

# SY series energy storage batteries



## Introduce

TCSN SY series is specifically designed for home energy storage solutions. Equipped with a 4.2-inch touchscreen, 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

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

**Man-machine interaction**  
 4.2-inch touch screen, Easy operation

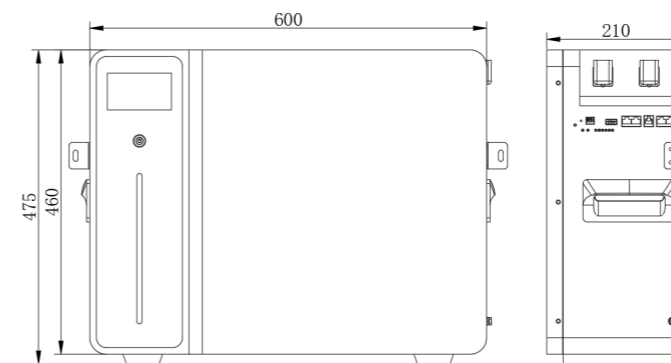
**Portable maintenance**  
 Battery parameters can be viewed and set through the Bluetooth APP

## Performance

Model	SY51.2-100-C
<b>Performance</b>	
Cell	Square LFP 100Ah
Terminal	M6
IP Grade	IP21
Self Discharge	<=2%/Month
Cycle Life	8000times(0.5C 80%DOD)
Rec. Charge Current	50A
Max. Charge Current	100A
Rec. Charge Voltage	54.4~55.2V
Charge Cut-off Voltage	58.4V
Balancing Voltage	>54.4V
Rec. Discharge Current	50A
Max. Discharge Current	100A
Rec. Discharge Cut-off Voltage	44.8V
Min. Discharge Cut-off Voltage	>40V
Short Circuit Current	Approx.500A

Performance parameters	
Capacity	100 Ah(0.5C@25°C)
Nominal Voltage	51.2 V
Energy	5120 Wh
Weight	44 kg
Dimensions	600*210*475 mm
Communication interface	RS485/CAN/RS232/Bluetooth
LCD Panel	4.2-inch touch screen
Storage Temp	-5°C to 35°C
Discharge Temp	-20°C to 55°C
Charge Temp	0°C to 45°C

