

# **SEPLUS 280(L) Installation guide (3.0Y)**

## 一、 Cabinet installation accessories:

1. Cabinet installation wheels, as " Figure 1 " use 16 pics M6\*14 Phillips hex screw with spring washer lock

( locking torque is: 10Nm) ;

2. Paste the epoxy boards 1/2/3 in order inside the cabinet , First tear off the epoxy board adhesive film centrifugal paper, as" Figure 2" Paste in the corresponding location.

3. As" Figure 3 " Check the assembly as required, and paste EVA foam and PC gasket on the corresponding surface of the battery core. The overall position is as shown in the diagram (next page) to separate the battery cells.

### Material:

cabinet\*1PCS , wheel\*4PCS ,

Epoxy board A\*2PCS ,

Epoxy board B\*2PCS ,

Epoxy board C\*2PCS ,

M6\*14 Phillips hex screw with spring washer \*16PCS

### Tool:

Electric batch、 10mmsleeve、  
PH2Cross bits



Figure 1

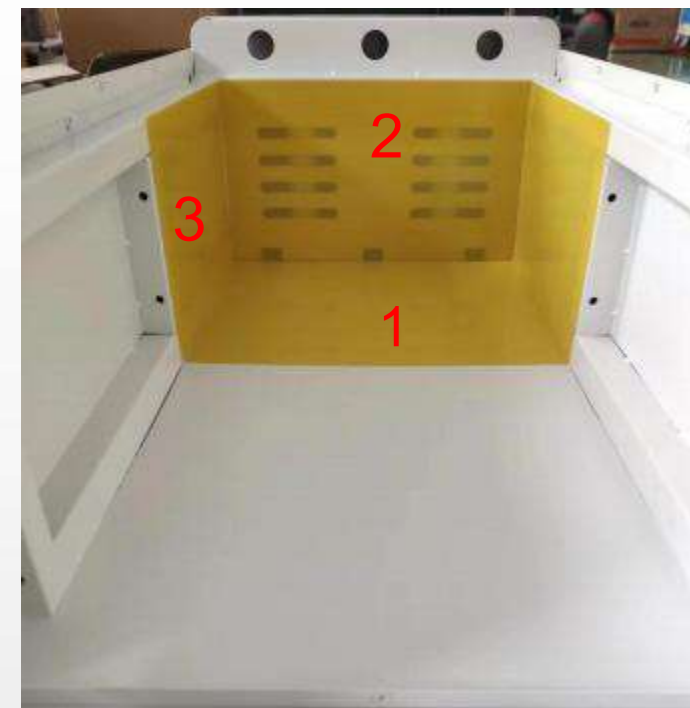


Figure 2



Matching requirements, the voltage difference is: within 0.010V, the internal

resistance difference is: within 0.15mΩ;

PC  
gasket

Figure 3

## 二、 Cell stacking:

1.As“ Figure 1 ” After the batteries are tested and assembled as required, EVA foam and PC gaskets are pasted on the corresponding surfaces of the batteries. The overall position is as shown in the schematic diagram in "Figure 1" to separate the batteries.

2.As shown in "Figure 1 and Figure 2", stack the cells in series and put them into the cabinet. Separate them with epoxy board B between the two columns, and attach the epoxy board to the end plate cells.

3.Install end plate, as “ Figure 3 ”use 6 pics M8\*20 Phillips hex screw with spring washer lock (locking torque is: 15Nm)

