

4S to 96S BMS Intelligent : BMS4S96S300A by [www.servovision.com](http://www.servovision.com)

1. Real-time monitoring of 4S-96S single-cell voltage, which can be connected indefinitely. Currently, the host only supports 8 modules, using modularity. Each module manages a maximum of 12 strings and a minimum of 4 strings (because the module's operating power is taken from the battery, so the total serial voltage of the battery connected to a single module cannot be less than 11v. If the battery is less than 12 strings, the extra detection channels must be all connected in parallel to the positive pole of the highest battery of the module). The total voltage of the input of a single module in series should not be higher than 75v, the detection range of single-segment channel is 0--5v, and the input voltage of the control part of the host must not exceed 60v.
  2. Monitor the total voltage, charge and discharge current, power and temperature of the battery pack in real time and count the actual charge and discharge capacity ah. The host has a temperature detection to monitor the temperature of the mos tube. Each module is accompanied by a temperature detection, a total of 9 temperature detection.
  3. With overshoot, over discharge, over current and over temperature protection.
  4. The percentage of remaining capacity is displayed in real time and displayed with a progress bar.
  5. High-voltage 200V-380V if use Relay current 200-300A, if use built-in FET instant short-time 60A, without using Relay continuous current 70A, instant short-time 100A, excessive voltage and current can use relay scheme, specific details can be discussed, long-term constant large current Work needs to strengthen the mos tube heat dissipation.
  6. Running flashing indicator, prompting the system running status, 3.5-inch IPS color display, super wide viewing angle, the working status is clear at a glance.
  7. With current manual calibration function, because the voltage measurement error is 1.2mv total measurement error, so no calibration is required.
  8. The same discharge and discharge design, reduce the connection lines.
  9. The module cascade connection is used to expand the number of connection strings, which can theoretically be infinitely expanded. The two-core cat5 twisted pair is used to connect the host to the module and the module to module communication. The cable length can reach 40 meters (the length is a laboratory The effective length of the actual test in the environment, if the interference is large on site or the wire selection is not suitable, the communication distance should be shortened accordingly).
  10. After the host is turned off, the module automatically goes to sleep, the power consumption is only 4ua, modularization can also reduce the length of the balance line, so that the host and the module, the module and the module can be placed over a long distance.
  11. The module has an auto-balancing function. It is balanced until the voltage drop stops at 0.001v, and the balanced current is 200ma. This function must be turned on after the battery is fully charged. Balanced discharge will generate a large amount of heat. You need to pay attention to the heat dissipation of the module.
  12. Fully isolated design, all interfaces can be hot swapped, and the temperature sensor can not be connected when not in use.
- The price is the reference price, and it depends on the number of modules.
13. If you think the alarm buzzer sound is low, you can tear off the sticker on the surface, the

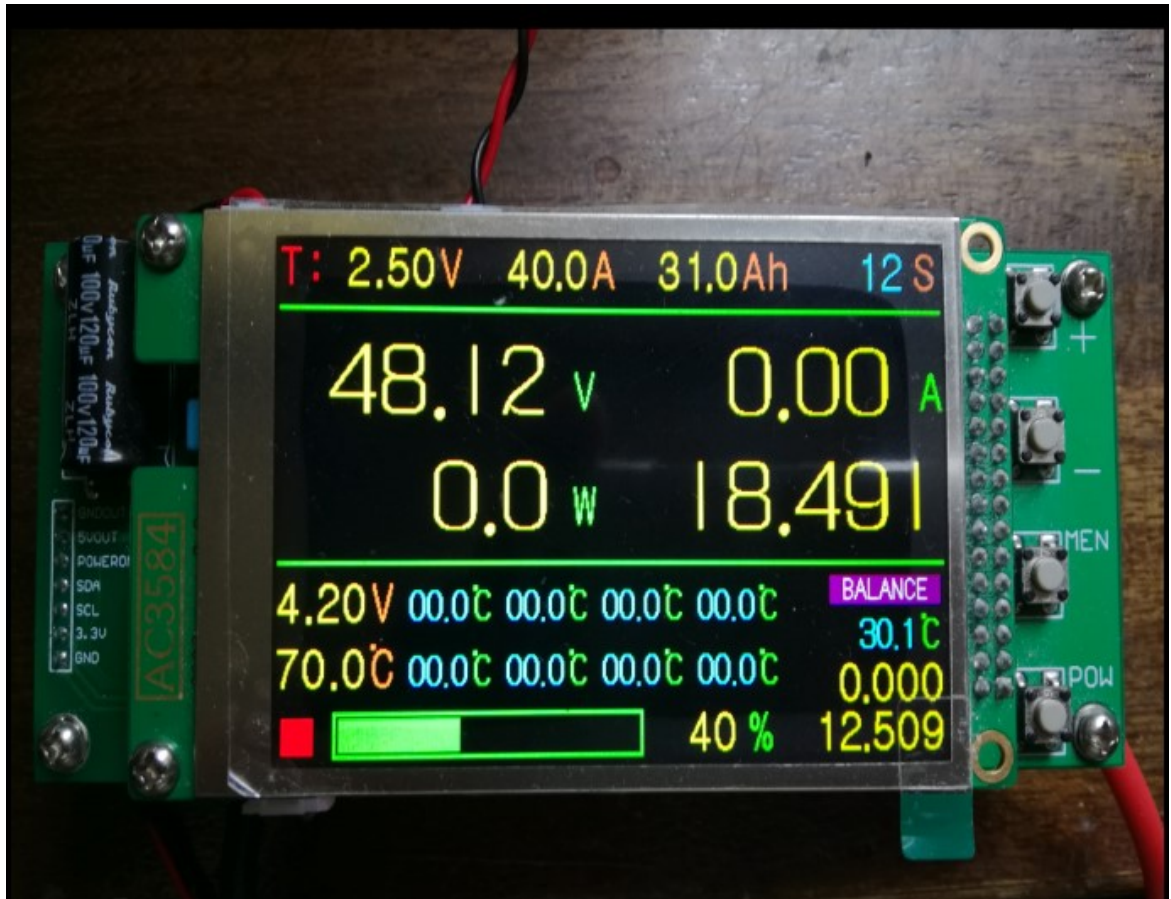
sound will be loud.

