frequency response
 - Grid forming - off-grid
- FEATURES**

 - Local data server
 - Cloud based monitoring
 - Multilevel authentications for security operation
 - Data acquisition and control functions
 - Event reporting
 - Ramp rate control demand management
- Modbus TCP
 - CAN
 - Ethernet-based communication
 - Compatibility with 3rd party EMS, SCADA systems

PRODUCT MATRIX

	Nameplate energy capacity (kWh)			
Power (kW)	2,508	3,344	4,180	5,016
1,000	2 hour	3 hour	4 hour	4 hour
1,300	2 hour*	2 hour	3 hour	4 hour
1,500		2 hour	3 hour	3 hour
1,600		2 hour	2 hour	3 hour
2,000			2 hour	2 hour
2,500				2 hour

*Max rated power at 2,508 kWh is ~1250 kW due to 0.5C limitation.

Product images are for reference only and are subject to change based on product improvements and updates.

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.