All In One ESS
Energy Storage System

Tiny Home Solar Solutions
SESS Small Energy Storage System
16kWh LiFePO4 Battery + 6kW Smart Inverter

CS SUN

SESS Series Brief Introduce

SESS 16+6 integrates a 16kWh LiFePO4 battery and a 6kW 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 51.2V with a rated capacity of 314Ah. Its compact cabinet allows convenient positioning for residential applications. The 6kW 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

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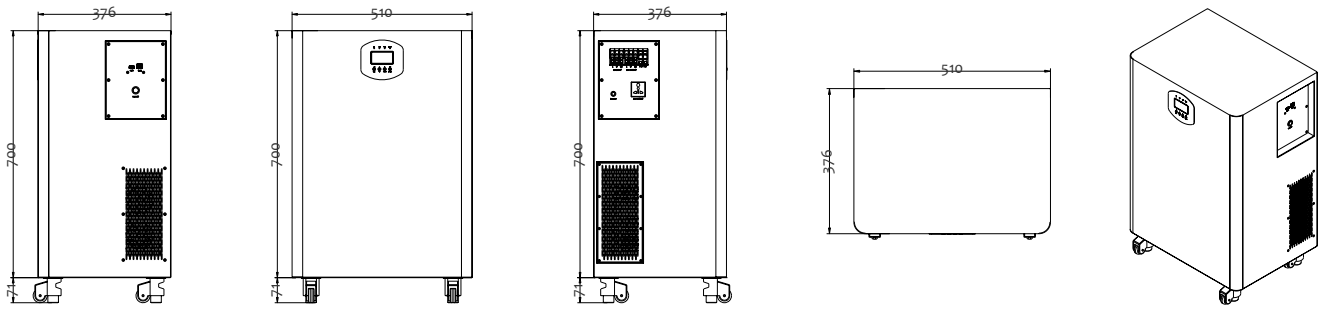
Technical Specifications

Model		SESS 16+6
Parametric Description		16kWh+6kW
Battery	Battery Type	LiFePO4 Battery
	Battery Energy	16kWh
	Nominal Voltage	51.2V
	Rated Capacity	314Ah
PV	MPPT Voltage Range	60~450Vdc
AC Output	Rated Power	6kW
	AC Voltage	230Vac
General Parameters	IP Grade	IP20 / IP54
	Communication	RS485/WiFi
	Size (mm)	510×376×771 mm
	Weight (kg)	124kg (about)

Size & Weight



Length: 510 mm | Width: 376 mm | Height: 700 + 71 mm | Weight: 124kg (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 !

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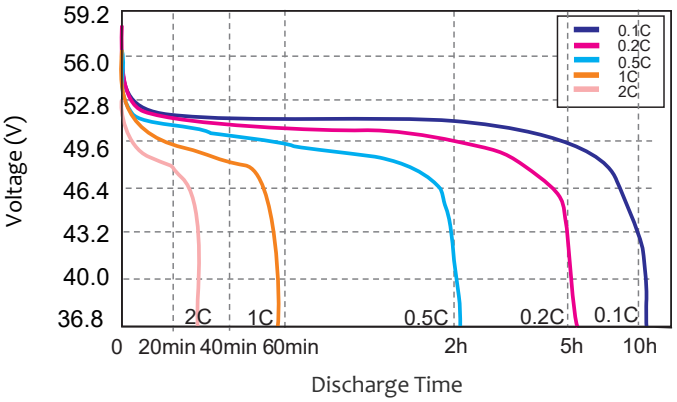
Battery BMS Specifications

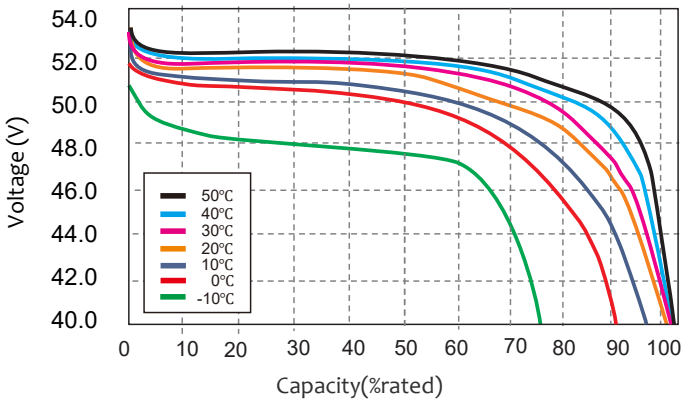
- Overcharge detection function
- Over discharge detection function
- Over current detection function
- Temperature protection
- Cell Voltage balance function
- Short detection function

