

Liquid-cooled Battery Container

ECO-B/Z20FT5015LP



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

Model	ECO-B20FT5015LP	ECO-Z20FT5015LP
Cell Type	LFP314 Ah	
Pack Configuration	104.5kWh / 1P104S	
System Configuration	5.015MWh / 12P416S	
Number of Output Circuits	1	12
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	