

**Power Rating:**

2.5 – 10+ MW

**Energy Rating:**

5 – 20+ MWh

**Enclosure Style:**

Outdoor rated

*Reference image of 5MW/10MWh SBE Block-DCR, with skid mounted MV Transformer integrated with inverter*

## Codes and Standards

## The Generac Solution



UL 9540



UL 9540A



UL 1973



UL 1642



UL 1741SB Ed. 3



UN 38.3



IEEE 1547-2018



NFPA 855



NFPA 69



NFPA 68



CSA 22.2 Large Scale Fire Test

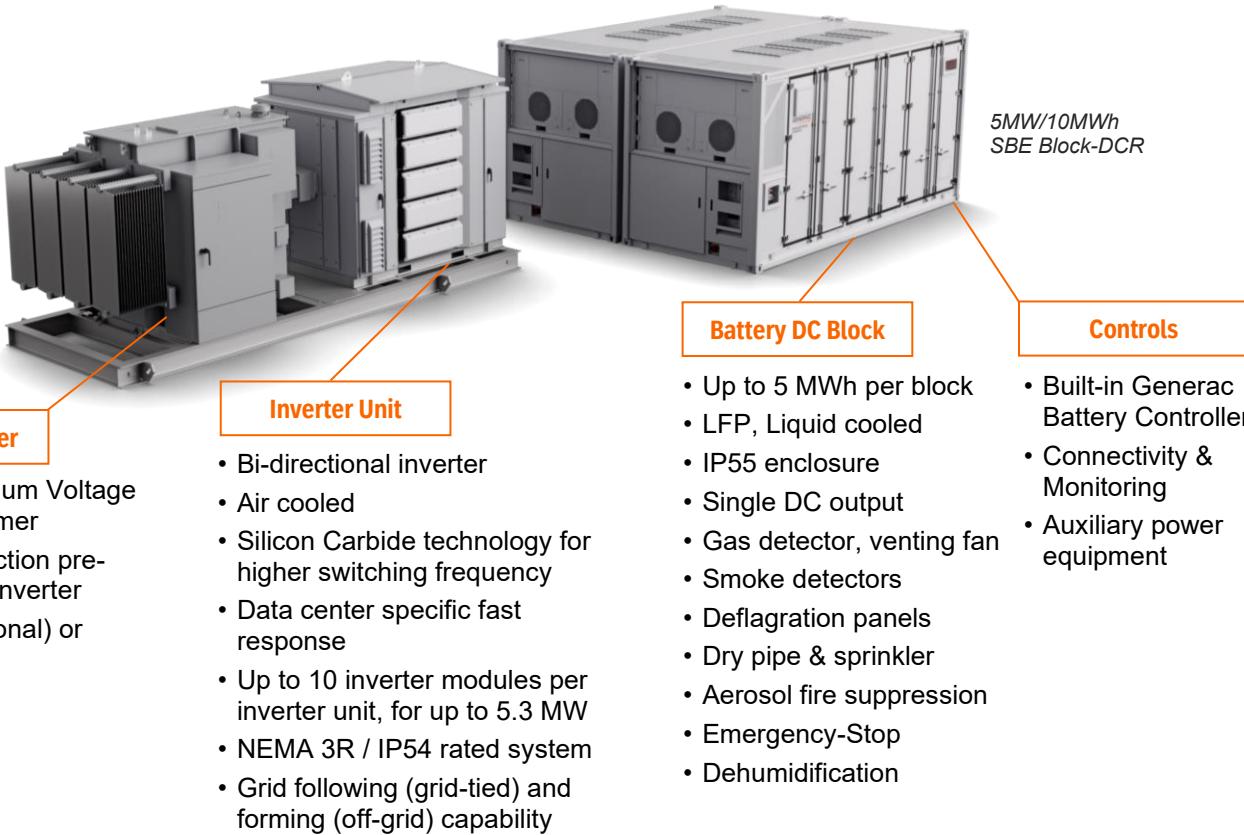
The **Data-Center-Rated (DCR)** SBE Block has specific features to meet the unique needs of data center customers:

