

All-in-one Air-cooled ESS Cabinet

ECO-E241WP-2A

Brief

The ECO-E241WP-2A integrates a long-life battery system, high-performance PCS, efficient balancing BMS, active safety systems, smart distribution, and HVAC into a single cabinet, ensuring long-term operation with superior safety, stability, and reliability. Through AC-side parallel connections, it enables agile deployment of ESS power with flexible capacity expansion.



Features

- Economical and Efficient**
RTE up to 87%,
DoD up to 100%.
- Safe & Reliable**
IP55 protection level, optimized ventilation design,
cells temperature difference $\leq 6^{\circ}\text{C}$.
- Compact**
1.8m² footprint only,
easy transportation & fast installation.
- Long Cycle Life**
Over 8,000 times cycle life,
excellent performance of battery system.

- Flexible Expansion**
Modular design, simplified parallel expansion,
fast expansion.
- Smart O & M**
Diversified O & M access,
both on APP & Cloud.

Specifications

DC Side	
Cell Type	LFP / 314 Ah
Pack Configuration	24.1 kWh / 1P24S
System Configuration	241 kWh / 1P240S
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)
AC Side	
Rated Output Power	125 kW
Rated AC Voltage	400 V
AC Voltage Range	±15%
Grid Type	3W+N+PE
Rated Frequency	50 Hz / 60 Hz
Power Factor	0.99/ -1 ~ +1
THDi	≤3%
DC Ratio	<0.5% I _{pn}
General	
Max. Round Trip Efficiency	87%
Cycle Life	≥ 8,000 cycles
Communication	Modbus TCP/IP
Fire Suppression System	Aerosol
Ingress Rating	IP55
Cooling	Air cooling
Operating Temperature	-25°C~55°C (Derating after 45°C)
Anticorrosion Rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Noise	≤ 75 dB
Altitude	3000m (Derating above 2000m)
Dimensions (W*D*H)	1,250*1,450*2,250 mm
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