

All In One ESS Energy Storage System

Tiny Home Solar Solutions
SESS Small Energy Storage System
4.0kWh LiFePO4 Battery + 2kW Smart Inverter



SESS Series Brief Introduce

SESS 4+2 integrates a 4.0kWh LiFePO4 battery and a 2kW inverter in one moveable system with wheels. Designed for home energy storage and backup power, the system supports PV charging and AC charging. The battery operates at a nominal 12.8V with a rated capacity of 314Ah. Its compact cabinet allows convenient positioning for residential applications. The 2kW AC output supplies compatible household appliances at 230Vac. Refer to the technical specifications for the operating limits and select the configuration to suit the application. OEM and customization options are available on request.

Safety

Long Life

Simple



Application Block Diagram



All In One ESS

Energy Storage System

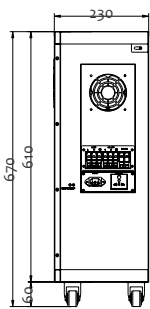
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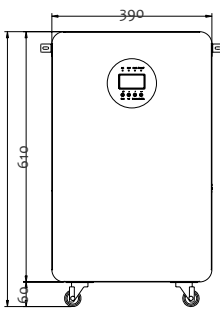
Technical Specifications

Model		SESS 4+2
Parametric Description		4.0kWh+2kW
Battery	Battery Type	LiFePO4 Battery
	Battery Energy	4kWh
	Nominal Voltage	12.8V
	Rated Capacity	314Ah
	Voltage Range	10.0 ~ 14.4V
PV	Max. Power	3kW
	Max. PV Voltage	450Vdc
	MPPT Voltage Range	30~400Vdc
	Max. PV Input Current	18A
AC Output	Rated Power	2kW
	AC Voltage	230Vac±5%
	AC Frequency	50Hz/60Hz
	Efficiency	≤93%
	Transfer Time	<20ms
	Waveform	Pure sine wave
AC Input	Rated AC Voltage	230Vac
	AC Voltage Range	170~280Vac(for PC) 90~280Vac(for Applis)
	Frequency Range	50Hz/60Hz
General Parameters	Altitude	≤2000m
	Humidity	5%~95%
	Work Temperature	-10°C~50°C
	IP Grade	IP20
	Communication	RS485/WiFi
	Size (mm)	390×230×670 mm
	Weight (kg)	30kg(about)

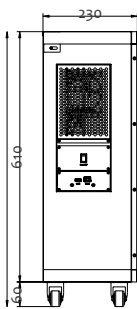
Size & Weight



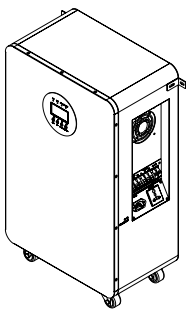
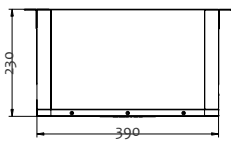
Length: 390 mm



Width: 230 mm



Height: 610 + 60 mm



Weight: 30kg(about)

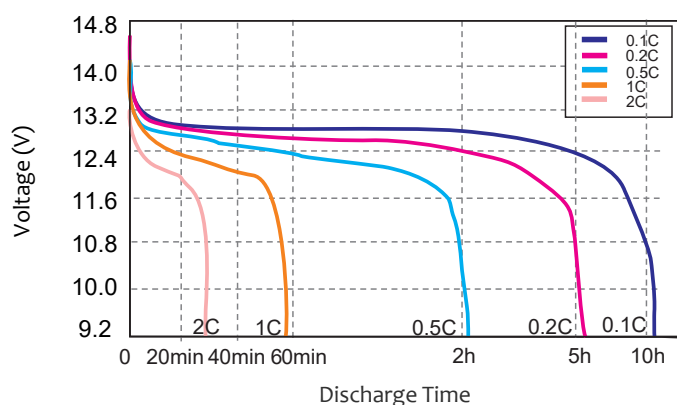
Note: All above information shall be changed without prior notice, we reserve the right to explain and update the latest information. Welcome inquiry us !