- Ultra-fast response time, enabling load smoothing for AI data center applications
- Zero voltage ride-through capability during utility outages
- Built in redundancy with multiple inverter modules per system

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**



**SAMPLE LAYOUT**



**10MW/20MWh**

- 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

<b>DC Block</b>			
Nameplate DC energy	<b>5,016 kWh</b>	<b>10,032 kWh</b>	<b>20,064 kWh</b>
Containers per inverter unit	1	2	4
Battery racks/container		6	
DC voltage range		1,165 – 1,498 VDC	
DC nominal voltage		1,331 VDC	
Max C-rate		0.5C	
Dimensions (WxDxH)*	19'11" x 8' x 9'6" (6.1 m x 2.4 m x 2.9 m)	19'11" x 16'4" x 9'6" (6.1 m x 5.0 m x 2.9 m)	40'2" x 16'4" x 9'6" (12.2 m x 5.0 m x 2.9 m)
Weight (approx.)	99,200 lb (45,000 kg)	198,400 lb (90,000 kg)	396,800 lb (180,000 kg)
Operating temperature (ambient)		-22 °F to 131 °F (-30 °C to 55 °C)	
Noise		<77 dB @ 9.8 ft (3 m)**	
<b>Inverter Unit</b>			
Max rated power	<b>2,500 kW</b>	<b>5,000 kW</b>	<b>5,378 kW</b>
Inverter modules/unit	5		10
AC Voltage		690 V	
DC Voltage range		1,025 - 1,500	
Frequency		60 Hz	
AC connection		3-wire (3P3W)	
Overload capacity		105% for 5 min; 125% for 3 s	
Power factor		Full 4-quadrant operation	
Inv. efficiency (Peak   CEC)		>99.0%   >98.5%	
Dimensions (WxDxH)*		10'5" x 7' x 9' (3.17 m x 2.13 m x 2.74 m)	
Weight (approx.)	5,250 lb (2,380 kg)		7,500 lb (3,400 kg)
Operating temperature (ambient)		-4 °F to 140 °F (-20 °C to 60 °C) -40 °F (-40 °C) option; power derate above +113 °F (45 °C)	
Altitude		3,280 ft (1,000 m)   up to 13,120 ft (4,000 m) with derating	
Noise		<69 dB @ 9.8 ft (3 m)	
<b>Medium Voltage Transformer (optional)</b>			
Size	<b>2,700 kVA</b> (pad-mounted)		<b>5,300 kVA</b> (skid option)
Transformer LV side		690 V	
Transformer MV side		34.5 kV, 13.8 kV, 12.47 kV	
Cooling		Oil filled, configurable (KNAN/ONAN)	
Dimensions (WxDxH)*	7'8" x 8'1" x 5'8" (transformer) (2.34 m x 2.47 m x 1.72 m)		25' x 9' x 10' (inverter + transformer skid) (7.62 m x 2.74 m x 3.05 m)
Weight (approx.)	15,000 lb (transformer) (6,800 kg)		39,000 lb (inverter + transformer skid) (17,690 kg)

\*Approximate dimensions with recommended spacing; project and location dependent.

\*\*Measured at 1 m, estimated at 3 m assuming free-field spherical spreading.

Configurations are scalable to larger MW/MWh ratings.

## 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
- **Large Scale Fire Tested**
- Aerosol fire suppression
- 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

## 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)

### MV TRANSFORMER

- Skidded or pad-mounted
- Throat connection pre-integrated to inverter

### O&M

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

## CONTROL SYSTEM

### USE CASES\*

- AI load management/smoothing
- Low voltage ride through
- Frequency response
- Peak shaving
- Arbitrage
- Renewable energy shifting
- Backup power
- Black start
- Grid forming - off-grid

### FEATURES

- Intelligent SOC management
- 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

\*With Generac Microgrid Controller

## PRODUCT MATRIX

Nameplate energy capacity (kWh)			
Power (kW)	5,016	10,032	20,064
2,500	2hour	4hour	
5,000		2hour	4hour
10,000			2hour

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.