

**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 9540



UL 9540A



UL 1973



UL 1642



UL 1741SB Ed. 3



UN 38.3



IEEE 1547



NFPA 855



NFPA 69



NFPA 68  
(select models)



CSA 22.2 Large  
Scale Fire Test

## 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.

**Why Generac:**

- **Fully integrated** – The SBE Block is integrated and tested by Generac as a full system – Batteries + Inverter + Controls. It comes with a built-in Generac Controller and optional Generac Microgrid Controller, enabling seamless integration with onsite generators, turbines and other resources in grid-tied or off-grid applications.
- **Long-Term Value** – With an extended warranty from Generac of up to 20 years, and Generac certified technicians across the US & Canada, the SBE Block offers long-term reliability and peace of mind for your energy storage investment.
- **Safety You Can Trust** – The SBE Block is engineered with safety at its core. It is UL 9540 certified, NFPA 855 compliant, and Large-Scale Fire Tested, with multiple layers of protection including a dry pipe & sprinkler system, aerosol fire suppression, and an integrated Fire Alarm Control Panel that integrates with your site's safety systems.

## Modular and scalable using common building blocks



**DC Block**

- Up to 5 MWh/block
- LFP, Liquid cooled
- IP55 enclosure
- Single DC output
- Gas detector, venting fan
- Smoke detectors
- Deflagration panels
- Dry pipe & sprinkler system
- Aerosol fire suppression
- Emergency-Stop
- Dehumidification



*Reference image of SBE Block with 1-1.5 MW inverter*

**Controls Cabinet**

- Built-in Generac Battery Controller
- Connectivity & Monitoring
- Auxiliary power equipment
- Type 3R enclosure
- UPS (inverter dependent)

**Inverter**

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

## SAMPLE LAYOUT



**20 MWh**

- Option to arrange 4x DC Blocks in 2x2 grid to reduce footprint
- Large Scale Fire Tested – enables more energy dense layout
- A/B models with flipped components on DC Block for optimal site layout

## BESS SPECIFICATIONS

DC Block							
Model	SBE-B-2508-1000	SBE-B-3344-1000	SBE-B-4180-1000	SBE-B-5016-1000	SBE-B-3344-2500	SBE-B-4180-2500	SBE-B-5016-2500
Nameplate DC energy	2,508 kWh	3,344 kWh	4,180 kWh	5,016 kWh	3,344 kWh	4,180 kWh	5,016 kWh
Battery racks/container	3	4	5	6	4	5	6
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.)	62,200 lb (28,200 kg)	74,500 lb (33,800 kg)	86,900 lb (39,400 kg)	99,200 lb (45,000 kg)	74,500 lb (33,800 kg)	86,900 lb (39,400 kg)	99,200 lb (45,000 kg)
Operating temperature (ambient)	-22 °F to 131 °F (-30 °C to 55 °C )						
Noise*	<77 dB @ 9.8 ft (3 m)						
Inverter							
Max rated power	1,250 kW	1,500 kW	1,500 kW	1,500 kW	1,600 kW	2,000 kW	2,500 kW
AC Voltage	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 140 °F (-20 °C to 60 °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)				<75 dB @ 9.8 ft (3 m)		

\*Measured at 1 m, estimated at 3 m assuming free-field spherical spreading.  
Configurations are scalable to larger MW/MWh ratings.

STANDARD FEATURES

<b>CONTROLS</b> <ul style="list-style-type: none"><li>Battery (unit) controller</li></ul> <b>ELECTRICAL SYSTEMS</b> <ul style="list-style-type: none"><li>Ground fault monitoring</li><li>BESS control panel</li><li>Auxiliary power equipment</li></ul>	<b>BIDIRECTIONAL INVERTER</b> <ul style="list-style-type: none"><li>Grid forming</li><li>Grid following</li><li>4 quadrant operation</li></ul>	<b>FIRE PREVENTION AND SUPPRESSION SYSTEM</b> <ul style="list-style-type: none"><li><b>NFPA 69 compliant:</b> gas detection and ventilation</li><li><b>NFPA 68 compliant:</b> deflagration panels on all models; NFPA 68 on select models</li><li>Aerosol fire suppression</li><li>Dry pipe and sprinkler system</li><li>Smoke detector</li><li>Audible/visual alarms</li><li>Fire alarm control panel</li><li>Door-mounted Emergency-Stop</li><li>UPS capable of 24 hrs in standby and 2 hrs in alarm</li></ul>	<b>ENCLOSURES</b> <ul style="list-style-type: none"><li>DC Block: Lifting points</li><li>Inverter: Lifting eyebolts</li><li>Controls Cabinet: Lifting eyebolts and forklift pockets</li></ul>
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OPTIONS

<b>EMS &amp; MICROGRID COMPONENTS</b> <ul style="list-style-type: none"><li>EMS &amp; Microgrid controller (MGC)</li><li>Protective relay cabinet (PRC / SEL-751)</li><li>Load control center (LCC)</li><li>Generator connect cabinet (GCC)</li><li>Revenue meter cabinet (RMC)</li></ul>	<b>ELECTRICAL SYSTEMS</b> <ul style="list-style-type: none"><li>Isolation transformer</li></ul> <b>CONTROLS CABINET</b> <ul style="list-style-type: none"><li>HMI screen</li></ul>	<b>O&amp;M</b> <ul style="list-style-type: none"><li>Extended warranty up to 20-years</li><li>Long-term service contract</li></ul>
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CONTROL SYSTEM

<b>USE CASES (WITH MGC)</b> <ul style="list-style-type: none"><li>Peak shaving</li><li>Arbitrage</li><li>Backup power</li><li>Black start</li><li>Renewable energy shifting</li><li>Voltage regulation</li><li>Frequency response</li><li>Grid forming - off-grid</li></ul>	<b>FEATURES</b> <ul style="list-style-type: none"><li>Local data server</li><li>Cloud based monitoring</li><li>Multilevel authentications for security operation</li><li>Data acquisition and control functions</li><li>Event reporting</li><li>Ramp rate control demand management</li></ul>	<ul style="list-style-type: none"><li>Modbus TCP</li><li>CAN</li><li>Ethernet-based communication</li><li>Compatibility with 3rd party EMS, SCADA systems</li></ul>
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PRODUCT MATRIX

	Nameplate energy capacity (kWh)			
Power (kW)	2,508	3,344	4,180	5,016
1,043	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.