Liquid-cooled Battery Cabinet

ECO-B418LP-2N

Brief

The ECO-B418LP-2N is a free-standing battery cabinet featuring pack-level liquid cooling and cell-level temperature balancing. It maintains temperature differences within 3 °C between cells, enhancing temperature consistency and extending battery life. Its modular design offers flexible parallel configurations and can be paired with a centralized PCS to create a complete ESS solution that delivers higher energy density and significantly improves cost-effectiveness.



Features

Compact
1.7㎡ footprint only, easy transportation & fast installation.

High Integration
Multiple units connected in parallel achieve MV/HV connection with PCS-boost containers.

Efficient Cooling
Optimal in-PACK duct design, achieve high-efficient cooling and low energy consumption.

Flexible Expansion
Support seamless cabinets combination and flexible grid access.

Long Cycle Life
Over 8,000 times cycle life, excellent performance of battery system.

Ultimate Safety
In-PACK fire warning and protection with aerosol, prevent heat diffusion and runaway.

Specifications

Item	Parameter
Cell Type	LFP / 314 Ah
Pack Configuration	52.248 kWh / 1P52S
System Configuration	418 kWh / 1P416S
Rated DC Voltage	1331.2 V
DC Voltage Range	1164.8 ~ 1497.6 V
Max. Charge/Discharge Rate	0.5 P
Max. Depth of Discharge	100% (25 ± 2 ℃)
Cycle Life	≥ 8,000 cycles
Communication	Modbus TCP/IP
Fire Suppression System	Aerosol
Ingress Rating	IP55
Cooling	Liquid cooling+Forced air cooling
Operating Temperature	-25℃~55℃ (Derating after 45℃)
Anticorrosion Rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Altitude	4500m
Dimensions (W*D*H)	1,350*1,350*2,400 mm
Weight	3,700 kg
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4