

# SC76.8-100(76.8V100Ah)



## Introduce

The TCSN SC series adopts high-safety LFP cells and features an intelligent BMS independently developed by TCSN. It is safe, reliable, and delivers excellent performance and stability, making it suitable for 1-30 kW UPS systems.

Widely used in distributed data centers, financial institutions, rail transit, large industrial and mining enterprises, and other fields that have high requirements for power backup and protection.

## Features



### Hassle-free & Long-lasting

Cycle life > 5000 cycles (1C, 80% DOD)  
Design life: 20 years



### Modular design

Simple combination  
Quick installation



### Multiple series and parallel

Ease of capacity expansion  
Supports series and parallel connections



### Integrated functions

Smart balancing good consistency  
Multiple comms options



### Flexible compatibility

Compatible with two-wire  
three-wire systems



### Eco-Friendly

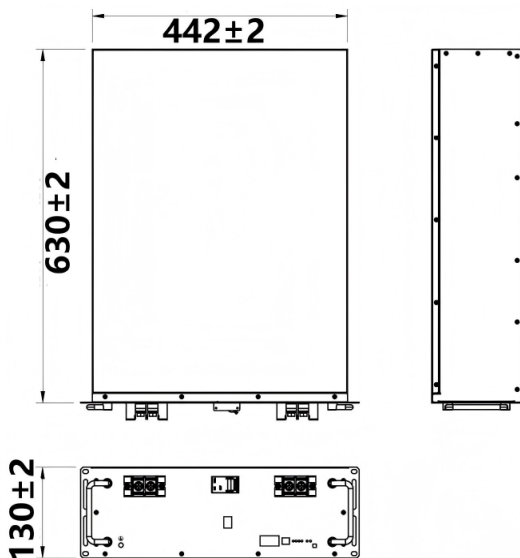
Low self-discharge  
Monthly self-consumption ≤2%

# Performance

Performance Parameters	
Cell	Square LFP
Capacity(Ah)	100 Ah
Voltage(V)	76.8 V
Energy(Wh)	7680 Wh
Rated Charge Current	50 A
Max. Charge Current	100 A
Rated Charge Voltage	81.6~82.8 V
Charge Cut-off Voltage	< 86.4 V (0.5~1.5S)
Balancing Voltage	>81.6 V
Rated Discharge Current	50 A
Max. Discharge Current	100 A
Rated Discharge Cut-off Voltage	67.2 V
Minimum Discharge Cut-off Voltage	> 60 V
Short-circuit Current	200~600μs

General Data	
Terminal	M6
IP Grade	IP21
Self-discharge	<=2%/Month
Cycle Life	5000 times(1C 80% DOD)
Weight	~71 Kg
Dimensions	442*630*130 mm
Storage Temperature	-5°C to 35°C
Discharge Temperature	-20°C to 65°C
Charge Temperature	0°C to 45°C

## Size

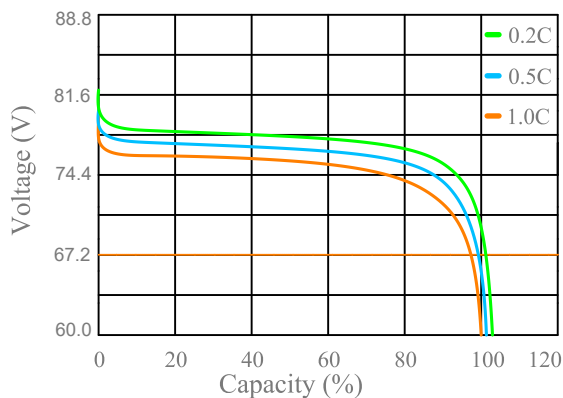


## Compliance

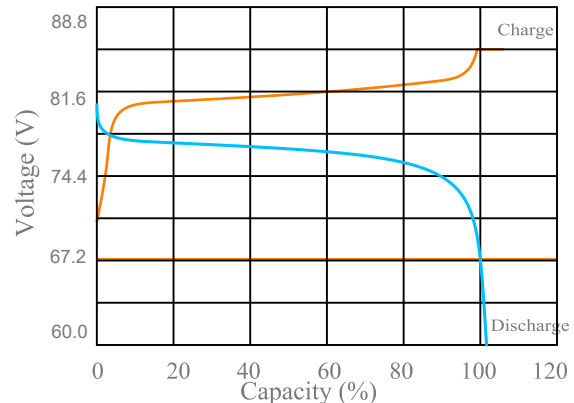
Certifications	Cell CE/UN38.3/UL1973
	Battery CE/UN38.3
Transport Appraisal	UN3480,CLASS 9

# Characteristics Curve

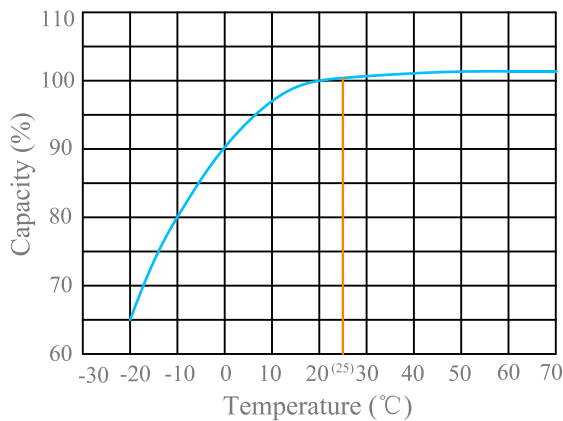
Discharge Performance at 25 °C



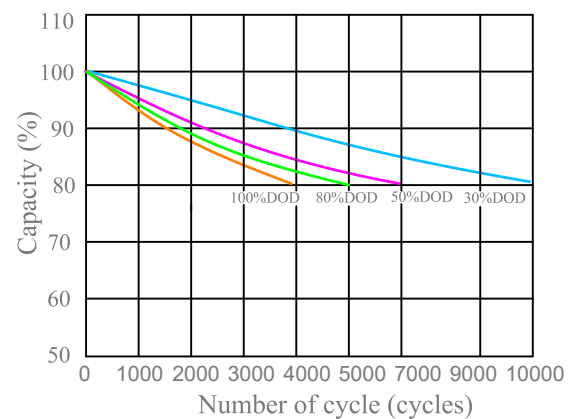
Charge and Discharge at 25°C, 1C



Temperature effects on capacity at 1C



Cycle life with DOD at 25°C, 1C/1C



## 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 6 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.