

UE BESS Cabinet

FL1-261L-314Ah-80k/100k/125k-400P

Brief

The FL1-261L-314Ah-80k/100k/125k-400P is an integrated liquid-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

Higher Space Utilization
1.4m² footprint, larger capacity per cabinet, saving space and site cost.

Safe & Reliable
IP55, optimized ventilation design, temperature difference within 3°C.

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

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

High PV Utilization Capability
Supports up to 250 kW PV input with wide MPPT voltage range for flexible PV system design.

Simplified System
Sufficient power for most C&I applications, reducing parallel inverters.

Specifications

Battery Cabinet					
Cell Type	LFP / 314Ah				
Pack Configuration	52.25 kWh / 1P52S				
System Configuration	261 kWh / 1P260S				
Rated DC Voltage	832V				
DC Voltage Range	728 ~ 936 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 ~ 950 V				
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% I _{pn}				
General					
Max. Round Trip Efficiency	90%				
Communication	Modbus TCP/IP				
Fire Suppression System	Aerosol				
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 (Derating above 2000m)				
Dimensions (W*D*H)	1,050*1,350*2,400 mm				
Weight	2,600 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				