







# GF series energy power batteries



## Introduce

TCSN GF series utilizes high-rate, long-life LFP batteries equipped with a built-in, high-quality BMS. Compared to lead-acid starter batteries, these lithium batteries offer superior performance and longevity; they weigh only 40% as much as their lead-acid counterparts and boast a service life more than double that of lead-acid batteries. Furthermore, they exhibit higher charge acceptance.

## Features

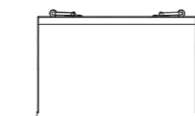
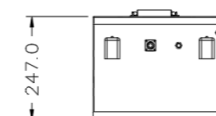
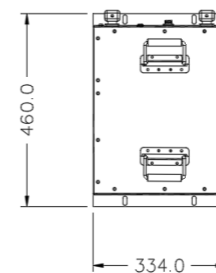
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**Powerful Performance**  
 High Instantaneous Current: Ascend and Descend with Effortless Ease  
 Experience the Thrill of Gliding Over Flat Ground
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**Safe and worry-free**  
 Using LFP batteries ensures high safety, no fire, and no explosion.
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**Worry-Free After-Sales Service**  
 5-Year Standard Warranty  
 Long-Lasting Protection — Extendable
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**Hassle-free and Long-lasting**  
 High Cycle Life  
 Designed Lifetime: 20 Years
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**Maintenance-free**  
 No maintenance is required other than charging.
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**High-Efficiency Fast Charging**  
 Supports 1C fast charging.  
 Standard charging can fully charge the device within 2.5 hours.

## Performance

Model	Dubhe GF51-50
<b>Performance</b>	
Cell	Square LFP 50Ah
Terminal	M8
IP Grade	IP67
Self Discharge	<=2%/Month
Cycle Life	6000times(80%DOD)
Rated Charge Current	25A
Max. Charge Current	50A
Rated Charge Voltage	54.4~55.2V
Charge Cut-off Voltage	58.4V
Balancing Voltage	>54.4V
Rated Discharge Current	25A
Max. Discharge Current	50A
Rated Discharge Cut-off Voltage	44.8V
Min. Discharge Cut-off Voltage	>40V
Short Circuit Current	Approx.3000A

Performance parameters	
Capacity	50 Ah(0.5C@25°C)
Nominal Voltage	51.2V
Energy	2560Wh
Weight	~33kg
Dimensions	460*334*247mm
Communication interface	RS485/CAN/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

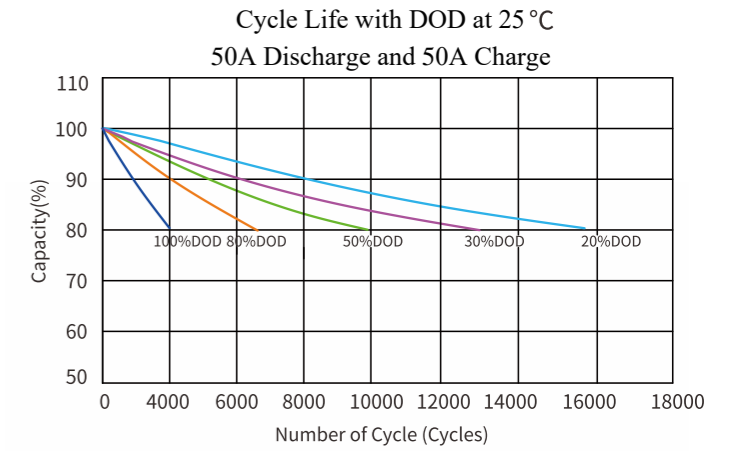
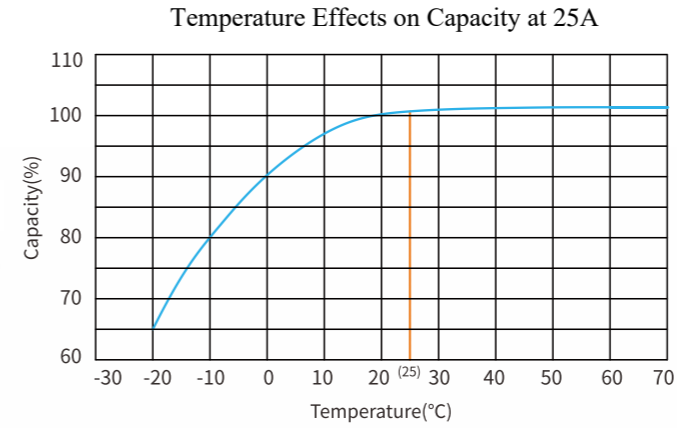
### Size



### 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

