

All In One ESS Energy Storage System

Tiny Home Solar Solutions
SESS Small Energy Storage System
1.0kWh LiFePO4 Battery + 0.5kW Smart Inverter



SESS Series Brief Introduce

SESS small Energy Storage System moveable lithium battery + inverter integrates cutting-edge technology for efficient energy storage and management. Designed for seamless installation and space-saving efficiency, it offers a compact solution ideal for residential and small commercial applications. With a robust 0.5 up 12 kW inverter and 1 up 16 kWh lithium battery capacity (3.2V 100Ah, 200Ah, 314Ah cell), it ensures reliable power supply and energy optimization. Advanced features include smart monitoring, remote control capabilities, and built-in safety protocols for enhanced reliability. This All In One system delivers versatility, performance, and ease of use, making it a dependable choice for modern energy needs. Customize All In One system to power your facility-with or without solar and lower your energy bills.

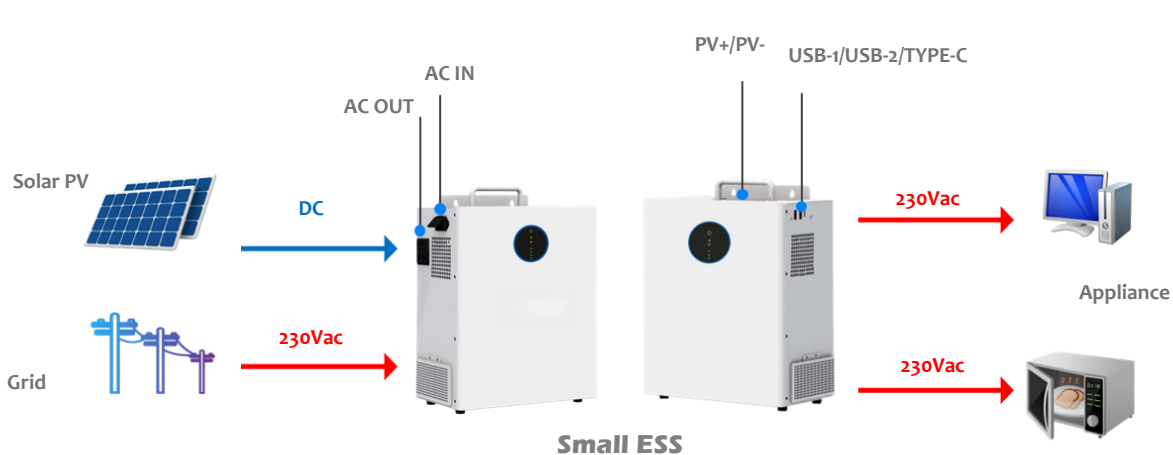
Safety

Long Life

Simple



Application Block Diagram



All In One ESS

Energy Storage System

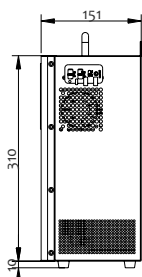
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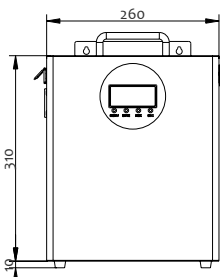
Technical Specifications

Model		SESS 1+0.5
Parametric Description		1kWh+500W
Battery	Battery Type	LiFePO4 Battery
	Battery Energy	1kWh
	Nominal Voltage	3.2V
	Rated Capacity	314Ah
	Voltage Range	3.0~3.65V
PV	Max. Power	300W
	MPPT Voltage Range	11~55V
	Max. PV Input Current	10A
AC Input	Rated AC Voltage	230Vac
	Input Voltage Range	90~280Vac±5Vac
	Frequency Range	45~65Hz
AC Output	Rated Power	500W
	AC Voltage	230Vac±5Vac
	AC Frequency	50Hz±5%
	Waveform	Pure sine wave output
DC Output	USB-A1 Output	USB 5V1A
Gernal Parameters	AC Out Port	Universal Socket
	AC IN Port	Three-prong triangular socket
	PV Port	PV MC4
	Operating Temperature	-10°C~40°C
	Storage Temperature	-15°C~60°C
	Altitude	≤3000m
	Size(mm)	260×151×320 mm
	Weight(kg)	15kg(about)