### Material :

End plate\* 1PCS , cell\* 16PCS ,

Battery core foam\*28PCS ,

Epoxy boardA\* 1PCS , Epoxy boardB\*3PCS ,

Epoxy boardC\*2PCS ,

M8\*20Phillips hex screw with spring washer \*6PCS ,

PC gasket\*56PCS

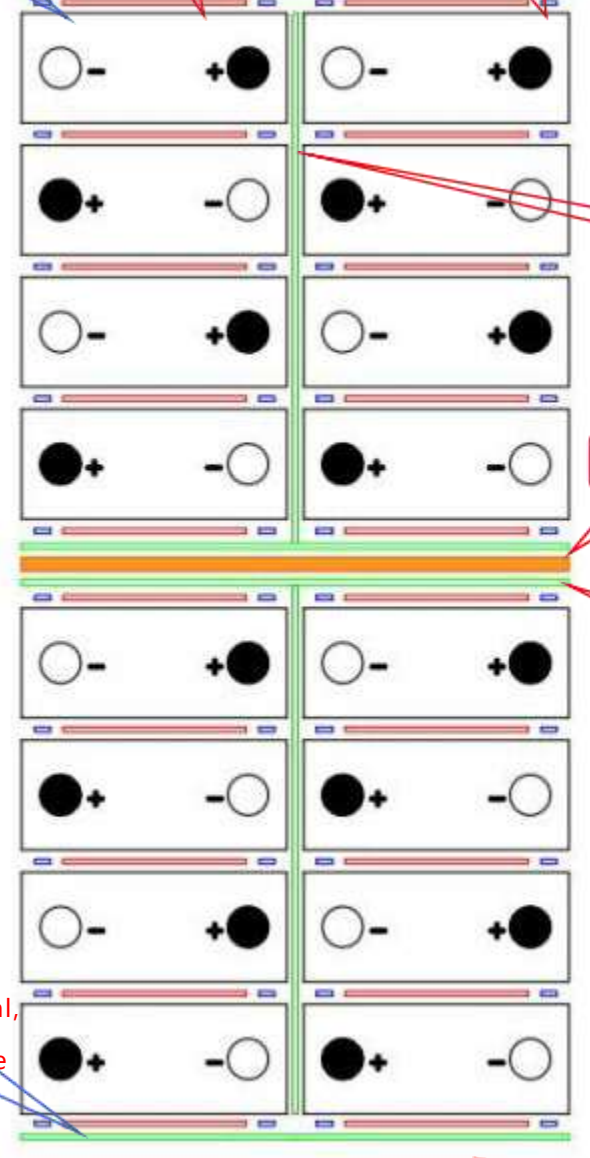
Tool: Electric batch、 13mmsleeve、 PH2Cross bits

Note : Because there are tolerances in battery cells from different manufacturers, if there are still loose parts after applying foam according to the instructions, add foam filling at the head and tail.

Stack as normal,  
If there is any  
looseness, here it is  
Add foam

Foam

PC gasket



B- B+

Figure1

Epoxy boardB

Epoxy boardC

Sheet metal  
compartment

Epoxy boardC

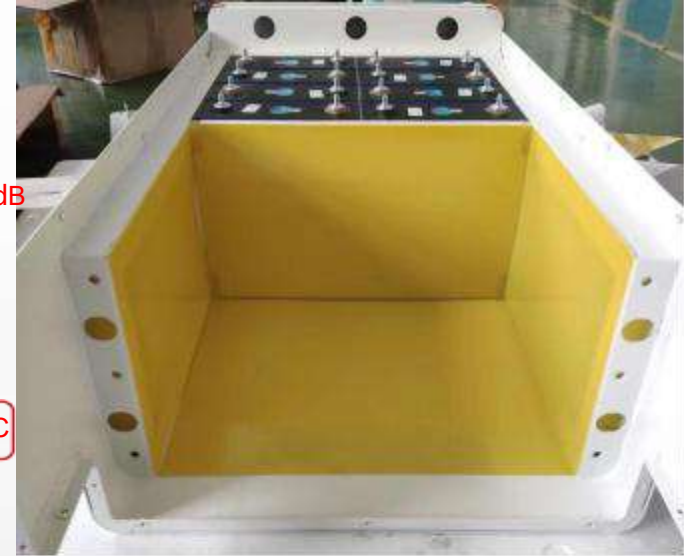


Figure 2



Figure 3

### 三、 Install aluminum row:

1. Install aluminum row, as " Figure 1 "Install series aluminum bars on the poles.
2. Apply pressure strip foam,as " Figure 2 " Paste EVA foam on the batten and align the holes.
3. Install the sampling plate on the batten,as " Figure 3 " use 6 pics M4\*8 Phillips hex screw with spring washer lock (locking torque is: 3Nm)

Material :

