

# ESS 1.25 MW / 2.3 MWh

Sodium-Ion Liquid-Cooled BESS Container



## FEATURES



### Utility-Scale Sodium-ion BESS

1.25 MW / 2.3 MWh 20-ft container for grid and renewable applications.



### Three-tier BMS Architecture

Multi-level battery control from cell-level sensing to rack-level supervision, with protection and diagnostics.



### Container EMS & Liquid Cooling

Integrated control and liquid cooling for safe long-duration operation.



### Multi-layer Fire Protection

Pack/cluster/electrical-room protection plus water-spray interface.


Battery DC Parameters	
Type	Sodium-ion Prismatic Cell
System grouping method	12 × 1P416S
Rated energy	2.3MWh
Rated capacity	160Ah
Rated voltage	1198V
Recommended operating voltage	665.6–1435.2 V
Battery Management System (BMS)	
Configuration	Three-tier BMS with multi-level safety from cell to rack to container
AC Parameters	
Rated output power	1450kW (1.25MW PCS)
AC maximum power	1595kW
Rated Voltage	400Vac
Rated Frequency	50Hz/60Hz
Output Harmonic	< 3%
Power Factor	>0.99
Power Factor Adjustable range	-1 to +1
Cooling System	
Configuration	40kW liquid chiller + liquid-cooled battery racks
System Parameter	
energy conversion efficiency	87%
Charge and discharge rate	0.5P / 0.5P
Number of cycles	≥8000 cycles at 0.5C charge/discharge, 25±3°C, 3.45V/1.6V cut-offs (cell test)
protection grade	IP54
Cooling method	Container liquid cooling with cold plates + chiller
operation temperature	-20°C to 60°C
relative humidity	0~95%RH, non-condensing
Working altitude	≤2000m (derating above 2000m)
Dimensions (W*D*H)	6058*2550*2896mm (container)
Total weight	≤43 ton
Fire Protection System	Four-layer fire protection
communication interface	CAN, RS485, TCP/IP
Compliant with standards	GB / GB/T / NB/T / DL/T, UL 9540
Energy Management System (EMS)	
Configuration	Centrally monitors, optimizes and dispatches the BESS for safe, efficient grid-connected operation.

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

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