

Air-cooled Hybrid Cabinet

ECO-B241WP-2H

Brief

The ECO-B241WP-2H is an integrated air-cooled PV-plus energy storage cabinet that combines lithium battery modules, a fire suppression system (FSS), and an embedded EMS into a single compact unit. Its integrated design simplifies system architecture and installation, while the modular structure allows flexible capacity expansion as project requirements grow. When used with a hybrid inverter and intelligent energy management, the cabinet supports multiple operating modes, enabling efficient coordination between PV generation, energy storage, and load demand.



Features

- Safe & Reliable**
IP55, optimized ventilation design, temperature difference within 5°C.
- Higher Space Utilization**
1.8 footprint, larger capacity per cabinet, saving space and site cost.
- High PV Utilization Capability**
Supports up to 250 kW PV input with wide MPPT voltage range for flexible PV system design.
- Versatile**
Support multiple brands of hybrid inverter, with higher selectivity.
- Expandable & Modular**
Easy modular design supports parallel connection for convenient system expansion.
- Simplified System**
Sufficient power for most commercial/industrial applications, reducing parallel inverters.

Specifications

Battery Cabinet					
Cell Type	LFP / 314 Ah				
Pack Configuration	24.1 kWh / 1P24S				
System Configuration	241 kWh / 1P2400S				
Rated DC Voltage	768 V				
DC Voltage Range	672 ~ 864 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	150kW	160kW	200kW	200kW	250kW
PV Voltage Range	150~950V				
MPPT	10				
Max. input Current	42A*10				
AC Side					
Rated Output Power	75kW	80kW	99.9kW	100kW	125kW
Rated AC Voltage	400 V				
AC Voltage Range	±15%				
Grid Type	3W+N+PE				
Rated Frequency	50 Hz / 60 Hz				
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	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 (Derating above 2000m)				
Dimensions (W*D*H)	1,250*1,450*2,050 mm (Foundation)				
	2,050*1,692*2,050mm (Entire)				
Weight	2,670 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				