

# SY series energy storage batteries



## Introduce

TCSN SY series is specifically designed for home energy storage solutions. It is convenient for viewing and setting battery parameters. It is equipped with a built-in Bluetooth module. Through the APP, you can view and set more parameters of the battery, and also upgrade the hardware version of the battery for convenient maintenance. Support communication with mainstream market inverters.

## Features

**Reliable and long-lasting**  
 Cycle life: 8000 times (0.5C 80% DOD)  
 Design life: 20 years

**Safe and worry-free**  
 Using LFP batteries ensures high safety, no fire, and no explosion.

**Flexible parallel connection**  
 Maximum support for 15 units to be used in parallel, Automatic addressing, no need for manual address selection

**Multiple protection**  
 Various protective measures such as overvoltage, overcurrent, overheating and short circuit protection

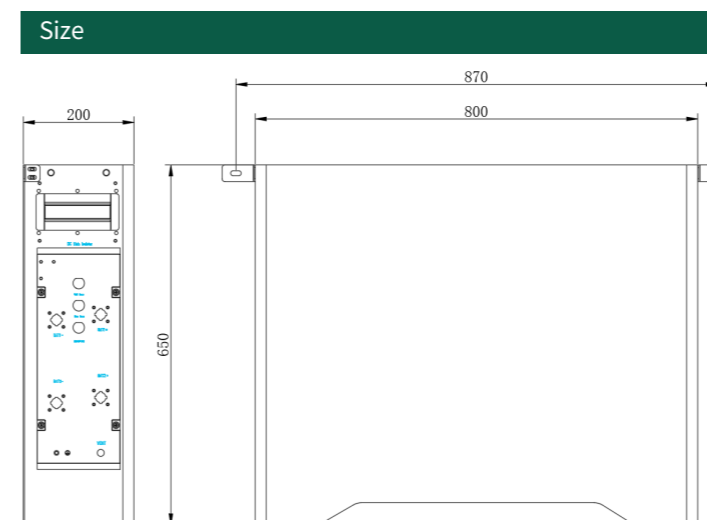
**Active Balance**  
 Maximum 3A balanced current, ensuring consistent cell voltage