Foam\*2PCS , Layering\*2PCS ,

Sampling plate\*2PCS ,

M4\*8Phillips hex screw with spring washer \* 12PCS ,

SF-N1Aluminum row\* 14PCS , SF-N13Aluminum row\* 1PCS

Tool: Electric batch、 10mmsleeve、 PH2Cross bits

Figure1

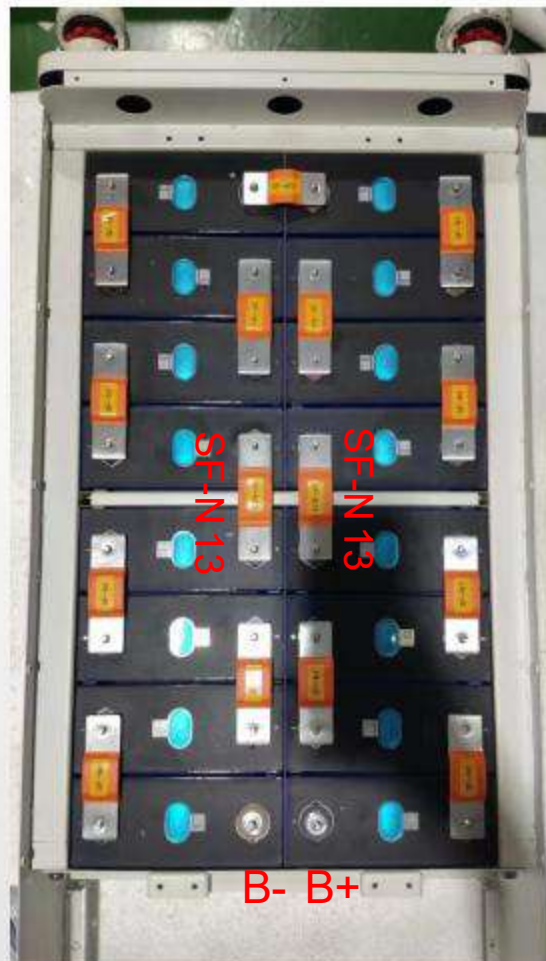
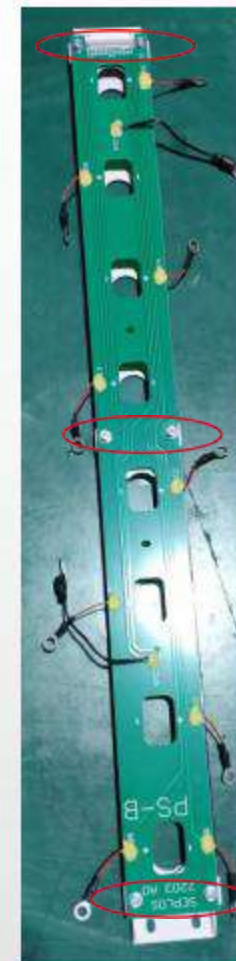


Figure 2



Figure 3



## 四、 Install pressure strips and balance board sampling lines:

1. Install the bead, as shown in "Picture 1", you need to distinguish between A/B boards, use 8 pcs M5\*8 Phillips hex screw with spring washer lock, (locking torque is: 5Nm)
2. Install the sampling wire lug. As shown in "Figure 2", insert the sampling wire lug into the pole at the corresponding position;
3. Install the balancing plate sampling line, as shown in "Figure 2", install the sampling line at the corresponding position, and then use 30 M6 flange nuts to lock the aluminum row (locking torque is: 6Nm) ;
4. Tie straps to secure equalization sampling lines.

Material :  
Balance board sampling line\*2PCS, M5\*8Phillips hex screw with spring washer \*8PCS, M6flange nut\*30PCS

