Air-cooled Hybrid Cabinet

ECO-B100/120WP-2H



Brief

The ECO-B100/120WP-2H series is a professional PV-plus ESS solution, designed on ESS integration and digital monitoring technologies. The cabinet integrates components such as lithium battery, HVAC, fire suppression system (FSS), and EMS. With compact structure, it enables easy installation and flexible capacity expansion. Paired with hybrid inverter, the ESS supports multiple work modes and various operation strategies.

Features

Economical and Efficient
RTE up to 90%, DOD up to 100%.

Versatile
Support multiple brands of hybrid inverter, with higher selectivity.

Safe & Reliable
IP55, optimized ventilation design, temperature difference within 6°C.

PV pluggable
Support PV connection, with higher integration.

Compact & Convenient
0.96㎡ footprint,
easy to transport and install.

Self-developed
LFP314Ah battery cell system integration,
leading cost advantage, 3S fusion.

Expandable & Modular
Easy modular design supports parallel connection for convenient system expansion.

Easy O&M
Support multiple ways of operation and maintenance, including onsite, cloud.

Specifications

Battery Cabinet	ECO-B100WP-2H	ECO-B120WP-2H
Cell Type	LFP / 314Ah	LFP / 314Ah
Pack Configuration	20.096 kWh / 1P20S	20.096 kWh / 1P20S
System Configuration	100.48 kWh / 1P100S	120.576 kWh / 1P120S
Rated DC Voltage	320 V	384 V
DC Voltage Range	280 ~ 360 V	336 ~ 432 V
Max. Charge/Discharge Rate	0.5 P	
Max. Depth of Discharge	100% (25 ± 2°C)	
Cycle Life	≥ 8,000 cycles	

PV Input			
Max. input power	60kW	80kW	100kW
PV Votage Range	150 ~ 850V	150 ~ 850V	150 ~ 850V
MPPT	3	4	4
Max. input Current	40A*3	40A*4	40A*4

AC Side			
Rated Output Power	30kW	40kW	50kW
Rated AC Voltage	400V		
AC Voltage Range	±15%		
Grid Type	3W+N+PE		
Rated Frequency	50Hz/60Hz		
Power Factor	0.99/ -0.8 ~ +0.8		
THDi	≤3%		
DC Ratio	＜0.5% Ipn		

General	
Max. Round Trip Efficiency	90%
Communication	Modbus TCP/IP
Fire Suppression System	Aerosol
Ingress Rating	IP55
Cooling	Air cooling
Operating Temperature	-25℃~55℃ (Derating after 45℃)
Anticorrosion Rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Altitude	3000m (Derating above 2000m)
Dimensions (W*D*H)	800*1,200*2,100 mm
Weight	1200 kg
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4
Grid code	EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11