

Portable Energy Storage System

ES-SXCN500 | All-in-One Solar ESS with Integrated Inverter

ESS 4 IN 1



Energy Storage



Inverter



MPPT Solar Charging



Backup Power





All-in-One ESS Design
Integrated energy storage, inverter, MPPT solar charging, and backup power in one compact unit.



LiFePO4 Battery
High safety, stable performance, and long cycle life.



Intelligent BMS
Protection against over-charge, over-discharge, over-temperature, and short circuit.



Solar Charging
Built-in MPPT controller, max solar input 300W.

Applications



Home Backup Power



RV & Outdoor



Emergency Power



Off-grid Use

Technical Specification

ES-SXCN500

Portable Energy Storage System



ESS 4 IN 1



Battery
Storage



Inverter



MPPT Solar
Charging



Backup
Power

1. Battery System

Model	ES-SXCN500
Battery Type	LiFePO ₄
Rated Capacity	896Wh / 1004.8Wh (25°C standard condition)
Cell Voltage	3.2V DC
Depth of Discharge (DOD)	≥95%
Cycle Life	≥4000 cycles, capacity retention ≥80% (25°C, 1C charge/discharge)
Charging Temperature	-20°C to 50°C
Discharging Temperature	-20°C to 60°C

2. Inverter Output

Rated Output Power	500W (AC)
Peak Output Power	1000W (3s)
Output Voltage	230V AC (single phase) ±2%
Output Frequency	50Hz
Inverter Efficiency	≥82% (at rated load)
Power Factor (PF)	0.8 lagging to 1.0 leading

3. Solar Charging

Max PV Input Power	300W MAX
PV Input Voltage Range	18V~55V DC
MPPT Charge Controller	Built-in
Charging Current	20A (system max support)

4. System / General Parameters

Standby Power Consumption	≤4.2W
Protection Rating	IP20 (indoor installation)
Noise	≤55dB (1m distance, rated load)
Dimensions (L × W × H)	210 × 140 × 320 mm (TBC)
Net Weight	≈10.6 kg

5. Interface Configurations

PV Input Interface	XT60 male, 1 port (max current 20A)
AC Output Interface	AC 230V universal socket (13A)
AC Input Interface	C14-style inlet, bidirectional supported
DC Output	USB 5V 2A × 1, Type-C × 1

6. Protection & Functions

- Intelligent BMS with self-developed SOC algorithm - Over-charge protection - Over-discharge protection - Over-temperature protection - Over-current protection	- Short-circuit protection - Leakage protection (leakage current >30mA) - Anti-islanding protection (compliant with GB/T 19939-2005) - Temperature-sensor based battery fire protection and automatic cut-off - Fault indication by indicator light flashing
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* Specifications are subject to change without prior notice.
* TBC: To be confirmed.