Tool:Electric batch、 10mmsleeve、 PH2Cross bits、 Torque breakers



Figure 1

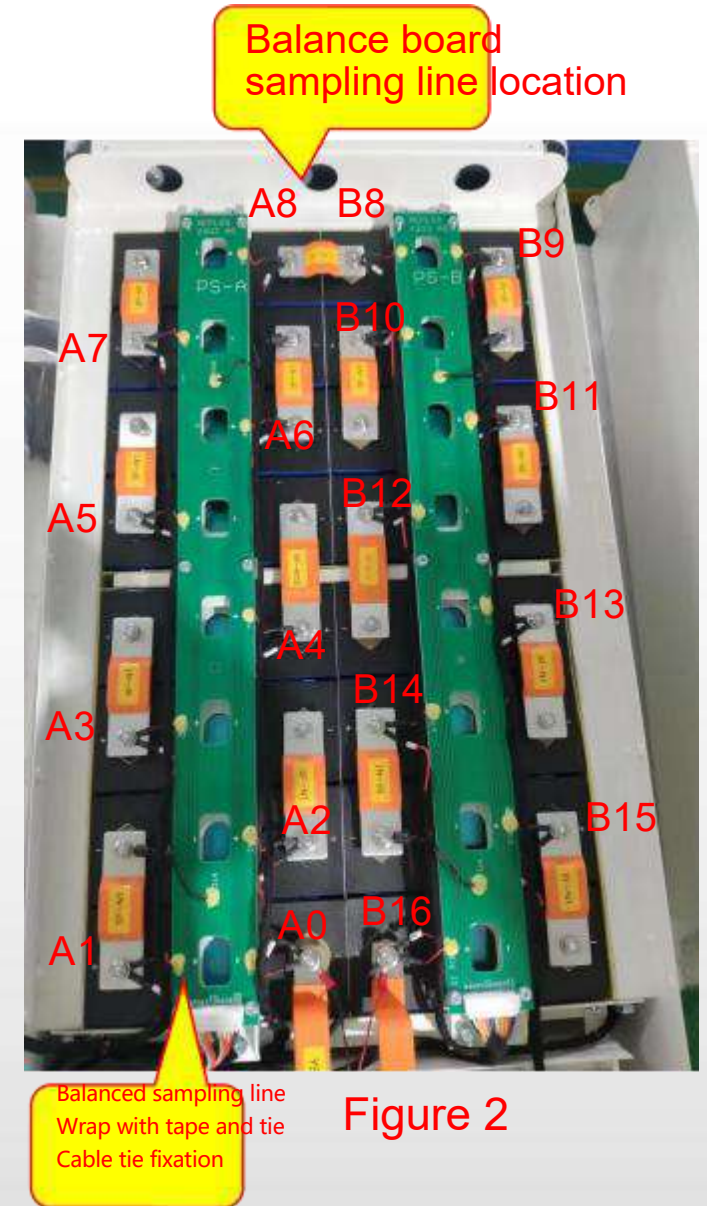


Figure 2

## 五、 Install BMS into sheet metal:

1. BMS installed on sheet metal bracket , as “ figure 1” BMS is installed on the sheet metal bracket, use 6 pics M3\*8 Phillips round head screw lock (locking torque is: 1Nm)
2. Install the YS-6/YS-8 copper busbar and fix it with the screws provided by BMS. (The locking force of the copper row screw is: 8Nm)
3. Install the small B+ line and fix it with the screws provided by BMS. (locking torque is: 1Nm)
4. Insert sampling lines A and B, and insert screen lines.

### Material:

BMS\* 1PCS , BMS bracket\* 1PCS ,  
Copper row YS- 8\* 1PCS , YS-6\* 1PCS ,  
Small B+ line\* 1PCS ,  
Black sampling line \* 1PCS  
white sampling line\* 1PCS ,  
display line \* 1PCS ,  
M3\*8 Phillips round head screw\* 6PCS