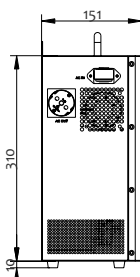
Size & Weight



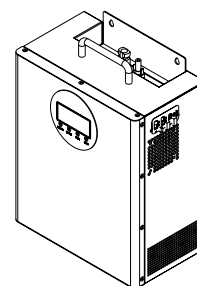
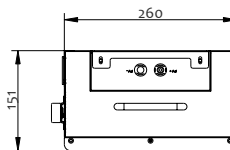
Length: 260 mm



Width: 151 mm



Height: 310 + 10 mm



Weight: 15 kg (about)

Note: All above information shall be changed without prior notice, we reserve the right to explain and update the latest information. Welcome inquiry us !

Power Your Home Choose CSSUN

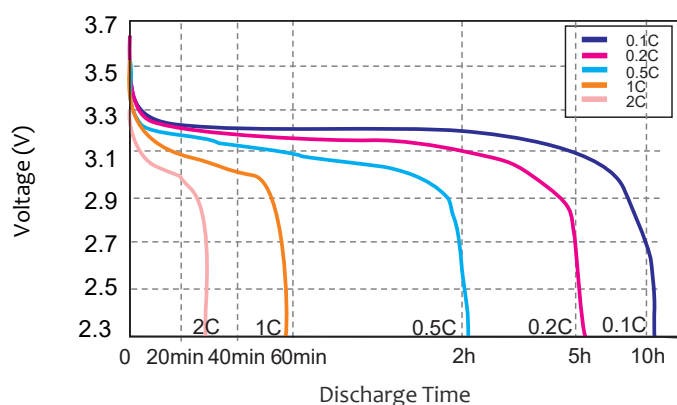
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Battery BMS Specifications

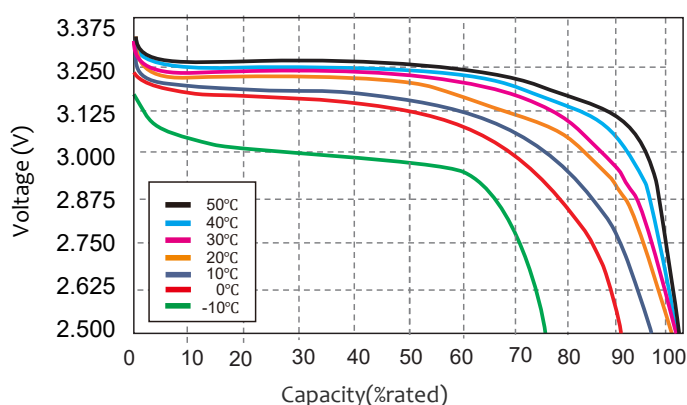
- Overcharge detection function
- Over discharge detection function
- Over current detection function
- Temperature protection
- Cell Voltage balance function
- Short detection function

Battery Performance Characteristics (Data test from Single Cell)

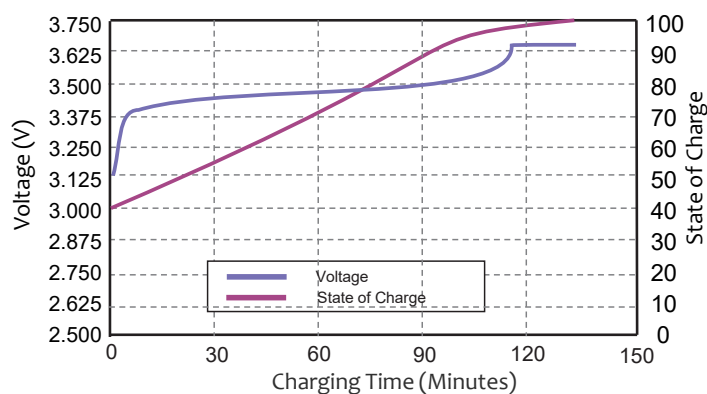
Different Rate Discharge Curve (25°C)



