

SC102.4-50(102.4V50Ah)



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

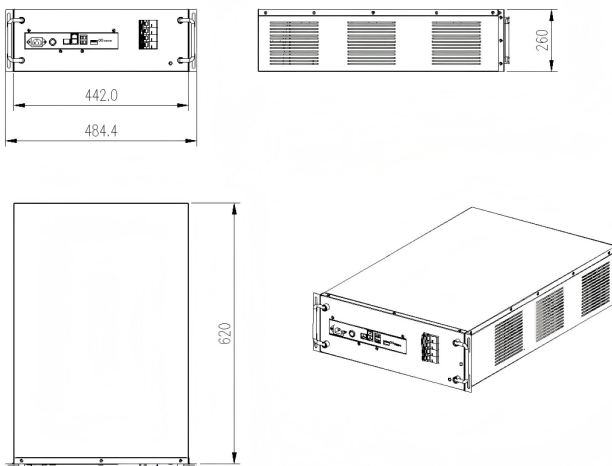
Low self-discharge
Monthly self-consumption ≤2%

Performance

Performance Parameters	
Cell	Square LFP
Capacity(Ah)	50 Ah
Voltage(V)	102.4 V
Energy(Wh)	5120 Wh
Rated Charge Current	25 A
Max. Charge Current	50 A
Rated Charge Voltage	108.8~110.4 V
Charge Cut-off Voltage	< 115.2 V
Balancing Voltage	>108.8 V
Max Output Power	10 KW
Standard Discharge Time	9 KW@30min
Rated Discharge Cut-off Voltage	89.6 V
Minimum Discharge Cut-off Voltage	> 80 V
Short-circuit Current	200~600μs

General Data	
Terminal	Anderson
IP Grade	IP21
Self-discharge	<=2%/Month
Cycle Life	5000 times(1C 80% DOD)
Weight	~46 Kg
Dimensions	442*750*150 mm
Storage Temperature	-5°C to 35°C
Discharge Temperature	-20°C to 65°C
Charge Temperature	0°C to 45°C

Size



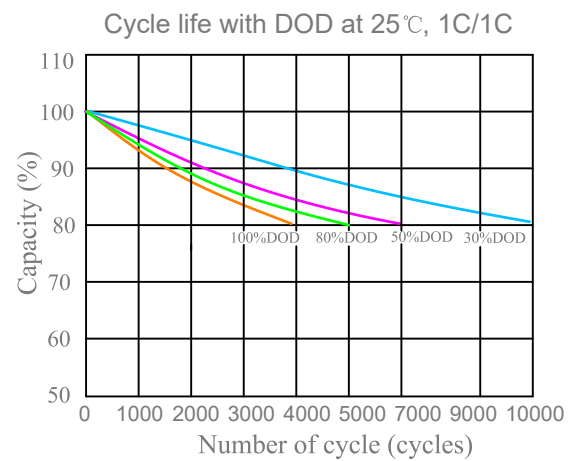
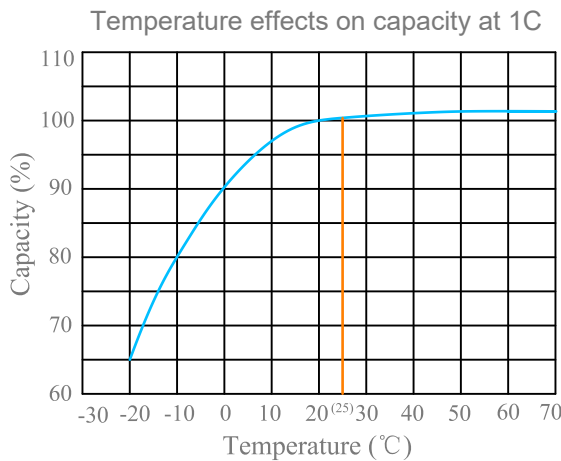
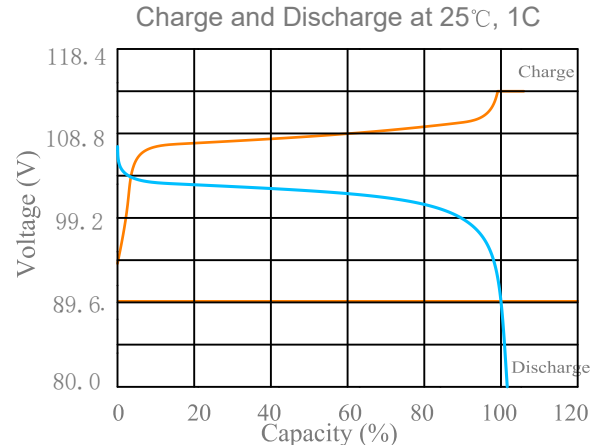
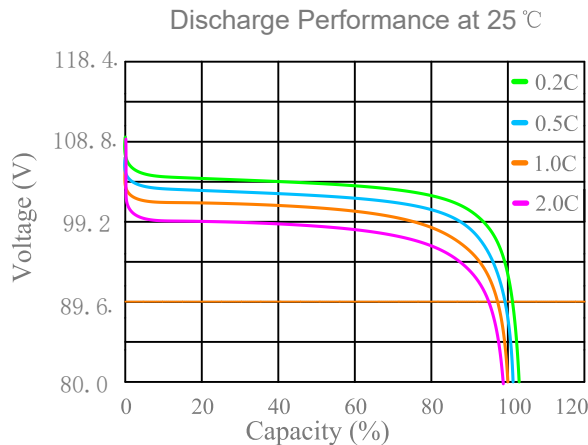
Compliance

Certifications	UN38.3
Transport Appraisal	UN3480,CLASS 9

Performance Data

Time(min)	30	45	60	120	180
Constant Power(kw)	9	6	4.8	2.4	1.6
Constant Current(A)	100	66	50	25	16

Characteristics Curve



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.