Tool: Electric batch、 PH2 Cross bits、 PH1 Cross bits、

Figure 1

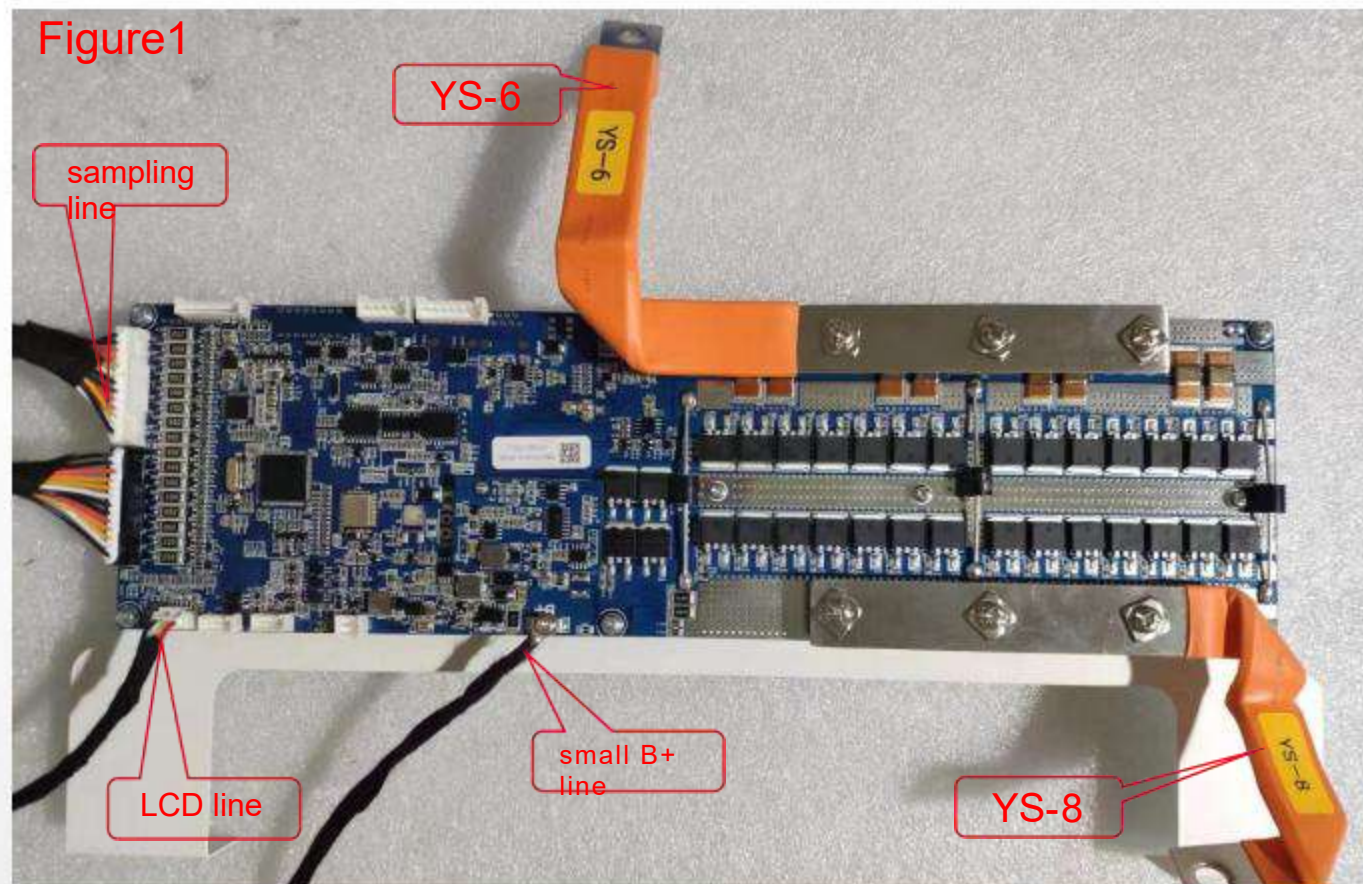
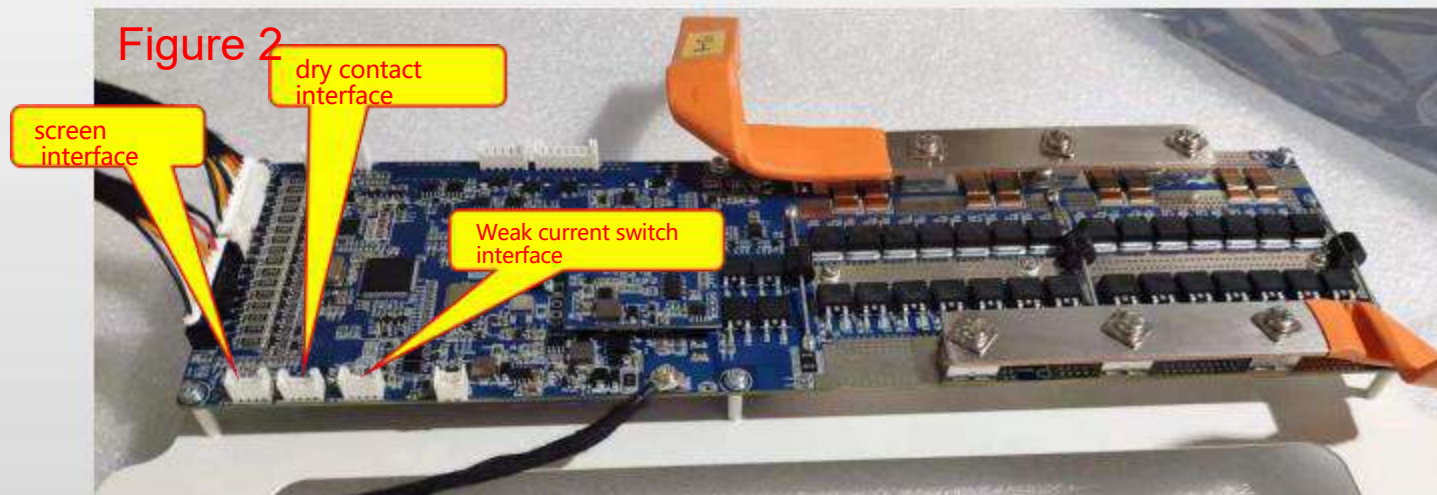


