

**Power Rating:**  
140-500 kW

**Energy Rating:**  
258 – 1,806 kWh

**Enclosure Style:**  
Outdoor rated cabinet



## Codes and Standards



UL 1642



UL 1973



UL 9540A



UL 1741 SB



UL 9540



CSA 22.2



UN 38.3



IEEE 1547



NFPA 855



NFPA 68

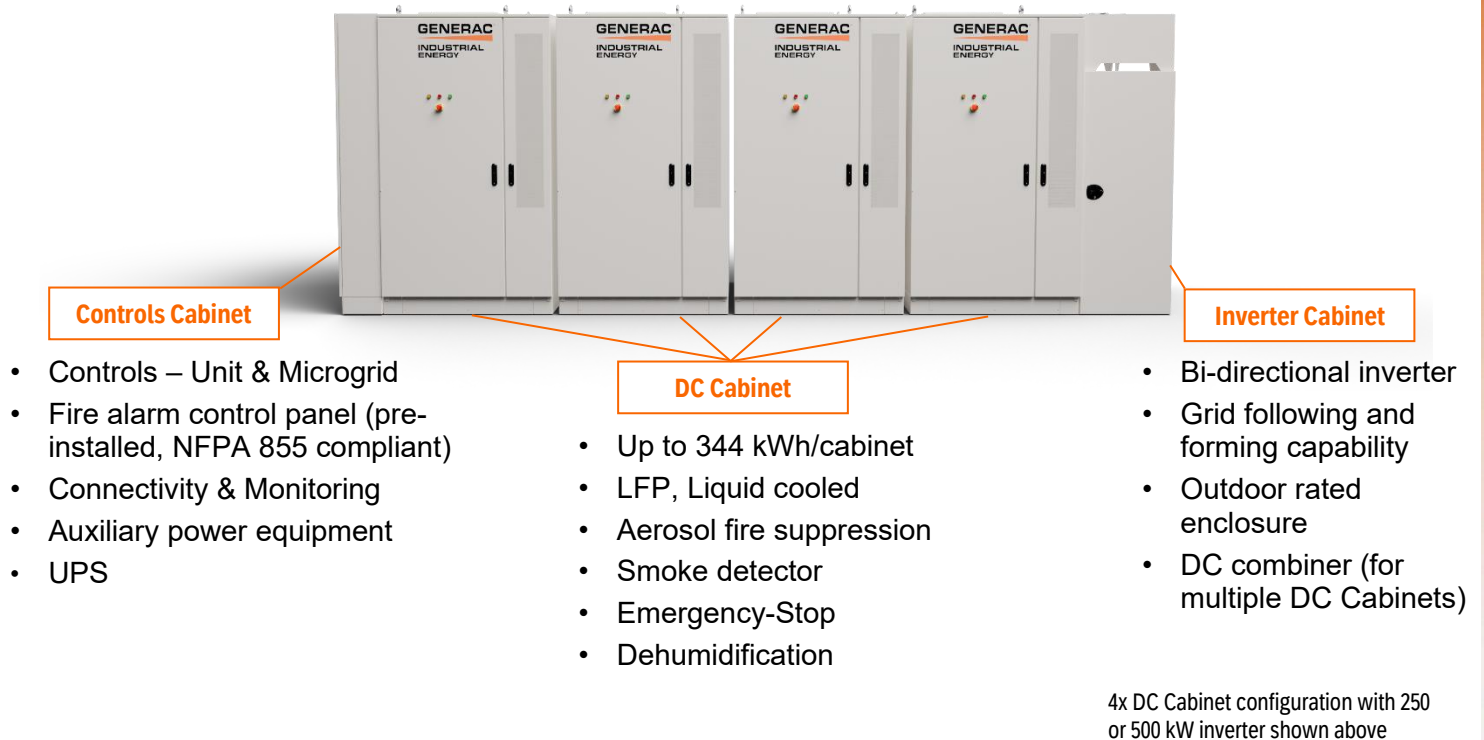
## The Generac Solution

Energy management today means balancing a combination of carbon reduction, energy savings, and energy resilience goals. Generac's SBE Cabinet 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



