

EBS Compact Energy Buffering System 90 - 135 kWh



SODIUM NICKEL TECHNOLOGY FOR ENERGY
The only Battery with a 100% Green heart

Cabinet System

- + 620 VDC Battery System for Energy Storage
- + Suitable for On-Grid and Off-Grid applications as well as Micro-Grid
- + Solution up to 4 or 6 ST523 battery modules
- + 100% maintenance free in operation
- + System does not need to shut down to replace energy modules (increased uptime, system remains in operation)

Application

- + Sync with gen sets
- + Grid Forming and following
- + Black start
- + Peak shaving
- + Spin reserve

Applicable Standards (batteries only)

- + C.D. 2006/95/EC and C.D. 2004/108/EC
- + CEI EN 61000-6-2
- + CEI EN 61000-6-4
- + CEI 64-8
- + IEC EN 61439-1
- + IEC EN 61439-2
- + Non-Environmental Constraints according to 2012/18/EU

Energy EBS Benefits



Safety

- + Zero ambient emission
- + No hazardous components
- + Redundant safety features (chemistry, cell, battery module and BMS)
- + Genset fuel savings



Modularity

- + Scalable with parallel operation (up to 6 cabinets or 24 battery modules)
- + Compact footprint: high energy density and design
- + Compatible with DC power supply and bidirectional inverters
- + Front side access to batteries



Flexibility of installation

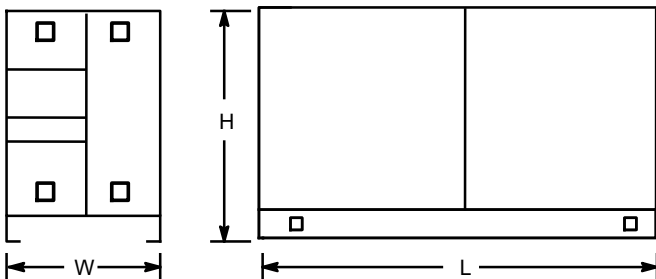
- + Outdoor installation (IP54 enclosure)
- + Range of operating temperature in standard conditions: -20°C to 40°C



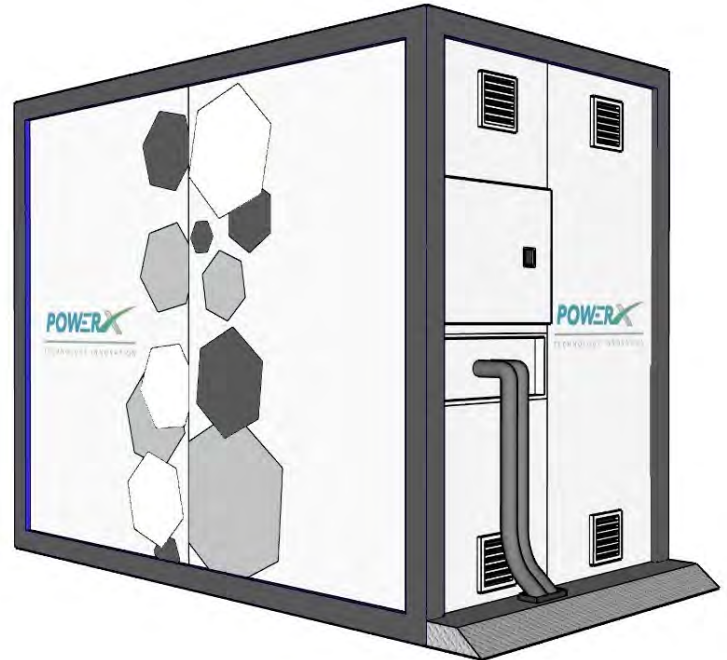
COMPACT Technical Specification for configuration of 4-6 ST523

Battery / Chemistry Type	NaNiCl ₂
Constant Power Discharge (COP)	28 kW or 42 kW for 3 hours
Power peak for 10 sec with 80-100 SOC	90 kW (4 batteries) – 135 kW (6 batteries)
Nominal Energy Capacity	90 kWh or 135kWh(100% DOD)
System Rating (Voltage, Current Capacity)	Nom. 620 VDC, Nom. 152 Ah
Min / Max Operative System Voltages	500 VDC / 700 VDC
Standard Charge / Discharge hours	8 hours of charge, 3 hours of discharge
Standard Circuit Design	4 or 6 ST523 battery modules in parallel per Cabinet
Enclosure Dimensions	2380 x 1800 x 2400 mm
Weight	3500 kg with 4 batteries – 4000 kg with 6 batteries
Heater Consumption during floating	<700 Wh / each battery
Ventilation	Not need Air Conditioning, only forced-air ventilation for power electronics
Design Cycle Life	4500 Cycles at 80% DOD

Overall dimensions



NOTE: This drawing is provided for reference only and should not be used for planning. Contact your local distributor for more detailed information.



SoNick™ Tecnology Overview

- + Long-term safety and reliability with over 15 years of field deployment
- + Multipurpose application: EV, TLC, UPS, Railway
- + Over 100MWh installed globally (batteries)
- + No auxiliary equipment (air conditioning, generator) needed