Figure 2



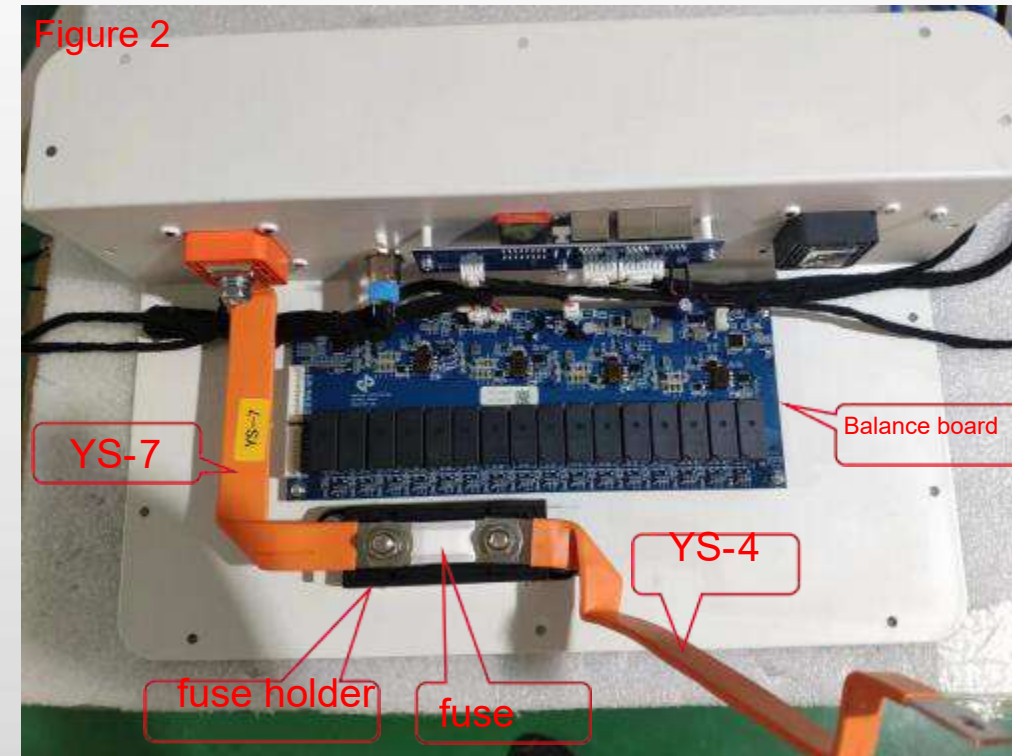
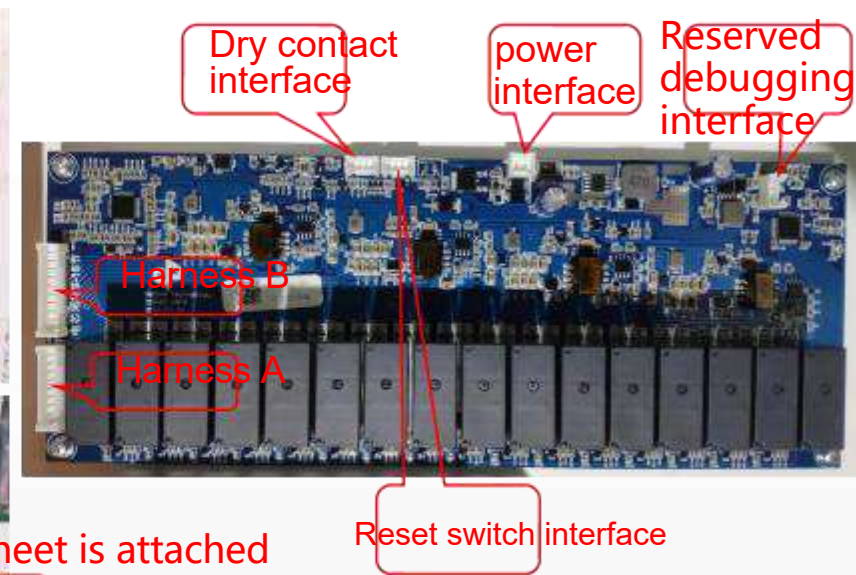
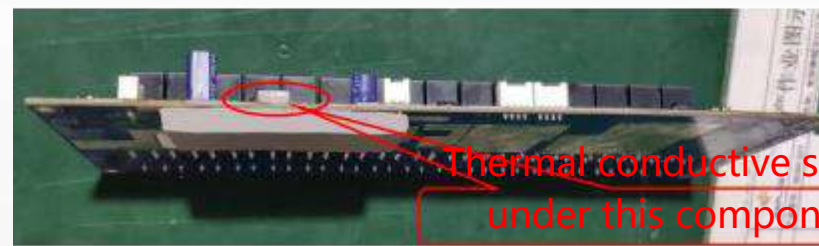
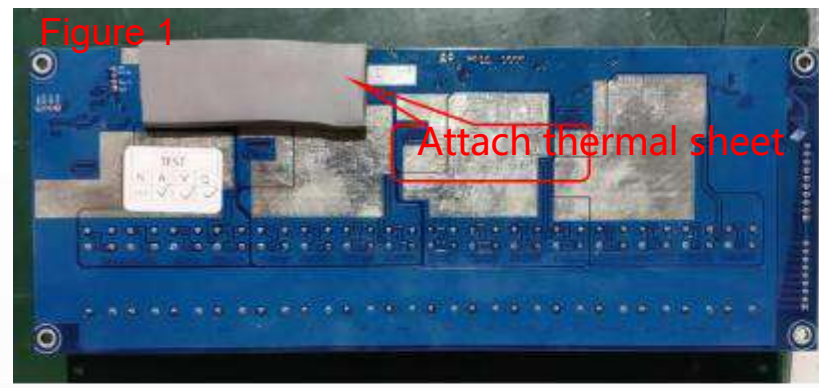
## 六、 Balance board, front panel installation accessories:

