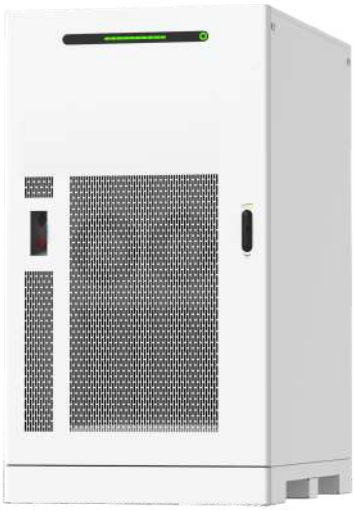
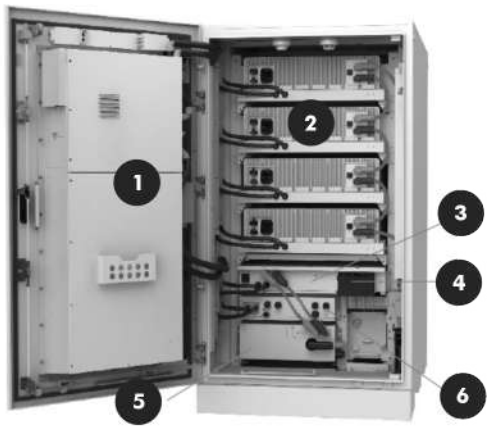
NEW PRODUCT

HUAWEI

LUNA 2000 SERIES

Smart Energy Storage Systems





1. Hybrid Cooling System
2. Battery Pack
3. Smart PCS
4. AC Output Port
5. Rack Control Module
6. Rack DCDC (Optional)

Huawei LUNA2000 Series are an integrated range of smart Energy Storage Systems (ESS) designed for Commercial & Industrial (C&I) applications. These systems store energy—usually from solar PV installations—and manage its use for self-consumption, backup and energy cost optimization.

This system is an ideal choice for facilities seeking to reduce energy costs, manage peak loads, and improve energy independence. With a compatible communication protocol, the LUNA2000 ESS series integrates seamlessly with energy management systems, supporting smart control and real-time monitoring. Particular features include:-

- Modular Design: Scalable battery units that can be expanded as energy needs grow.
- Advanced Cooling: hybrid liquid + air cooling for C&I models improving efficiency and safety.
- High Round-Trip Efficiency: Up to 91.3% for minimal energy loss.
- Enhanced Safety: Multi-level protection, including cell-level monitoring, fire prevention, and C2C (cell-to-consumption) safety architecture.
- Smart Management: Integration with Huawei's Fusion Solar Smart PV platform for real-time monitoring, energy management, and remote diagnostics.
- Flexible Integration: Supports both on-grid and hybrid installations and integrates with Huawei's inverters and third-party EMS systems.

Use Case Scenarios:

- Commercial buildings and industrial facilities
- Microgrids and off-grid power systems
- Backup for critical infrastructure (e.g., hospitals, data centers, banks, institutions)

TECHNICAL SPECIFICATIONS

Enclosure Class: IP55 ***Operating Temp Range:*** -30°C to 55°C

Energy Storage System Parameters			
Model	**LUNA2000-107-1S11**	**LUNA2000-161-2S11**	**LUNA2000-215-2S10**
Rated Capapcity, kWh	107	161	215
Maximum Cycle Rate, C	1	0.67	0.5
Recommended PV Array, kWp	57.5	69	115
Maximum PV Array, kWp*	215	322.6	430
Compatible Inverters	SUN2000-30-50KTL-M3	SUN2000-100-115KTL-M1/M2	SUN2000-150K-MG0
Maximum Cycle Efficiency, %	86	88	91.3
Dimensions (WxDxH), mm	1150x1800x2100		
Weight, kgs	2000	2400	2800
Battery Parameters (DC)			
Rated Battery Capacity, Ah	280		
Number of Battery Packs	2	3	4
Operating Voltage Range, V	324-432	486-648	648-864
Rated DC Current, A	280	187	140
PCS Parameters (AC)			
PCS Model Type	CS2000-108K-MB1		
Rated Output Power,kW	108		
Rated AC Current, A	155.9		
AC Voltage & Frequency	380/400/415/420/440/480 V (3P4W), 50/60Hz		
Adjustable Power Factor Range	-1...+1		

Notes: The ratio of PV and BESS should always be less than 2:1 in the switchover and pure off-grid scenarios • The actual PV Array in kWp must be designed based on the loads to be powered