## EXAMPLE SITE LAYOUT



6x DC Cabinet configuration, back-to-back layout, with 250 kW or 500 kW inverter

## BESS SPECIFICATIONS

250 kW Inverter	1x DC Cabinet	2x DC Cabinet	3x DC Cabinet	4x DC Cabinet	5x DC Cabinets
	140kW/301kWh	250kW/602kWh	250kW/903kWh	250kW/1204kWh	250kW/1505kWh
Power	140 kW *	250 kW			
Nameplate DC energy	301 kWh	602 kWh	903 kWh	1,204 kWh	1,505 kWh
DC voltage range	941-1,210 VDC				
DC Nominal voltage	1,075.2 VDC				
AC connection	Split-phase or 3-wire (3P3W)	3-wire (3P3W)			
AC Voltage, Frequency	480 V, 60 Hz				
Overload capacity	110%, 10 min; 125%, 10s				
Power factor	Full 4-quadrant operation				
Inverter efficiency	Up to 98.4%				
Operating temperature	-4 °F to 122 °F -20 °C to 50 °C				
Altitude before derate	3,280 ft (1,000 m)				
Noise	<70 dB @ 3.3 ft (1 m)				
Dimensions (WxDxH)**	7.7' x 4.3 x 7.6' (2.3 m x 1.3 m x 2.3 m)	12' x 4.3 x 7.6' (3.7 m x 1.3 m x 2.3 m)	16.4' x 4.3 x 7.6' (5.0 m x 1.3 m x 2.3 m)	20.8' x 4.3 x 7.6' (6.3 m x 1.3 m x 2.3 m)	14.1' x 10.2' x 7.6' (4.3 m x 3.1 m x 2.3 m)
Weight (approx.)	8,390 lb (3,810 kg)	15,390 lb (6,990 kg)	22,230 lb (10,090 kg)	29,060 lb (13,190 kg)	35,900 lb (16,290 kg)

<b>500 kW Inverter</b>	<b>3x DC Cabinet</b>	<b>4x DC Cabinet</b>	<b>5x DC Cabinet</b>	<b>6x DC Cabinet</b>
	<b>400kW/903kWh</b>	<b>500kW/1204kWh</b>	<b>500kW/1505kWh</b>	<b>500kW/1806kWh</b>
Power	400 kW *	500 kW		
Nameplate DC energy	903 kWh	1,204 kWh	1,505 kWh	1,806 kWh
DC voltage range	941-1,210 VDC			
VDC Nominal voltage	1,075.2 VDC			
AC connection	3-wire (3P3W)			
AC Voltage, Frequency	480 V, 60 Hz			
Overload capacity	110%, 10 min; 125%, 10s			
Power factor	Full 4-quadrant operation			
Inverter efficiency	Up to 98.4%			
Operating temperature	-4 °F to 122 °F -20 °C to 50 °C			
Altitude before derate	3,280 ft (1,000 m)			
Noise	<70 dB @ 3.3 ft (1 m)			
Dimensions (WxDxH)**	16.4' x 4.3' x 7.6' (5.0 m x 1.3 m x 2.3 m)	20.8' x 4.3' x 7.6' (6.3 m x 1.3 m x 2.3 m)	14.1' x 10.2' x 7.6' (4.3 m x 3.1 m x 2.3 m)	15.3' x 10.2' x 7.6' (4.6 m x 3.1 m x 2.3 m)
Weight (approx.)	22,290 lb (10,110 kg)	29,130 lb (13,210 kg)	35,690 lb (16,310 kg)	42,790 lb (19,410 kg)

\*Derated inverter

\*\*Approximate dimensions; for multiple DC Cabinets, width assumes minimum required spacing of 30 mm between DC Cabinets. Dimensions for 5x and 6x DC Cabinet configurations assume back-to-back layout with minimum required spacing of 500 mm back-to-back between DC Cabinets.

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
  - THD < 2%
  - Load imbalance capable
- FIRE PREVENTION AND SUPPRESSION SYSTEM**
  - Aerosol fire suppression
  - Smoke detector
  - NFPA 68 compliant:** deflagration panels
  - Audible/visual alarms
  - Fire alarm control panel
  - Door mounted Emergency-Stop
  - UPS capable of 24 hours in standby and 2 hours in alarm
- ENCLOSURE**
  - Forklift pockets
  - 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)
- ELECTRICAL SYSTEMS**
  - Isolation transformer
- CONTROLS CABINET**
  - HMI screen
  - HVAC for up to 122 °F (50 °C) ambient temperature rating
- O&M**
  - Extended warranty up to 15-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

	1x DC Cabinet			2x DC Cabinet			3x DC Cabinet			4x DC Cabinet			5x DC Cabinet			6x DC Cabinet		
	Nameplate Energy capacity (kWh)																	
Power (kW)	258	301	344	516	602	688	774	903	1032	1032	1204	1376	1290	1505	1720	1548	1806	2064
125	2hour	2hour	2hour	4hour	4hour	5hour	5hour	6hour	7hour									
140		2hour																
250				2hour	2hour		3hour	3hour		4hour	4hour		5hour	5hour				
400							2hour	2hour										
500								2hour	2hour	2hour	2hour	2hour	2hour	3hour		3hour	3hour	
600												2hour						
750															2hour			
1000																		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.