1. Attach a thermal pad to the balancing board, as shown in the figure "1".
2. Top plate installation accessories: As shown in "Figure 2", install the balancing plate and adapter plate, use 3 pics M3\*8 Phillips screw lock (locking torque is: 1Nm) Install terminal socket\*2; use 8 pic M4\*10Hexagon socket screws lock (locking torque is : 3Nm) Install the switch key; solder the plug on the switch key, then insert and fasten it corresponding to ON/OFF; Install the fuse holder, use 2 pics M6\*14Phillips hex screw with spring washer lock (locking torque is: 6Nm) ; Install fuses and copper bars: YS-4, YS-7; use the screws provided with the fuse to fix them (locking torque is : 8Nm)

3. Plug in the data cable of the adapter board.

Material : Roof\* 1PCS , balance board\*1PCS , Copper row YS-7\*1PCS , YS-4\*1PCS , Adapter board data cable\*3PCS,connector socket\*2PCS , adapter board\*1PCS , power button\*1PCS , fuse holder\*1PCS , fuse\*1PCS , M4\*10Hex socket flat head screw\*8PCS , M3\*8 Phillips round head screw\*4PCS , M6\*14Phillips hex screw with spring washer\*2PCS , M8\*16Phillips hex screw with spring washer\*1PCS

Tool:Electric batch、 PH2Cross bits、 PH1Cross bits、 10mmsleeve、 13mmsleeve、



## 七、 Install the BMS bracket and the front panel into the chassis:

1. Install the BMS bracket into the cabinet, as shown in "figure 1" and "figure 2" use 4 pics M5\*14Phillips hex screw with spring washer lock (locking torque is: 5Nm) ;
2. Install roof , as " Figure 3" use M4\*10 Hex socket countersunk screw lock (locking torque is : 3Nm)
3. As shown in "Figure 4", insert the sampling line plug of the equalization board and the switch line plug into the BMS.
4. As shown in Figure "5", install the B-copper bar, sampling wire lugs, and the negative power cord of the balancing board; use M6 flange nut lock (locking torque is: 6Nm) ;
5. As shown in "Figure 5", insert the blackhead sampling line;
6. As shown in "Figure 5", install the B+ copper bar, the small B+ line sampling wire lug, and the positive power line of the equalization board; use M6 flange nut lock (locking torque is: 6Nm) ;
7. Insert the white head sampling line as shown in "Figure 2";
8. P- YS-8Copper row use M8\*16Phillips hex screw with spring washer lock (locking torque is: 15Nm)

### Material:

M5\*14Phillips hex screw with spring washer\*4PCS,  
M4\*10 Hex socket countersunk screw\*14PCS,  
M6 flange nut \*2PCS, M8\*16Phillips hex screw with spring washer\*1PCS.

