

### Sodium-Nickel Chloride Battery E12510



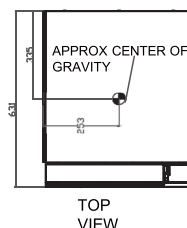
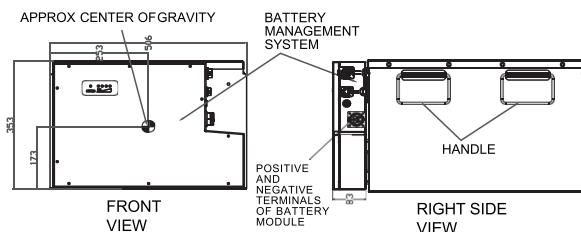
General Data		
Nominal Energy	11.86	kWh
Nominal Capacity	92	Ah
Ambient Condition <sup>1</sup>	-40 to 65	°C
Humidity	<95% (no condensation)	RH
Altitude	<3,000	m
Warm-up Time <sup>2</sup>	≤16 (from 25°C)	hours
Max Internal Heater Power	510	W
Avg Heater Power Consumption, CDC <sup>1</sup>	<10	W
Avg Heater Power Consumption, Float	<130	W
End of Discharge Voltage <sup>2</sup>	100	VDC
Dimensions <sup>3</sup> (HxDxW)	353x631x506	mm
Weight	127±2	kg
Design Life	20	yrs
Battery Certification	UL9540A, CE, UL1973, IEC62984 (in progress)	

Basic Parameters		
Usable Energy <sup>4</sup>	10	kWh
Usable Capacity <sup>4</sup>	82	Ah
Max Recharge Current	16	A
Recharge Voltage Range	136 to 160	VDC
Open Circuit Voltage	129	VDC

Operating Parameters		
Continuous Load Range	0.9 to 2.7	kW
Continuous Discharge Current	8 to 24	A
Max Discharge Current (1h)	60	A
Max Discharge Current (1min)	120	A
Max Cycles Between Return to Top of Charge (TOC) <sup>5</sup>	40	Cycles

Interconnects	
Battery Terminals	Quick Plug Terminal
Ground Connection	M6 Hex Nut
Communication	RS485, MODBUS
Communication (Optional)	CAN/LAN
Ingress Protection (IP)	IP55/IP65 (Optional)

### Dimension

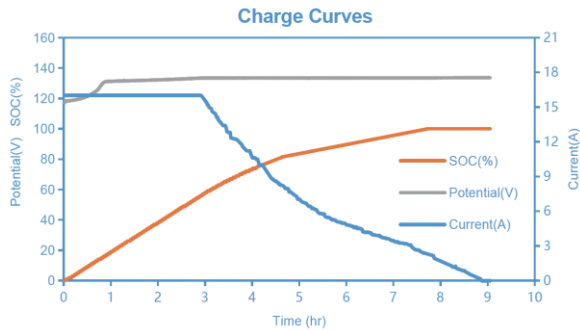


ESTIMATED BATTERY MODULE WEIGHT = 127KG

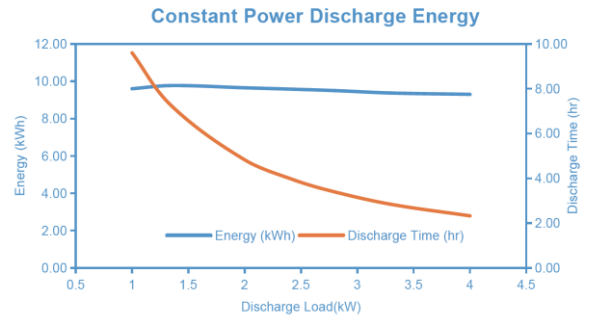
\*Specifications may change without notice as part of continuous improvement.  
\*Images are illustrative; actual product/configuration may vary.

### Performance Characteristics

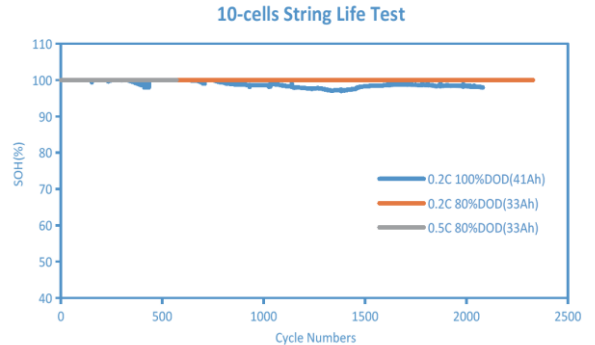
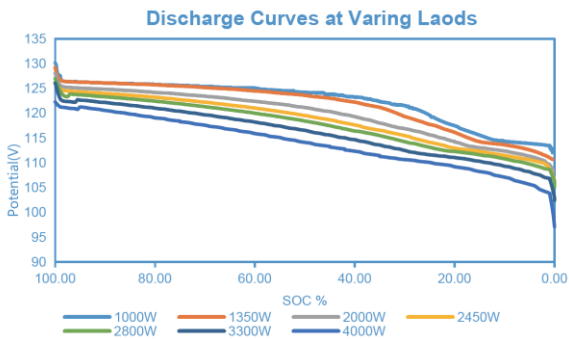
The performance data presented below is based on testing done at labs at 25°C and applies to ambient temperatures from -40°C to 65°C at beginning of life (BOL). Actual performance may vary. Discharge curves apply after 24-hour charge cycle.



	From 0% State of Charge to...					
	50%	60%	70%	80%	90%	95%
Charge Time (hr)	2.6	3.1	3.7	4.5	6	7



	Load (W)						
	1,000	1,350	2,000	2,450	2,800	3,300	4,000
Energy (kWh)	9.6	9.77	9.65	9.57	9.5	9.37	9.3
Discharge Time (hr)	9.6	7.23	4.83	3.9	3.39	2.83	2.33



### Cycle Life Projection – At Varying Loads

The performance data presented on 10-cells String Life Test chart is the lab testing results at ambient temperature (25°C). Basing the testing results, the predicted cycle life at 0.5C 80%DOD is > 6000 cycles with > 80%SOH.

\*Notes:

1. When continuously charged and discharged at rated load.
2. Exact voltage is load-dependent. Extendable end of discharge voltage up to 80V during overload discharge.
3. Dimensions are nominal.
4. C/10 rate at beginning of life.
5. Battery does not need to be taken off line to return to top of charge.