

# 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<sup>8</sup>



#### 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 10.5kW Charging & Discharging Power per Group  
Super Quiet Operation



#### Easy Installation

Cable Free Connection Between Modules  
Horizontal Adjustment Design  
Quick Commissioning



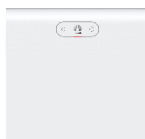
#### Aesthetically Pleasing Design

Breathing Star Ring Display  
Silky Curve Design  
Simplistic and Borderless

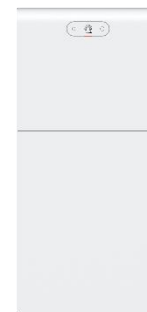
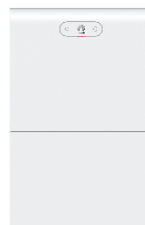
 LUNA2000-7/14/21-S1  
**Technical Specification**

LUNA2000-21-S1

LUNA2000-7-S1



LUNA2000-14-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 <sup>1</sup>            | 6.9 kWh              | 13.8 kWh | 20.7 kWh |
| Max. charging & discharging power             | 3.74kW <sup>2</sup>  | 7 kW     | 10.5 kW  |
| Operating voltage range (single-phase system) | 350 – 560V           |          |          |
| Operating voltage range (three-phase system)  | 600 – 980 V          |          |          |
| Cycles and SOH <sup>3</sup>                   | >5000, 80%(10 years) |          |          |

**Communication**

|                            |                                     |  |  |
|----------------------------|-------------------------------------|--|--|
| Display                    | SOC status indicator, LED indicator |  |  |
| Communication <sup>4</sup> | 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 <sup>5</sup>    | 68 kg   |                          |                           |
| Installation                          | Floor stand (standard), Wall mounting (optional)  |                          |                           |
| Operating temperature <sup>6</sup>    | -20°C to +55°C (-4°F to +131°F)   |                          |                           |
| Max. operating altitude <sup>7</sup>  | 4,000 m (13,123 ft.) (Derating above 2,000 m)   |                          |                           |
| Environment <sup>8</sup>              | Outdoor/Indoor  |                          |                           |
| Relative humidity                     | 5% - 95%  |                          |                           |
| Cooling                               | Natural convection  |                          |                           |
| Protection rating                     | IP 66   |                          |                           |
| Noise emission                        | < 29 dB <sup>9</sup>  |                          |                           |
| Cell technology                       | Lithium iron phosphate (LiFePO <sub>4</sub> )   |                          |                           |
| Scalability <sup>10</sup>             | Max. 4 systems in parallel operation  |                          |                           |
| Compatible inverters <sup>11</sup>    | SUN2000-12/15/17/20/25K-MB0, SUN2000-3/4/5/6/8/10KTL-M1<br>SUN2000-5/6/8/10/12K-MAP0, SUN2000-8/10K-LC0, SUN2000-2/3/3.68/4/4.6/5/6KTL-L1<br>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 <sup>12</sup> | 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°C, at the beginning of service life.
2. The Max. power can maintain 5s, under the conditions: <80% SOC, work temperature between 25 °C to 40 °C.
3. Under the condition 35% DOD(depth of discharge).
4. 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.
5. The weight of the battery modules varies with products, with a tolerance of ±3%.
6. The output power may be affected by temperature. Please refer to the output derating curve for details.
7. The output power may be affected by altitude. Please refer to the output derating curve for details.
8. Outdoor installation is recommended. For indoor installation instructions, please refer to the user manual.
9. The data is from Huawei lab, and the test condition is 1m distance and typical working voltage.
10. Only SUN2000-12/15/17/20/25K-MB0 supports 4 energy storage systems in parallel operation.
11. LUNA S1 will be compatible with inverter SUN2000 MAP0/L1/LC0 and SUN5000 MAP0/MB0 in 2024.Q3.
12. The power module and battery modules of the storage system are separately order in the required quantity.

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