

5 MWh Container DC 5 MWh

20ft Liquid-Cooling Container 5.015 MWh



PRODUCT OVERVIEW

This 5.015 MWh pre-integrated 20ft battery container integrates high-performance 314 Ah battery cells, three-level BMS, liquid cooling thermal system, fire suppression system. Built on a highly compact standard 20ft cabinet layout, it features wide environmental tolerance, optimized top air outlet liquid cooling, dual-side/bottom wiring flexible installation. The modular design enables fast transportation, on-site commissioning and scalable capacity expansion, delivering reliable energy storage solutions for large grid-side, commercial and industrial projects globally.

WIDE ENVIRONMENTAL ADAPTABILITY

Stable operation at -30 °C~50 °C, up to 3000 m altitude and high humidity up to 95% RH, up to IP66 and C4M rating, adaptable mountainous areas, islands, deserts.

EFFICIENT TEMPERATURE MANAGEMENT SYSTEM

Liquid Cooling System with Top Air Outlet Layout, with temperature difference between cells in one cluster is controlled below 5 °C, enabling stable operation under high temperature and humidity condition.

FLEXIBLE WIRING AND MODULAR DESIGN

Both side cable outlet and bottom cable outlet adapt to various foundation installation. 20ft container with flexible configuration for efficient transport, installation and maintenance.

LONG-LIFE CYCLE AND INTELLIGENT BMS-EMS LOGIC

Long-life cells with 70% SOH retained over 8000 cycles, reducing effectively replacement and maintenance expenses. Three-level battery management system perfectly coordinates with EMS for intelligent operation.

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ELECTRICAL	
Configuration Method	1P104S×4×12
Nominal Energy	5015 kWh (0.5P @ 25±2 °C)
Nominal Voltage	1331.2 V
Voltage Range	1164.8 V~1497.6 V
Charge/Discharge Method	Constant Power/Constant Current
Standard Charge	2500 kW
Charge/Discharge Efficiency	≥94%
Communication Method	Ethernet/CAN/RS485/Dry Contact
PCS connection	String-type/Centralized, both grid-forming and following mode

MECHANICAL	
Dimension	L6058 × W2438 × H2896 mm
Weight	≤42.8 t
Thermal Management Method	Liquid-cooling/Liquid-heating
Design Life	20 years

ENVIRONMENT	
Operating Ambient Temperature	-30~50 °C (0.5P @ 25±2 °C, BOL)
Storage Temperature	0~25 °C ≤1 year; -20~45 °C ≤1 month
Storage/Operating Humidity	Storage Humidity < 85% RH; Operating Humidity < 95% RH
Altitude	≤3000 m
IP Level	IP65/IP55, according to environment
Anti-corrosion Level	C4M
Noise Level	≤80 dB(A)/≤65 dB(A), according to environment

SAFETY & COMPLIANCE	
Fire Protection System	Gas Fire Suppression System (Aerosol) + Water Fire Protection System
Standard compliance	IEC 63056:2020, IEC 60730-1 Annex H, IEC 62933-5-2:2020, EN 62477-1:2012/A12:2021, IEC 62477-1:2012, IEC 62477-1:2012/AMD1:2016, EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019, UL 9540A:2025, UL 9540:2023, NFPA 69, AS 3000, AS 3008, AS 5139