

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



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 Generac Solution

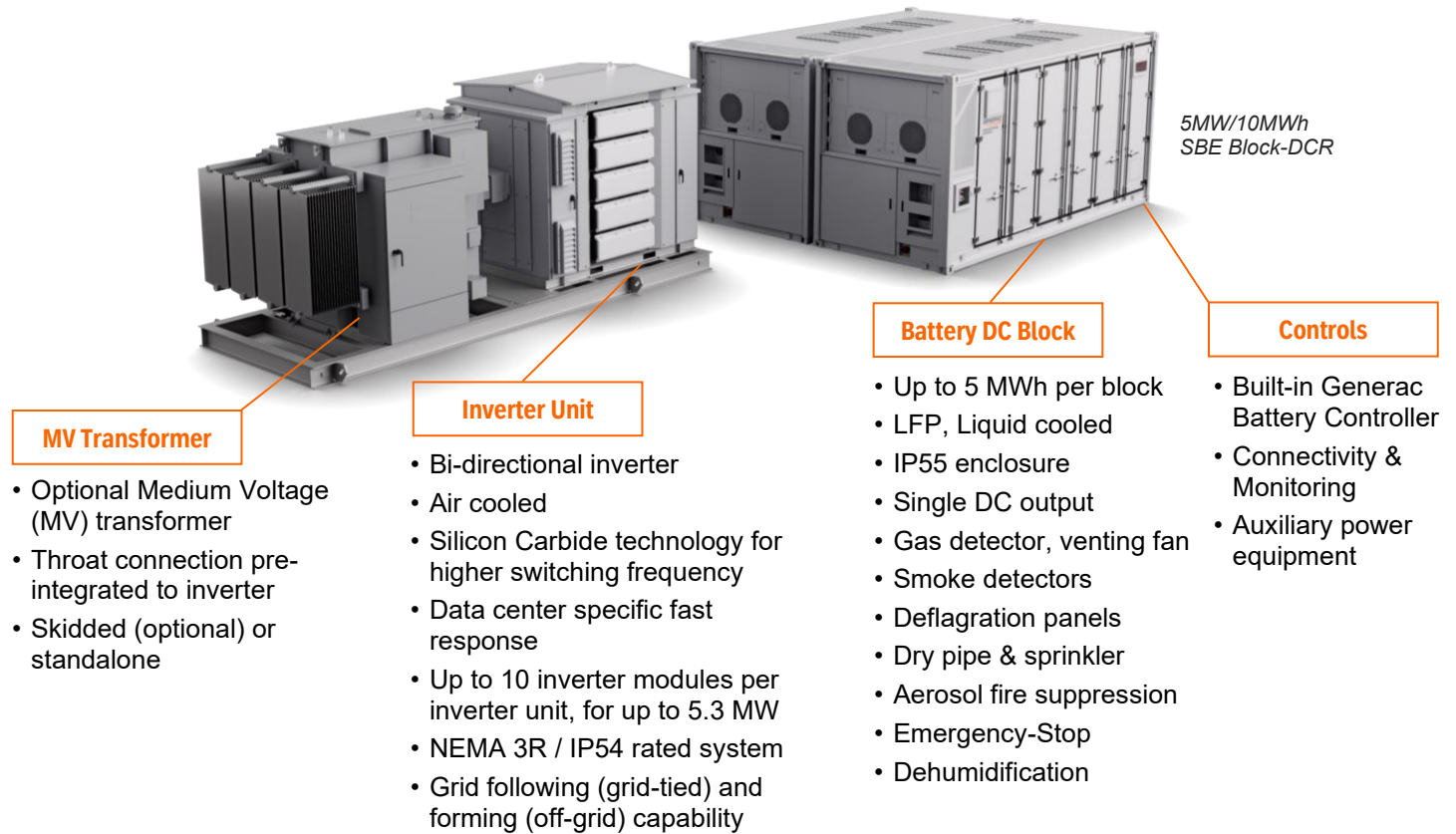
The **Data-Center-Rated** (DCR) SBE Block has specific features to meet the unique needs of data center customers:

- 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

DC Block			
Nameplate DC energy	5,016 kWh	10,032 kWh	20,064 kWh
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)**		
Inverter Unit			
Max rated power	2,500 kW	5,000 kW	5,378 kW
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)		
Medium Voltage Transformer (optional)			
Size	2,700 kVA (pad-mounted)	5,300 kVA (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

**With Generac Microgrid Controller*

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

PRODUCT MATRIX

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

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.