

C20 Lithium LifePO4 Battery Specification



Profile

C20 belongs to lithium iron phosphate battery. Very good Safety performance, long life, excellent temperature characteristics, high energy density, low cost and low pollution.

Certification

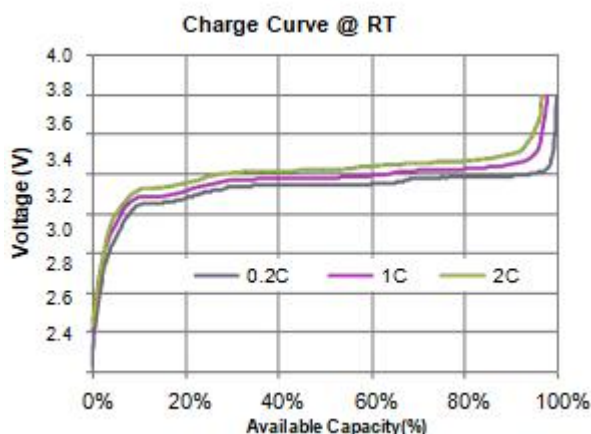
- ◆ UN38.3
- ◆ QC/T 743

General parameters	
Voltage	12.8V
Capacitor	80Ah (standard)
Power	1024Wh
Internal resistance	Within 12mΩ
Mechanical parameters	
Thickness	320mm
Width	122mm
Length	175mm
Weight	12.8Kg
Electrical parameters	
Charging method	Constant current
Recharging current	10A (standard)
	40A (Max. CC @ 25°C)
Overshoot protection voltage	14.6V/Cell
Discharge method	CC
Over-discharge protection voltage	11.2V/Cell
Discharge current	20A (standard)
	60A (Max. CC @25°C)
Working parameters	
Operating temperature	Charging(current):-20~+65°C
	Discharging(current):-40~+65°C
Storage temperature	Conventional storage temperature: -10~+45°C (<3 months, Percentage of electricity: 20%~60%)
	Long-term storage :-10 ~+40°C (<1 year, Coefficient of electricity: 20%~60%)
Storage humidity	5%~95%
Transportation environment	voltage:13~13.4V
	Percentage of electricity: 30~60%

Charging voltage-capacity curve and charging current relationship(Based on 3.2V)

The environment is charged at 25 ° C, and the battery is charged to a 3.80 V voltage according to different charging currents.

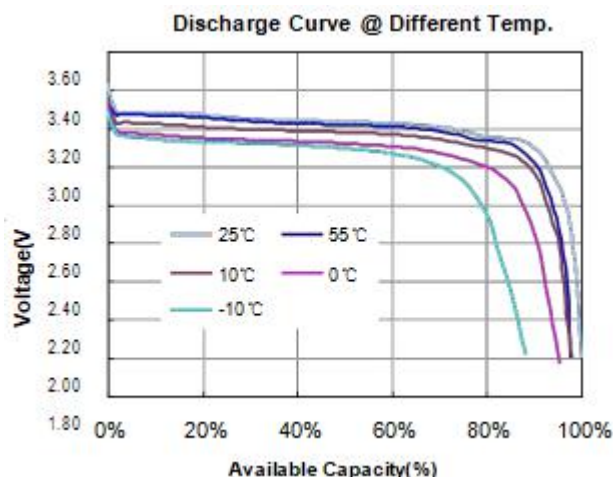
Charge and discharge mode:
constant current / constant current.



Discharge voltage-capacity curve and charging current relationship(Based on 3.2V)

After fully charging at 25 ° C, the battery is discharged to 2.00V at a different C rate.

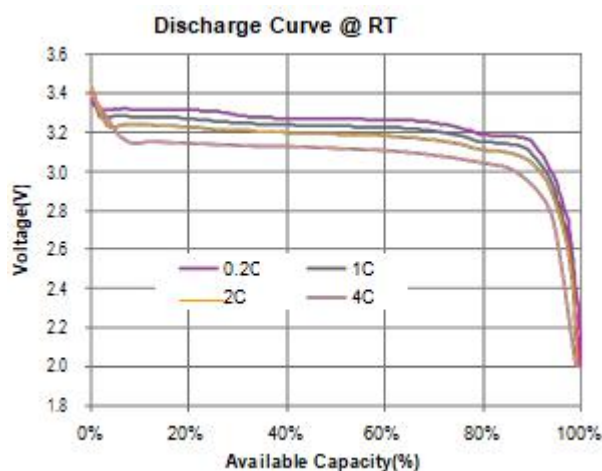
Charge and discharge mode:
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Discharge voltage-capacity curve and charging current relationship(Based on 3.2V)

After fully charging at 25 ° C, the battery is discharged to 2.00V at a different C rate.

Charge and discharge mode:
constant current / constant current.



Necessary protection(Based on 3.2V)

In the charge and discharge cycle, the charger and protection circuit should meet the following conditions to ensure battery charge and discharge safety.

No.	Item	Condition
1	Charging protection voltage	3.80 V/cell
2	Discharge protection voltage	2.00 V/ cell
3	1 times charge protection voltage	3.81V~3.90 V/ cell
4	2 times overcharge protection voltage	3.91V~4.00 V/ cell
5	Overcharge release voltage	3.60V~3.70 V/ cell
6	1 times over-discharge protection voltage	1.90V-1.99 V/ cell
7	2 times overdischarge protection voltage	1.80V-1.89 V/ cell
8	Overdischarge release voltage	2.10V-2.20 V/ cell
9	Over temperature alarm	55°C
10	Over temperature protection	65°C

The test data on the second page is based on a C20 unit. The test is to show the performance of the unit. Some conditions may exceed the normal specifications, so it cannot be used to guarantee performance.