HUAWEI

SMART STRING ENERGY STORAGE SYSTEM

Model: LUNA2000-7/14/21-S1



Flexible Capacity
6.9 kWh per Battery Module
Scalable from 6.9 kWh to 20.7 kWh per Group
Max. 4 Groups with 82.8 kWh for an Inverter[8]

More Usable Energy
Module+ Architecture, Built-in Energy Optimizer
Ultra-long Service Time
100% Depth of Discharge

5-layer Safety Protection
Cell-level, Electrical-level, Structural-level
Active Protection, Emergency Protection

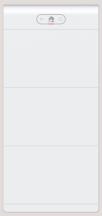
Ultimate Use Experience
–20°C to +55°C Operating Temperature
Max 10.5 kW Charging & Discharging Power per Group
Super Quiet Operation

Easy Installation
Cable Free Connection Between Modules
Horizontal Adjustment Design
Quick Commissioning

Aesthetically Pleasing Design
Breathing Star Ring Display
Silky Curve Design
Simplistic and Borderless

Version No.: 01-202411

LUNA2000-7/14/21-S1
Technical Specification

Technical Specification	LUNA2000-7-S1	LUNA2000-14-S1	LUNA2000-21-S1
			
Performance			
Power module	LUNA2000-10KW-C1		
Number of power modules	1		
Battery module	LUNA2000-7-E1		
Battery module capacity	6.9 kWh		
Number of battery modules	1	2	3
Battery usable energy [1]	6.9 kWh	13.8 kWh	20.7 kWh
Max. charging & discharging power	3.5 kW	7 kW	10.5 kW
Operating voltage range (single-phase system)	350–560 V		
Operating voltage range (three phase system)	600–980 V		
Communication			
Display	SOC status indicator, LED indicator		
Communication [2]	RS485/FE/CAN		
General Specification			
Dimensions (W x D x H)	590 mm x 255 mm x 510 mm	590 mm x 255 mm x 870 mm	590 mm x 255 mm x 1230 mm
Weight (Floor stand toolkit included)	80 kg	148 kg	216 kg
Power module dimensions (W x D x H)	590 mm x 255 mm x 150 mm		
Power module weight	10 kg		
Battery module dimensions (W x D x H)	590 mm x 255 mm x 360 mm		
Battery module weight [3]	68 kg (110.2 lb) [2]		
Installation	Floor stand (standard), Wall mount (optional)		
Operating temperature [4]	–20°C to +55°C (–4°F to +131°F)		
Max. operating altitude [5]	4,000 m (13,123 ft.) (Derated above 2,000 m)		
Environment [6]	Outdoor / Indoor		
Relative humidity	5%–95%		
Cooling	Natural convection		
IP rating	IP 66		
Noise emission	< 29 dB [7]		
Cell technology	Lithium-iron phosphate ($LiFePO_4$)		
Scalability [8]	Max.4 systems in parallel operation		
Compatible inverters [9]	SUN2000-12/15/17/20/-25K-MB0, SUN2000-3/4/5/6/8/10KTL-M1 SUN2000-5/6/8/10/12K-MAP0, SUN2000-8/10K-LC0, SUN2000-2/3/3.68/4/4.6/5/6KTL-L1 SUN5000-8/12K-MAP0, SUN5000-17/25K-MB0		
Standards Compliance (More Available Upon Request)			
Certificates	CE, RCM, CEC, VDE2510-50, IEC62619, IEC 60730, UN38.3, ISO13849, REACH, RoHS		
Ordering and Deliverable Part			
Available for ordering [10]	LUNA2000-7-E1, LUNA2000-10KW-C1, Wall Mounting Bracket for LUNA2000-7/14/21-S1		

*1 Test conditions: 100% depth of discharge (DoD), 0.2C rate charge & discharge at 25℃ , at the beginning of service life.
*2 CAN is for communication between ESSs in parallel scenarios only. The launch time of the FE communication version is to be determined. Please confirm with your local product manager of Huawei for information about the final version.
*3 The weight of the battery modules varies with products, with a tolerance of ±3%.
*4 The output power may be affected by temperature. Please refer to the output derating curve for details.
*5 The output power may be affected by altitude. Please refer to the output derating curve for details.
*6 Outdoor installation is recommended. For indoor installation instructions, please refer to the user manual.
*7 The data is from Huawei lab, and the test condition is 1m distance and typical working voltage.
*8 Only SUN2000-12/15/17/20/25K-MB0 supports 4 energy storage systems in parallel operation.
*9 For details on the timetable of compatibility with SUN2000-8/10K-LC0 and SUN2000-2/3/3.68/4/4.6/5/6KTL-L1, please confirm with your local product manager of Huawei for final version.
*10 The power module and battery modules of the storage system are separately ordered in the required quantity.

Disclaimer: The preceding values are measured by an internal laboratory of Huawei in a specific environment. The actual values may vary with products, software versions, usage conditions, and environmental factors.