

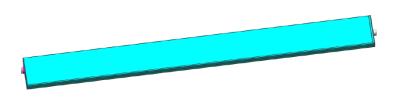
file name:	C102F-PACK Capacity 138Ah battery product specification			project number (optional)	BYD C102F
File No:	Ve	ersion:	1	Page code:	1/3

# C102F-PACK Capacity 138Ah battery product specification

## - Model: C102F

- C102F battery characteristics
  - Using lithium iron phosphate as the cathode material
  - Has excellent safety characteristics and long cycle life
  - Good temperature performance, battery operating temperature range is wide
  - High energy density, environment friendly
- battery certification
  - GBT31484-2015
  - GBT31485-2015
  - GBT31486-2015

	Basic parameters of the battery		Basic battery size & weight	
Q	3.20V		960±0.7mm	
monomerAllowquantity(1/3Cmin)	138Ah	width	90±0.5mm	
Rated energy	441.6wh	thickness	13.5±0.5mm	
Standard charging method	Constant current charging (CC)	weight	2.65±0.05 kg	
Standard charging current	27A @ 23°C			
Maximum continuous charging current	270A @ 23°C	abuse test (GB3148	85) Test results (based on:EUCAR)	
Charge cut-off voltage	3.80V/Cell	extrusion	<  4	
discharge method	constant current discharge (CC)	overcharge	≤L4	
Discharge cut-off voltage	2.00V/Cell	Overdischarge	≤L2	
Standard discharge current	27A @ 23°C	short circuit	≤L4	
Maximum Continuous Discharge Current	270A @ 23°C	Furnace heat	≤L4	
Maximum charging power	1000W(BOL/23°C/50%SOC/10S)			
Maximum discharge power	2000W(BOL/23°C /50%SOC/10S )			
Shipping state voltage	3.25V~3.35V			
Shipping statusSOC	30%~60%			
DCIR@50 %SOC	30s,1.5C,1.2±0.2mΩ			





file name:	C102F-PACK Capacity 138Ah battery product specification			project number (optional)	BYD C102F
File No:		Version:	1	Page code:	twenty three

## - battery safety

Battery Operation & Storage

Charging ambient temperature	0~+50°C
Discharge ambient temperature	- 20~+55°C
Short-term storage ambient temperature	- 20~+30°C(<3month,20~60% SOC)
Long-term storage ambient temperature	- 20 ~+30°C(<1Year,30~60% SOC)
storage humidity	5%~95%
altitude	≤4000m

#### Battery Protection & Monitoring

In order to ensure battery life and safe use, the charger and protection circuit must monitor the

#### battery during charging and discharging:

No.	project	condition
1	Charge cut-off voltage	3.80 V/Cell
2	Discharge cut-off voltage	2.00 V/Cell
3	Level 1 overcharge protection voltage	3.81V~3.90V/Cell
4	Secondary overcharge protection voltage	3.91V~4.00V/Cell(suggested value )
5	Overcharge recovery voltage	3.50V~3.60V/Cell
6	Level 1 over-discharge protection voltage	1.90V~1.99V/Cell
7	Secondary over-discharge protection voltage	1.80V~1.89V/Cell(suggested value)
8	Over-discharge recovery voltage	2.50V~2.80V/Cell
9	overheating alarm	56°C
10	Overheating protection	60°C

### -safety warning

1, Do not throw the battery into fire or otherwise heat the battery

2, Do not short circuit or install with incorrect polarity to avoid mechanical or electrical abuse

3, Do not mix batteries from different manufacturers or models

4, Do not disassemble or change the external structure of the battery, do not hit or

puncture the battery with external force

5, Do not put the battery into water, sea water, strong acid, strong alkali and other substances

6, Avoid direct sunlight, avoid high temperature and high humidity (temperature≤65°C, humidity≤95%)

7, When operating the battery, you need to wear rubber or rubber gloves 8, When charging

and discharging the battery, ensure that the battery has voltage, current, temperature monitoring and protection

9, When the battery leaks, smokes or is damaged, stop using it immediately and contact our company to deal with it



 $\star$  secret  $\star$ 

file name:	C102F-PACK Capacity 138Ah battery product specification			project number (optional)	BYD C102F
File No:		Version:	1	Page code:	3/3



Shenzhen BYD Lithium Battery Co., Ltd.

Address: No. 5, Xiusha Road, Pingshan New District, Shenzhen (Phase II of BYD Kengzi)