Liquid-cooled Battery Container

ECO-B20FT5015LP-2



Brief

The 20-ft liquid-cooled ESS container integrates PACK, EMS, BMS, HVAC, and fire suppression system (FSS) into a single container. Designed for demanding applications, the 20-ft liquid-cooled ESS container is suitable for power generation, grid, and commercial & industrial (C&I) ESS scenarios that require high power and flexible capacity.

Features

Higher Energy Density

The 20-ft liquid-cooled energy storage container offers a maximum capacity of 5.015 MWh, delivering higher energy density and reducing overall costs.

Lower Self Power Consumption

A variable-frequency compressor adapts to temperature conditions, reducing the system's power consumption.

Lower Operating Noise

Minimized fan usage significantly reduces operating noise compared to air-cooled solutions.

Longer Service Life

Enhanced cell temperature consistency extends battery life, increases safety, and improves return on investment.

Better Temperature Control

The liquid cooling system maintains cell temperature differences below 3°C, improving voltage consistency and overall performance.

Higher Protection

The container features an IP55-rated enclosure (PACK IP65), up to C5 corrosion protection, and high/low-temperature design for robust environmental resistance.

Specifications

Item	
Cell Type	LFP314 Ah
Pack Configuration	104.5kWh / 1P104S
System Configuration	5.015MWh / 12P416S
Rated DC Voltage	1331.2 V
DC Voltage Range	1165 ~ 1498 V
Max. Charge/Discharge Rate	0.5 P
Max. Depth of Discharge	100% (25 ± 2 °C)
Cycle Life	≥ 8,000 cycles
Fire Suppression System	Aerosol system+Water spray system
Ingress Rating	IP55
Cooling	Liquid cooling+Forced air cooling
Operating Temperature	-25°C~55°C (Derating after 45°C)
Anticorrosion Rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Altitude	3000m
Dimensions (W*D*H)	6,058*2,438*2,896 mm
Weight	41.8t
Safety/EMC	UN3536, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4