LUNA2000 - 200/161/129KWH-2H1
LUNA2000 - 97KWH-1H1
Smart String ESS

More Energy **Simple O&M** **Safe & Reliable**

Technical Specifications

Model	LUNA2000-200KWH-2H1	LUNA2000-161KWH-2H1	LUNA2000-129KWH-2H1	LUNA2000-97KWH-1H1
Battery configuration	12S1P	10S1P	8S1P	6S1P
Max. capacity	193.5 kWh	161.3 kWh	129.0 kWh	96.8 kWh
Max. charging power	≤ 100 kW			
Max. discharging power	≤ 100 kW	≤ 100 kW	≤ 100 kW	≤ 92 kW
Dimensions (W x H x D)	1810 mm x 2135 mm x 1200 mm			
Dimensions (W x H x D, including Smart Rack Controller and Smart PCS)	2570 mm x 2135 mm x 1200 mm			
Weight (with battery packs)	≤ 2950 kg	≤ 2690 kg	≤ 2430 kg	≤ 2170 kg
Weight (without battery packs)	≤ 1070 kg	≤ 1070 kg	≤ 1090 kg	≤ 1130 kg
Operating temperature range	−30°C to +55°C			
Storage temperature range	−40°C to +60°C			
Operating humidity range	0–100% (non-condensing)			
Max. operating altitude	4000 m			
Installation environment	Outdoor installation			
Temperature control mode	Industrial-grade air conditioner			
Fire suppression	Supported			
Auxiliary power supply	220 V AC, ≤ 4.2 kW			
Communication port	Ethernet / SFP			
Communication protocol	Modbus TCP			
IP rating	IP55			
EMC rating	Class A			
DC surge protection	Type II			
Compliant Standards				
Environment	RoHS			
Certification	GB/T 36276-2018; GB/T 33582; UL 9540A; UN 38.3; ISO 9227:2017; IEC 60529; IEC/EN 62477-1; IEC/EN 62040-1; IEC/EN 61000-6-2; IEC/EN 61000-6-4; EN 55011			

Typical System Configurations

Energy (kWh, up to 3870 kWh)	Recommended Combinations				
967.5					12 * 5p
935.3					12 * 4p + 10
903.0					12 * 4p + 8
870.8					12 * 4p + 6
838.5					12 * 3p + 8 * 2p
806.3					12 * 3p + 8 + 6
774.0				12 * 4p	
741.8				12 * 3p + 10	
709.5				12 * 3p + 8	
677.3				12 * 3p + 6	
645.0				12 * 2p + 8 * 2p	
612.8				12 * 2p + 8 + 6	
580.5			12 * 3p		
548.3			12 * 2p + 10		
516.0			12 * 2p + 8		
483.8			12 * 2p + 6		
451.5			12 + 8 * 2p		
419.3			12 + 8 + 6		
387.0		12 * 2p			
354.8		12 + 10			
322.5		12 + 8			
290.3		12 + 6			
258.0		8 * 2p			
225.8		8 + 6			
193.5	12				
161.3	10				
129.0	8				
96.8	6				
Power (up to 2000 kW)	100 kW	200 kW	300 kW	400 kW	500 kW
ESS quantity (up to 20x)	1x	2x	3x	4x	5x

Note

1. All four models can be used together. A maximum of 20 ESSs can be connected in parallel. This table only applies to scenarios where up to 5 ESSs are connected in parallel.

2. When different models are connected in parallel, each ESS is charged and discharged according to its respective actual C rate.

3. The numbers 6, 8, 10, and 12 refer to the quantity of battery packs the models contain, that is, LUNA2000-97KWH-1H1, LUNA2000-129KWH-2H1, LUAN2000-161KWH-2H1, LUNA2000-200KWH-2H1.

4. Currently, LUNA2000-161/129KWH-2H1 and LUNA2000-97KWH-1H1 are not available in the Chinese Mainland and Japan.