Battery Performance Characteristics (16S reference curves, 51.2V nominal)

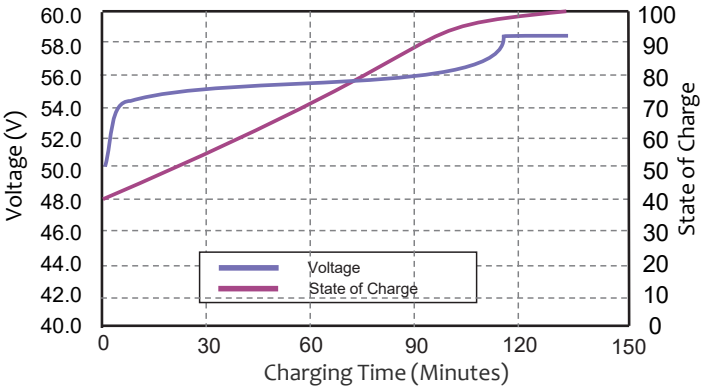
Different Rate Discharge Curve (25°C)



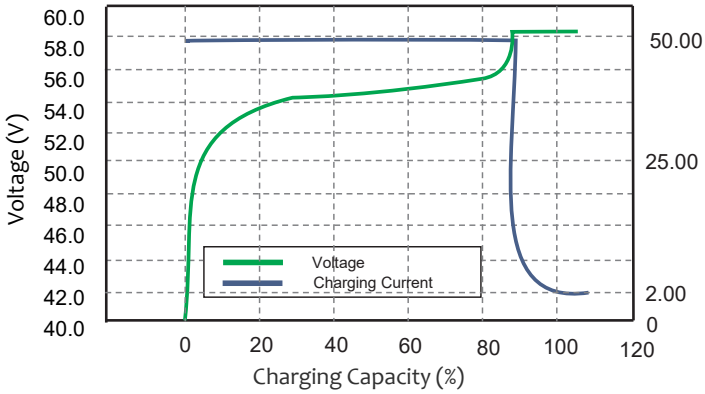
Different Temperature Discharge Curve At 0.5C



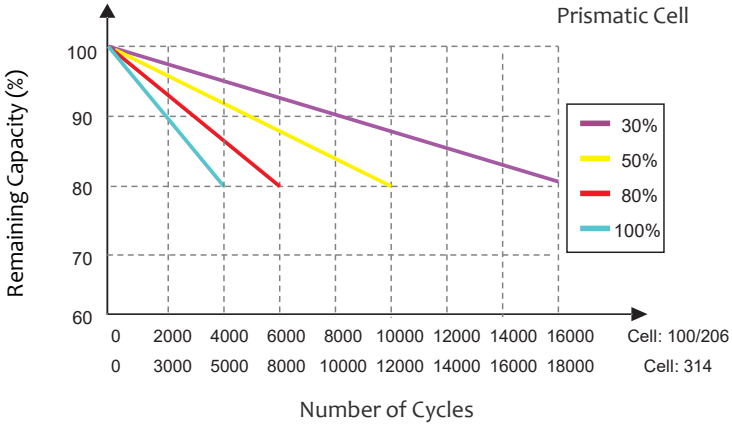
State Of Charge Curve At 0.5C (25°C)



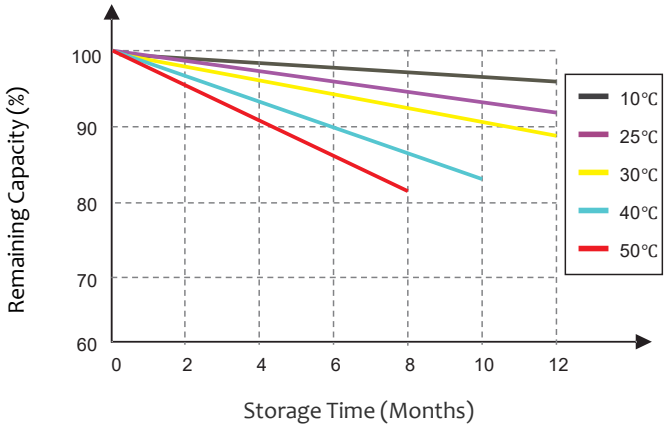
Charging Characteristics At 0.5C (25°C)



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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