**Portable maintenance**  
 Battery parameters can be viewed and set through the Bluetooth APP

## Performance

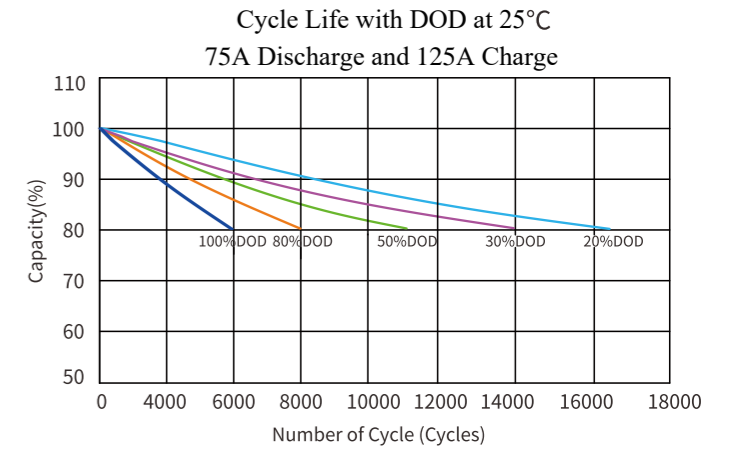
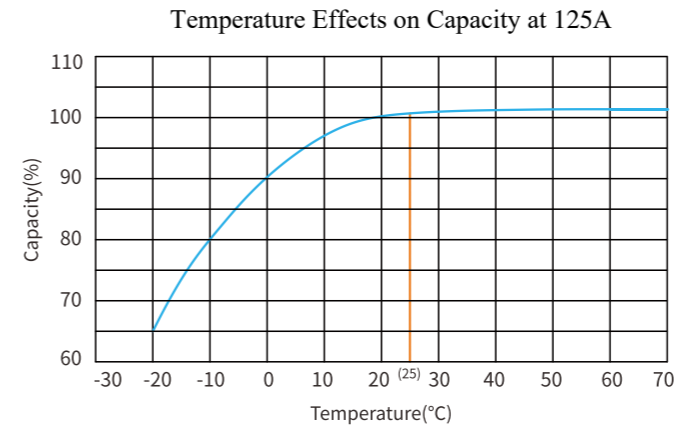
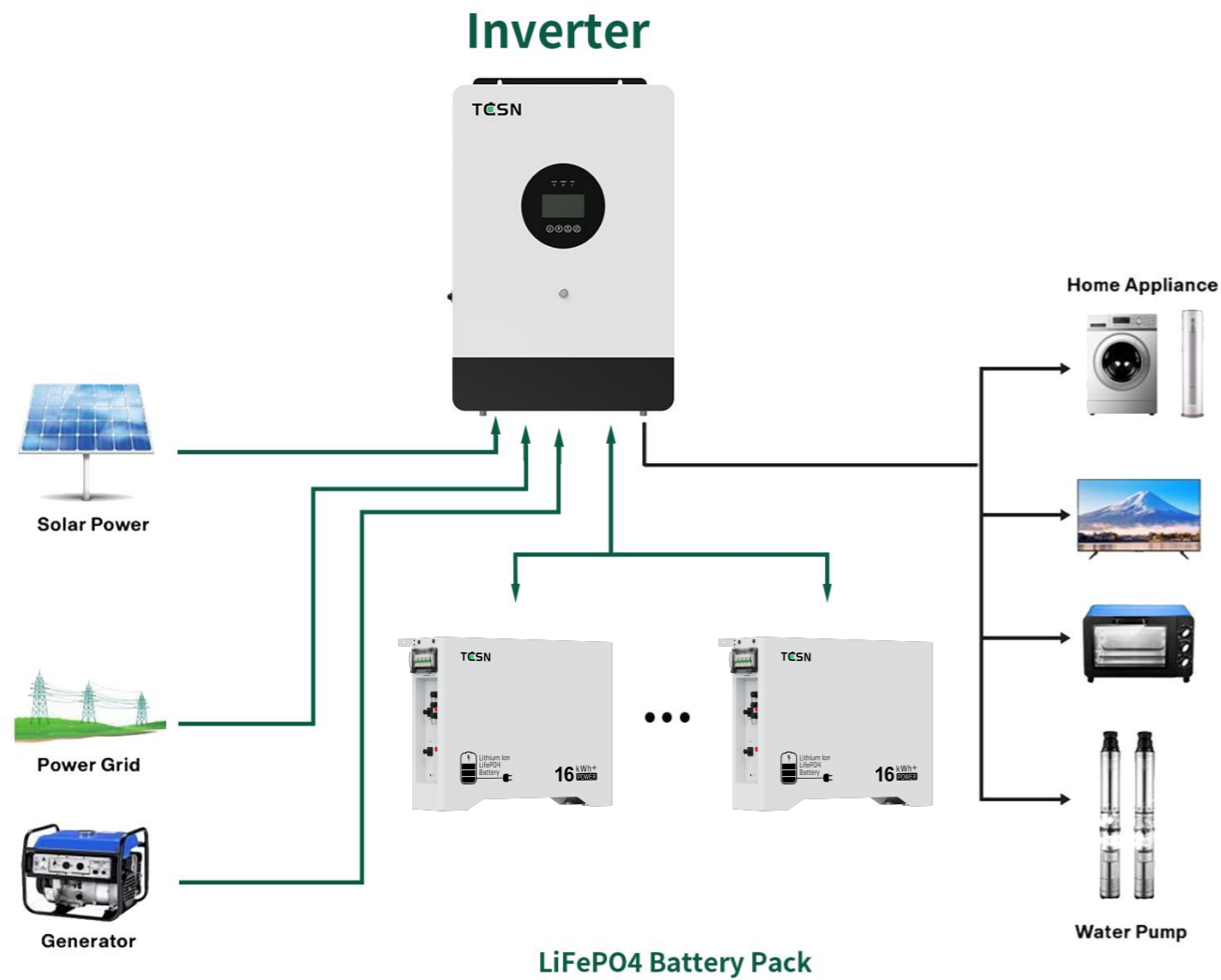
Model	SY51.2-314-OD-A
Performance	
Cell	Square LFP 314Ah
Terminal	Plug-in terminal
IP Grade	IP54
Self Discharge	<=2%/Month
Cycle Life	8000times(0.5C 80%DOD)
Rec. Charge Current	75A
Max. Charge Current	150A
Rec. Charge Voltage	54.4~55.2V
Charge Cut-off Voltage	58.4V
Balancing Voltage	>54.4V
Rec. Discharge Current	125A
Max. Discharge Current	250A
Rec. Discharge Cut-off Voltage	44.8V
Min. Discharge Cut-off Voltage	>40V
Short Circuit Current	Approx.500A

Performance parameters	
Capacity	314Ah(0.5C@25°C)
Nominal Voltage	51.2 V
Energy	16076.8Wh
Weight	123kg
Dimensions	800*650*200mm
Communication interface	RS485/CAN/Bluetooth
LCD Panel	Optional configuration
Storage Temp	-5°C to 35°C
Discharge Temp	-20°C to 55°C
Charge Temp	0°C to 45°C



Compliance	
Certifications	Cell UN38.3
	Battery UN38.3
Transport Appraisal	UN3480, CLASS 9

# System Management Diagram



## Cautions

1. Do NOT short circuit, crush or disassemble.
2. Do NOT heat or incinerate.
3. Do NOT immerse in any liquid.
4. Store at 50% capacity. Recharge every 3 months. The storage area should be clean, cool, dry and ventilated.
5. Disconnect charging source prior to connecting or disconnecting battery terminals.
6. Do not dispose of batteries in a fire as they can explode.
7. Do not open, alter, or mutilate batteries. Released electrolyte is harmful to skin and eyes. It may be toxic.
8. Do not mix different types and brands of lithium-ion batteries.
9. Do not dispose in trash, follow local regulations and manufacturer's instruction.
10. See installation instructions before connecting to the supply.
11. The battery cabinet receives power from more than one source. Disconnection of all DC sources is required to De-energize this unit before installing or servicing. Wait 5 minutes before opening the unit.
12. Do not install on or over combustible surfaces.
13. Refer to manual before servicing.
14. Do not touch bare terminals.

## Characteristics Curve

