HUAWEI

SMART STRING ENERGY STORAGE SYSTEM

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 ℃ to +55℃ Operating Temperature

Max 10.5kW 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.: 01-202401

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 energy	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 dimension (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.) (Derating 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]	SUN2000-2/3/3.68/4/4.6/5/6KTL-L1, SUN2000-8/10K-LC0 SUN2000-3/4/5/6/8/10KTL-M1 , SUN2000-12/15/17/20/25K-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 energy storage in parallel scenarios only. Launch time of FE communication is to be determined, please confirm with your local product manager of Huawei for 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 order 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.

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