Battery BMS Specifications

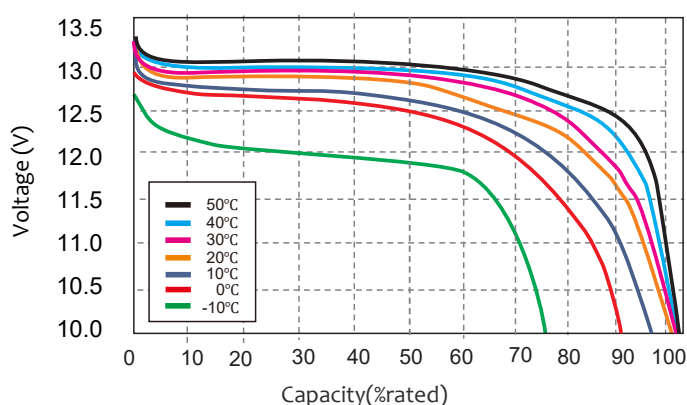
- Overcharge detection function
- Over discharge detection function
- Over current detection function
- Temperature protection
- Cell Voltage balance function
- Short detection function

Battery Performance Characteristics (4S reference curves, 12.8V nominal)

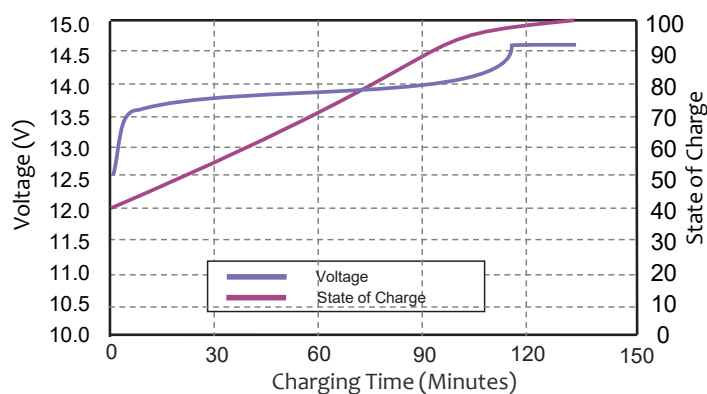
Different Rate Discharge Curve (25°C)



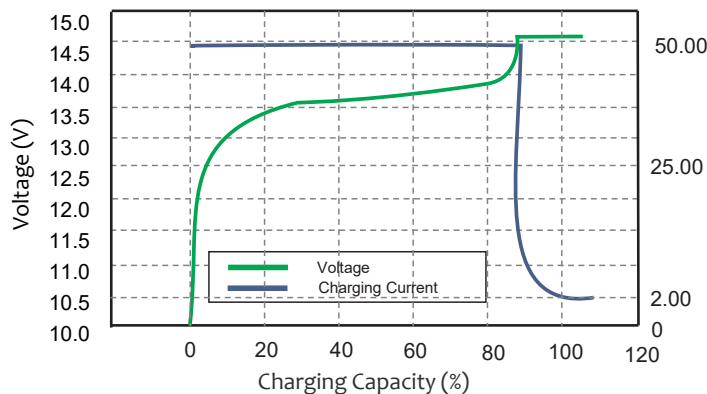
Different Temperature Discharge Curve At 0.5C



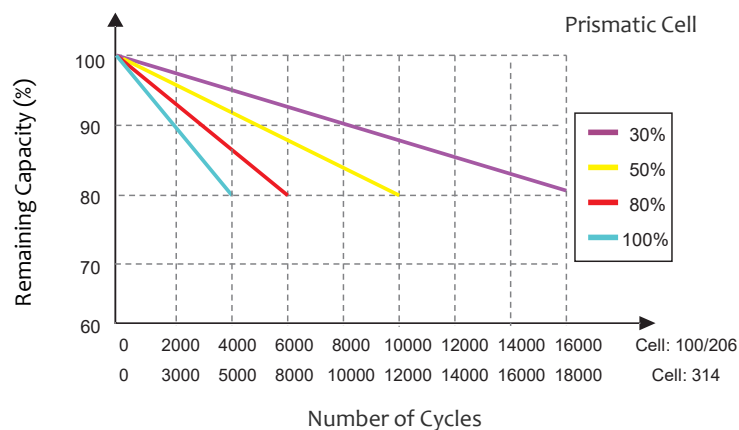
State Of Charge Curve At 0.5C (25°C)



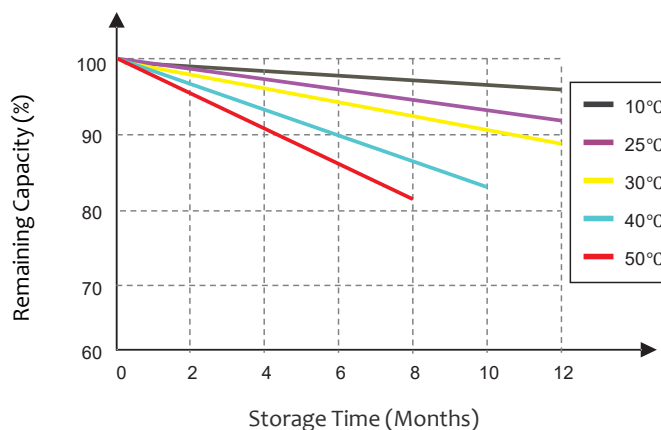
Charging Characteristics At 0.5C (25°C)



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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