Tool: Electric batch、 10mmsleeve、 13mmsleeve、 PH2Cross bits



Figure 1

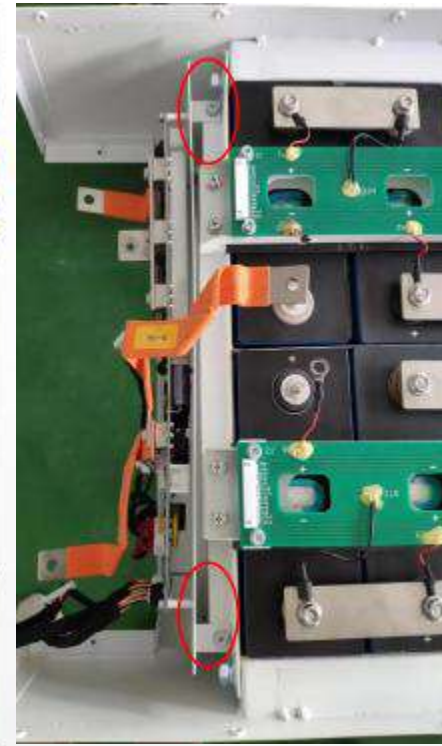


Figure 2



Figure 3



Figure 4

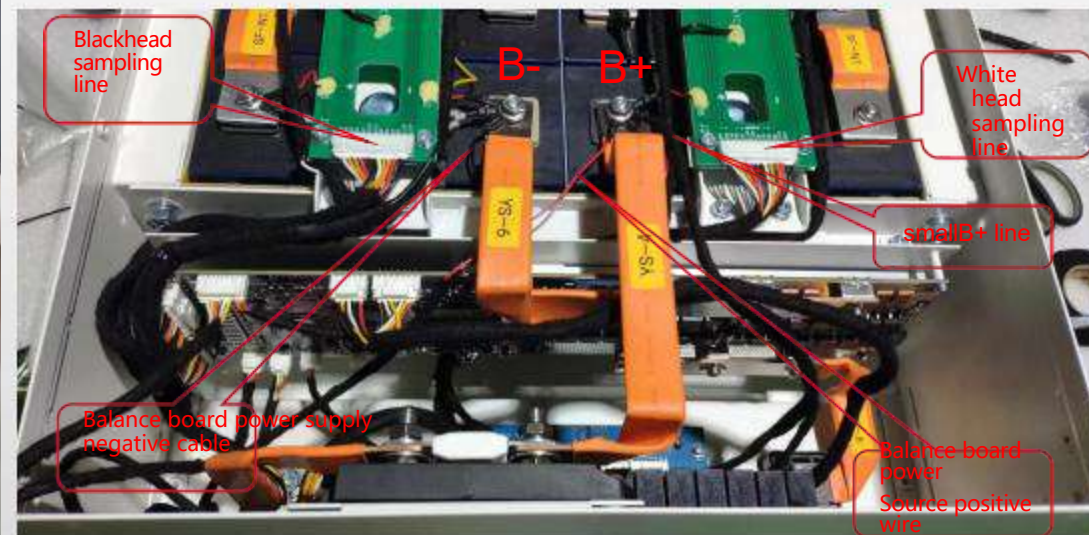


Figure 5



## 八、 Cabinet cover processing and closing:

1.Cabinet cover installation accessories, such as "figure 1" installation of display screen, LED light, use M3\*8 Phillips round head screw lock (locking torque is: 1Nm) ;

2.As shown in "Figure 2", insert the display cable and LED light cable.

3.As shown in "Figure 3 and 4", close the cabinet cover use 17 pics M4\*10 Hex socket countersunk screw lock (locking torque is: 3Nm)

4.As shown in "figure 3 and 4", attach the LCD sticker.

5.After installation, the BMS needs to perform capacity learning. Specific steps: Fully charge the battery first. (Recommended current100A)  
Put it into battery system protection (Recommended current100A)  
Charge to 50% battery (Recommended current100A)  
Complete capacity learning

Material: Cabinet cover\*1PCS, Display\*1PCS, LED light panel \*1, M3\*8 Phillips round head screw\*6PCS, M4\*10Hex socket countersunk screw\*17PCS, PVC sticker\*1PCS

Tool:Electric batch、PH1Cross bits、Hexagonal H2.5 bit



Figure1



Figure 2



Figure 3



Figure 4