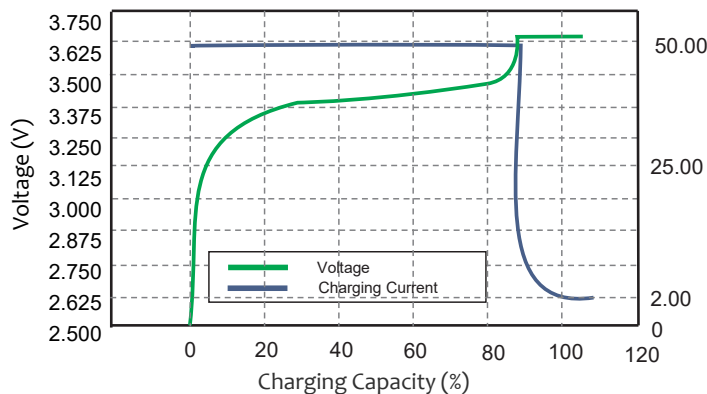
Different Temperature Discharge Curve At 0.5C



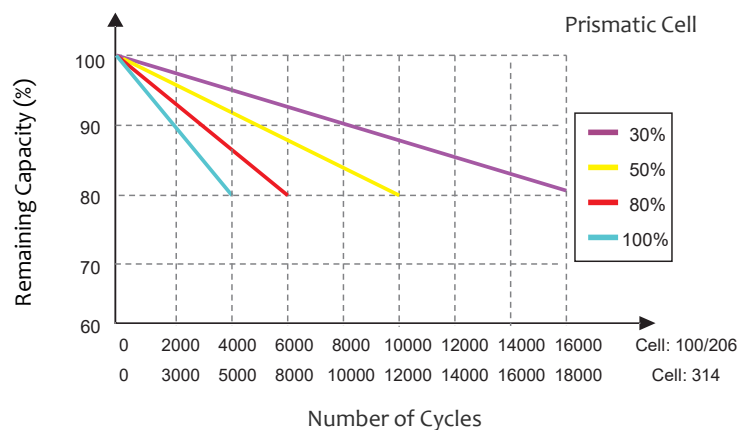
State Of Charge Curve At 0.5C (25°C)



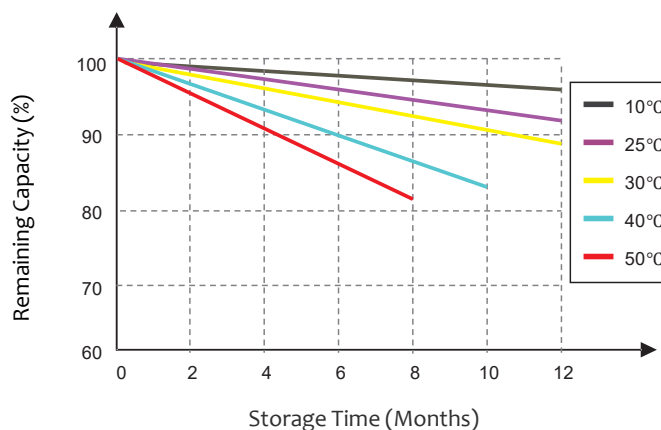
Charging Characteristics At 0.5C (25°C)



Cycle Life Curve At 0.2C According DoD



Self Discharge Characteristics Curve



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SAFETY WARNING : Use only within the allowed parameters. Do not short circuit or over-load the battery. Charge only using an approved charger designed specifically to charge this battery. Do not heat above maximum temperatures indicated. Never crush, mutilate, puncture or abuse the battery. Do not dismantle the pack or disable any of the protective devices or circuits. Do not use the battery if you suspect it may be faulty or damaged.

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