

4256-5697 A



BPC223-02  
BCRT20N00V2  
POWER GEM PLUS RT  
6kVA&10kVA BATTERY CABINET  
USER MANUAL

## 1. BATTERY SAFETY



**WARNING:** The battery is not isolated from the mains voltage. Hazardous voltage may occur between the battery terminals and ground.



**WARNING:** A battery can present a risk of electric shock or burn from high short circuit currents. Always take the following precautions when working on batteries:

- Remove watches, rings or other metal objects.
- Use tools with insulated handles.



**WARNING:** The BC20N system uses recyclable batteries:

- The batteries contain lead and pose a hazard to the environment and human health if not disposed of properly.
- If you replace the batteries you must dispose of the used batteries in accordance with local environmental laws and regulations.



**WARNING:** Heed the following warnings concerning battery handling:

- Do not dispose of batteries in a fire. The batteries may explode.
- Do not open or mutilate the batteries. They contain an electrolyte which is toxic and harmful to the skin and eyes.
- If electrolyte comes into contact with the skin, the affected area should be washed immediately with clean flowing water.
- The internal energy source (the battery) cannot be de-energized by the user.



**WARNING:** When changing the batteries, install the same number and same type of batteries.

## 2. INTRODUCTION

The BPC PowerGem Plus RT 6-10kVA UPS battery pack dimension is W443\*H131\*D585mm. It includes battery connection cables, breaker, terminal, etc. The Cabinet has a maximum capacity of 20pcs 12V/7Ah or 12V/9Ah batteries inside. The battery connection should be configured to output  $\pm 120V$ , two groups batteries connect in series as BAT+、BATN、BAT-.

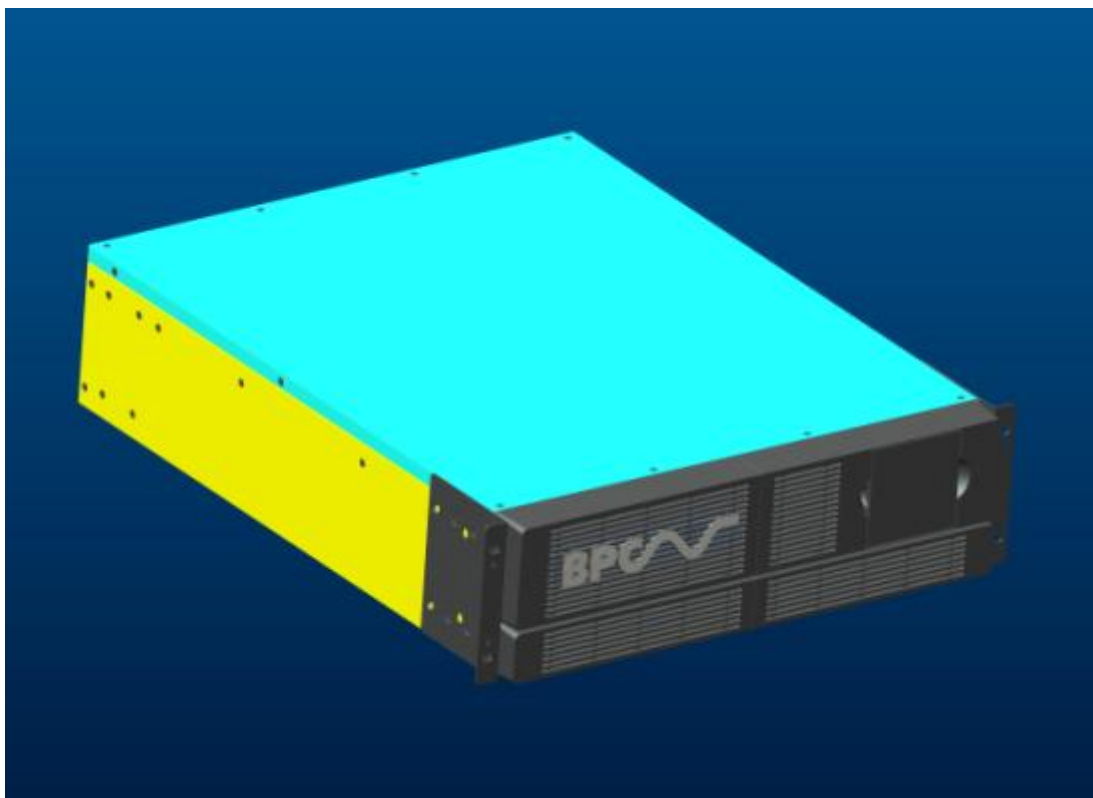


Fig.1 The complete battery pack cabinet

## 3. ASSEMBLY

### 3.1 REMOVE COVERS

Place the battery pack on a level surface, unscrew and remove the panels, remove the battery tray top covers and battery holder for easier battery installation and connection, as shown in Fig.2 & Fig.3