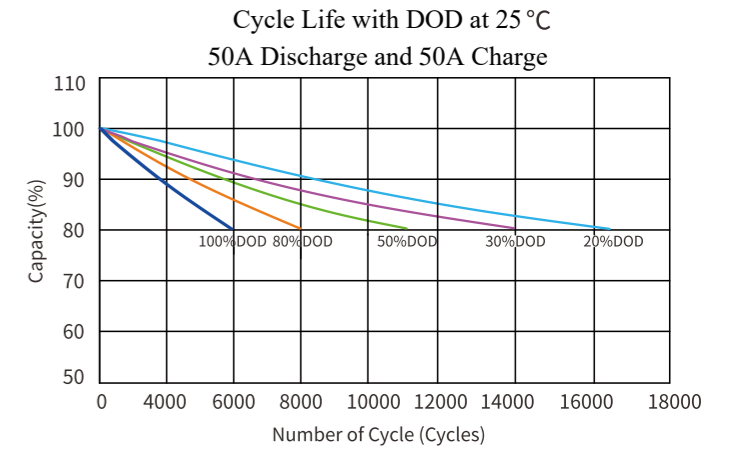
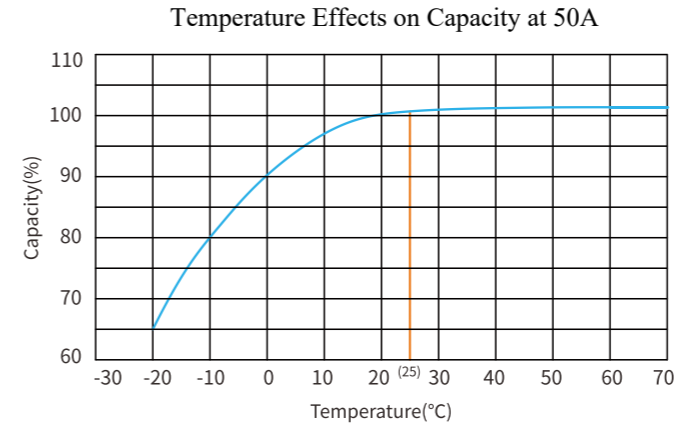
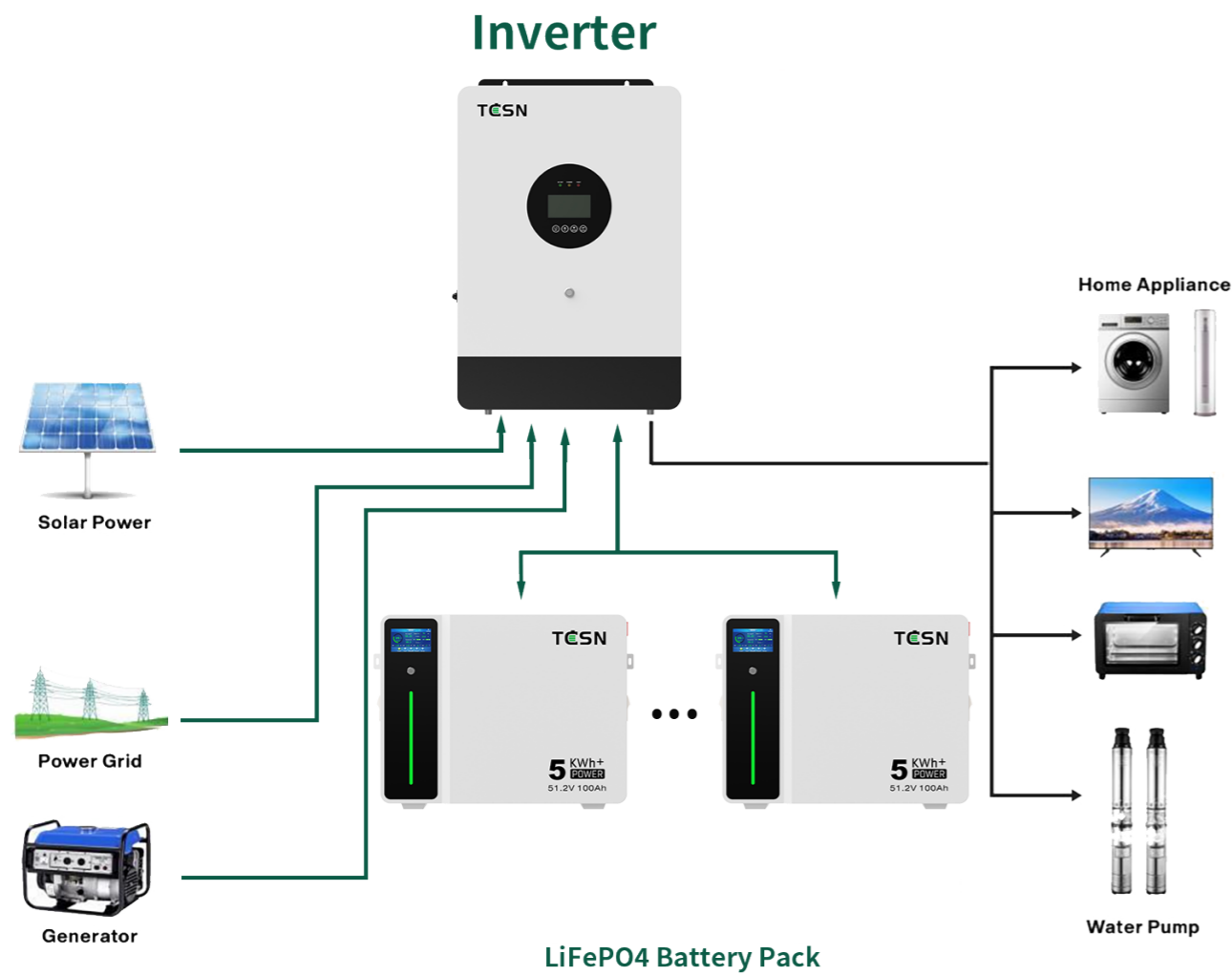
### Size



### 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

