

GOODWE

ESA Series **125kW/261kWh**

Scalable and flexible C&I all-in-one energy storage solution



6-layer Safety Protection

From Cell to System



2.5MW/5.22MWh_{Max}



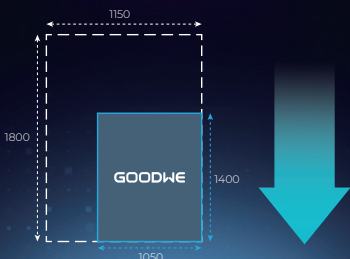
Microgrid Ready



VSG Support



28.9% Space Saving



177.6 kWh/m² High Energy Density



Face-to-face

Back-to-back

Dual Cooling for Lower LCOE

Liquid Cooling



Air Cooling



Technical Data		GW125/261-ESA-LCN-G10	GW125/261-ESA-LCN-G11
Battery Data			
Cell Type	LFP (LiFePO ₄)		
Cell Capacity (Ah)	314		
Module Nominal Energy (kWh)	52.25		
Number of Packs	5		
Rack Nominal Energy (kWh)	261.25		
Rack Usable Energy (kWh)	261.25		
Nominal Voltage (V)	832		
Operating Voltage Range (V)	676 ~ 936		
Max. Continuous Charge / Discharge Current (A)	188		
Max. Charge / Discharge Current (A)	198.5		
Max. Charge / Discharge Rate	0.5P		
Depth of Discharge	90% ~ 100% (90% Recommended)		
AC Output Data (On-grid)			
Nominal Output Power (kW)	125		
Max. Output Power (kW)	137.5@400V AC; 130.6@380V AC		
Nominal Apparent Power (kVA)	125		
Nominal Apparent Power Output to Utility Grid (kVA)	125		
Nominal Apparent Power from Utility Grid (kVA)	125		
Max. Apparent Power (kVA)	137.5@400V AC; 130.6@380V AC		
Max. Apparent Power Output to Utility Grid (kVA)	137.5@400V AC; 130.6@380V AC		
Max. Apparent Power from Utility Grid (kVA)	137.5@400V AC; 130.6@380V AC		
Nominal Output Voltage (V)	400 / 380, 3L / N / PE		
Output Voltage Range (V)	340 ~ 440 / 323 ~ 418		
Nominal AC Grid Frequency (Hz)	50 / 60		
AC Grid Frequency Range (Hz)	47.5 ~ 52.5 / 57.5 ~ 62.5		
Max. AC Output Current (A)	198.5		
Max. AC Current Output to Utility Grid (A)	198.5		
Max. AC Current from Utility Grid (A)	198.5		
Nominal Output Current (A)	180.4@400V AC; 189.9@380V AC		
Power Factor	~1 (0.8 lag to 0.8 lead)		
Max. Total Harmonic Distortion	<3%		
AC Output Data (Off-grid)			
Nominal Output Power (kW)	125		
Max. Output Power (kW)	137.5@400V AC; 130.6@380V AC		
Nominal Apparent Power (kVA)	125		
Nominal Output Apparent Power to Grid (kVA)	125		
Nominal Input Apparent Power from Grid (kVA)	125		
Max. Apparent Power (kVA)	137.5@400V AC; 130.6@380V AC		
Max. Output Apparent Power to Grid (kVA)	137.5@400V AC; 130.6@380V AC		
Max. Input Apparent Power from Grid (kVA)	137.5@400V AC; 130.6@380V AC		
Nominal Output Voltage (V)	400 / 380, 3L / N / PE		
Output Voltage Range (V)	340 ~ 440 / 323 ~ 418		
Nominal Output Frequency (Hz)	50 / 60		
AC Grid Frequency Range (Hz)	47.5 ~ 52.5 / 57.5 ~ 62.5		
Max. AC Output Current (A)	198.5		
Max. AC Current Output to Grid (A)	198.5		
Max. AC Current from Grid (A)	198.5		
Nominal Output Current (A)	180.4@400V AC; 189.9@380V AC		
Power Factor	~1 (0.8 lag to 0.8 lead)		
Output THDi (@Linear Load)	<3%		
Efficiency			
Max. PCS Efficiency	98.6%		
Max. System Efficiency	92.0%		
Protection			
Battery Reverse Polarity Protection	Integrated		
Anti-islanding Protection	Integrated		
AC Overcurrent Protection	Integrated		
AC Short Circuit Protection	Integrated		
AC Surge Protection	Type II		
General Data			
Operation Temperature Range (°C)	-25 ~ +55		
Derating Temperature (°C)	45		
Storage Temperature (°C)	-20 ~ +45 (One Month); 0 ~ +35 (One Year)		
Relative Humidity	10% ~ 95%		
Max. Operating Altitude (m)	4000 (2000 derating)		
Cooling Method	Pack: Liquid Cooling; PCS: Smart Fan Cooling		
User Interface	LED, WLAN + APP		
Communication Protocol	Modbus TCP, Modbus RTU		
Weight (kg)	2580		
Dimension (W × H × D mm)	1050 × 2250 × 1400		
Noise Emission (dB)	≤70		
Topology	Non-isolated		
Ingress Protection Rating	IP54		
Anti-Corrosion	C4 (C5 optional)		
Configuration of Safety	Aerosol + water-based fire suppression, explosion-proof fan + explosion-proof plates (optional)		
Charge / Discharge Switching Time	<60ms		
Country of Manufacture	China		

*: Please visit GoodWe website for the latest certificates.