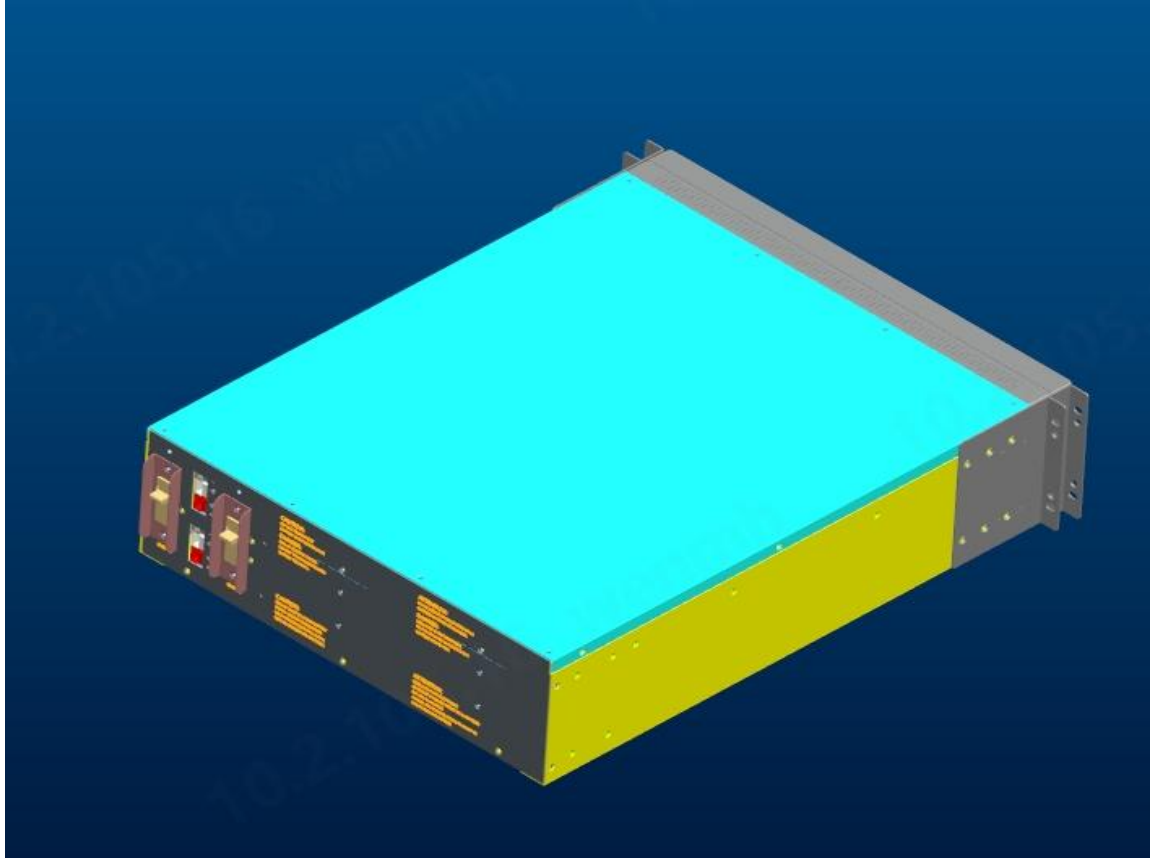


Fig.2

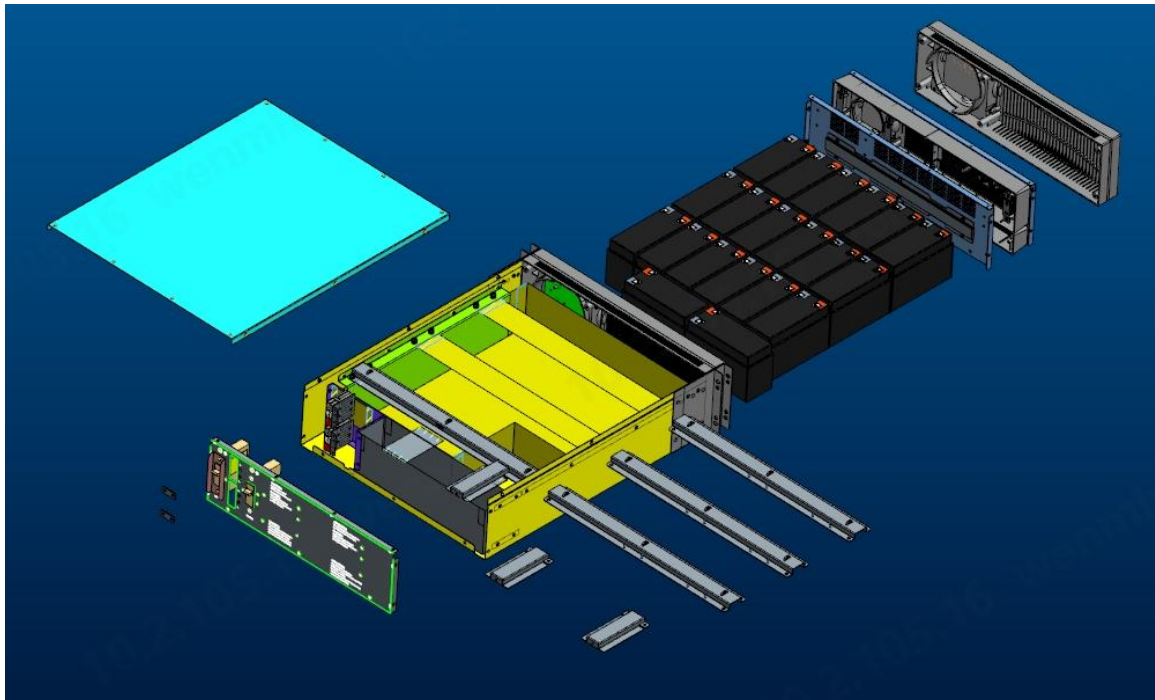


Fig.3

### 3.2 BATTERY INSTALLATION AND CONNECTION

20pcs 7/9Ah batteries are required to complete installation.

Divide into 2 groups of 10 blocks, then connect the 10 battery blocks in series, as (BAT+ / BATN / BAT-) shown below.

Connect the 20 batteries as shown in below pictures.

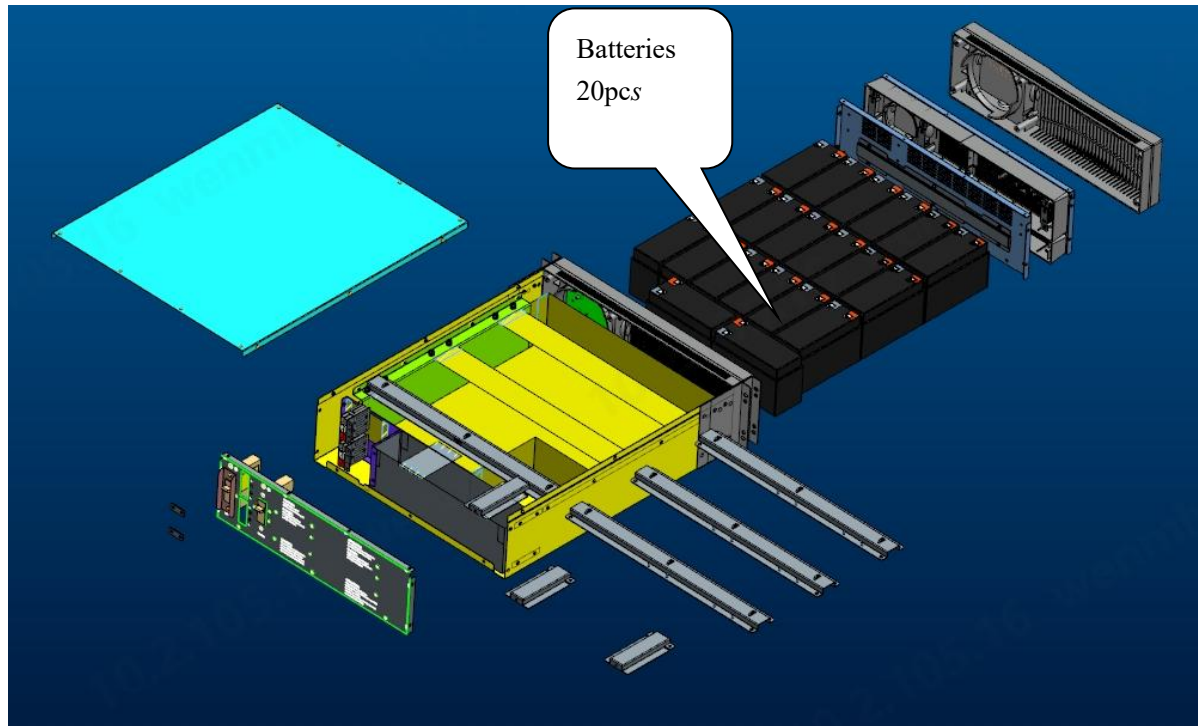


Fig. 4 (20pcs batteries installation)

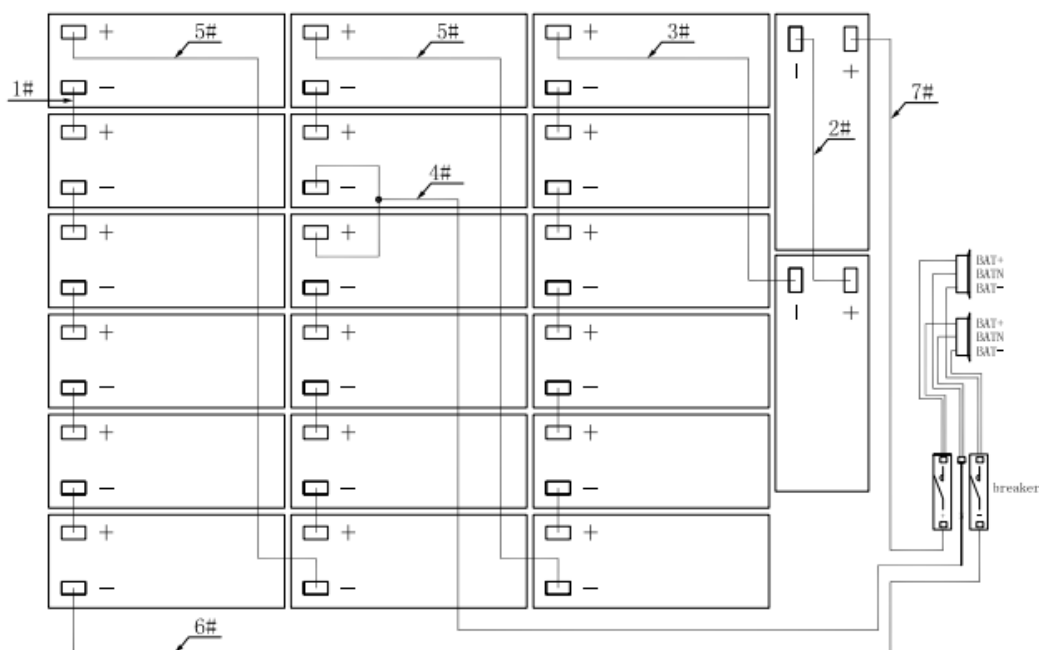


Fig. 5 (20pcs batteries connection)

### 3.3 CHECK AND TEST

After the battery installation and connection is completed, check if BAT+ to N & N to BAT- voltages are correct with multimeter. Install the cover if the voltages are correct.

### 4. BATTERY PACK ACCESSORIES

A complete battery pack includes the below accessories.

No.	Name	Specification	PCS
1	Cable 1#	Black wire 1015 10AWG 101mm 250TC*2	14
2	Cable 2#	Black wire 1015 10AWG 250mm 250TC*2	1
3	Cable 3#	Black wire 1015 10AWG 420mm 250TC*2	1
4	Cable 4#	Blue wire 1015 10AWG 100*2/550mm 250TC*2+BN8+OI5.5-5	1
5	Cable 5#	Black wire 1015 10AWG 650mm 250TC*2	2
6	Cable 6#	Black wire 1015 10AWG 600mm 250TC+YI6	1
7	Cable 7#	Red wire 1015 10AWG 550mm 250TC+YI6	1
8	BAT_N	4wires Blue 1015 12AWG 150*2/200mm*2 OI14-5+P30*4	1
9	BAT_-	2wires black 1015 12AWG 200mm P30*2+YI6	2
10	BAT_+	2wires red 1015 12AWG 200mm P30*2+YI6	2
11	Breaker	NDB2Z-63 C63/1 1P 63A/250VDC UL certified	2
12	Battery Pack	W443*H131*D585mm	1