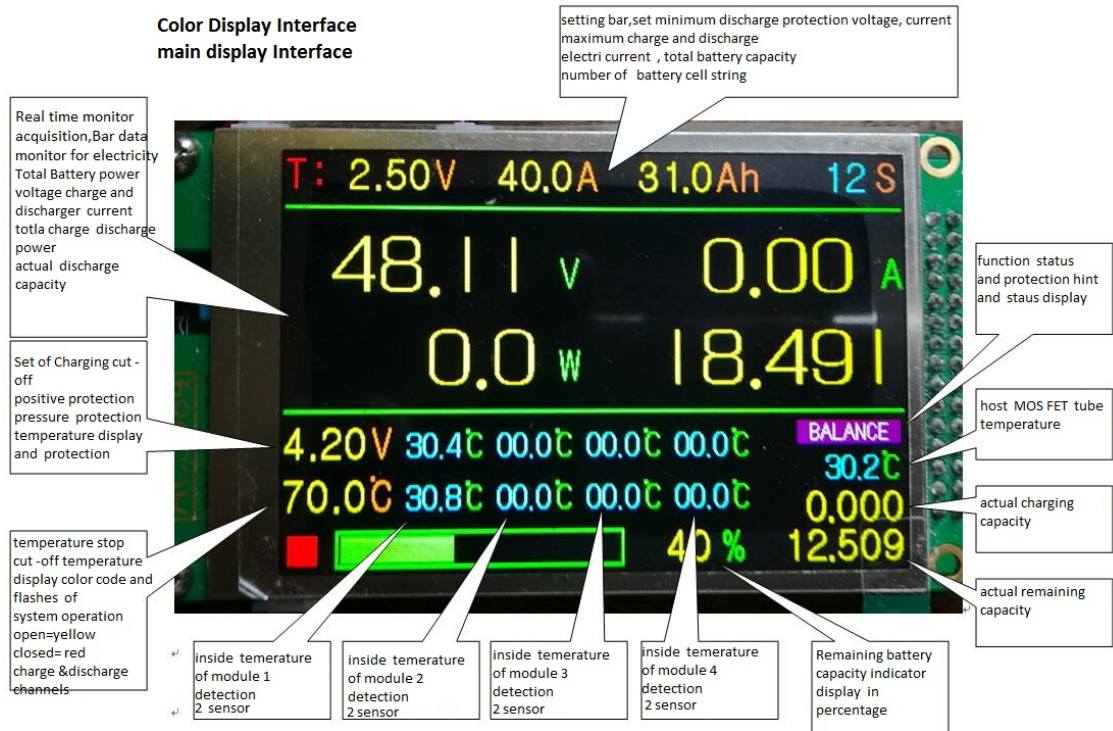
The two layers of the motherboard are superimposed, the size is 135x57mm, and the stack thickness is 45mm without the size of the radiator.

Module size 82x72mm, stack thickness 13.8mm

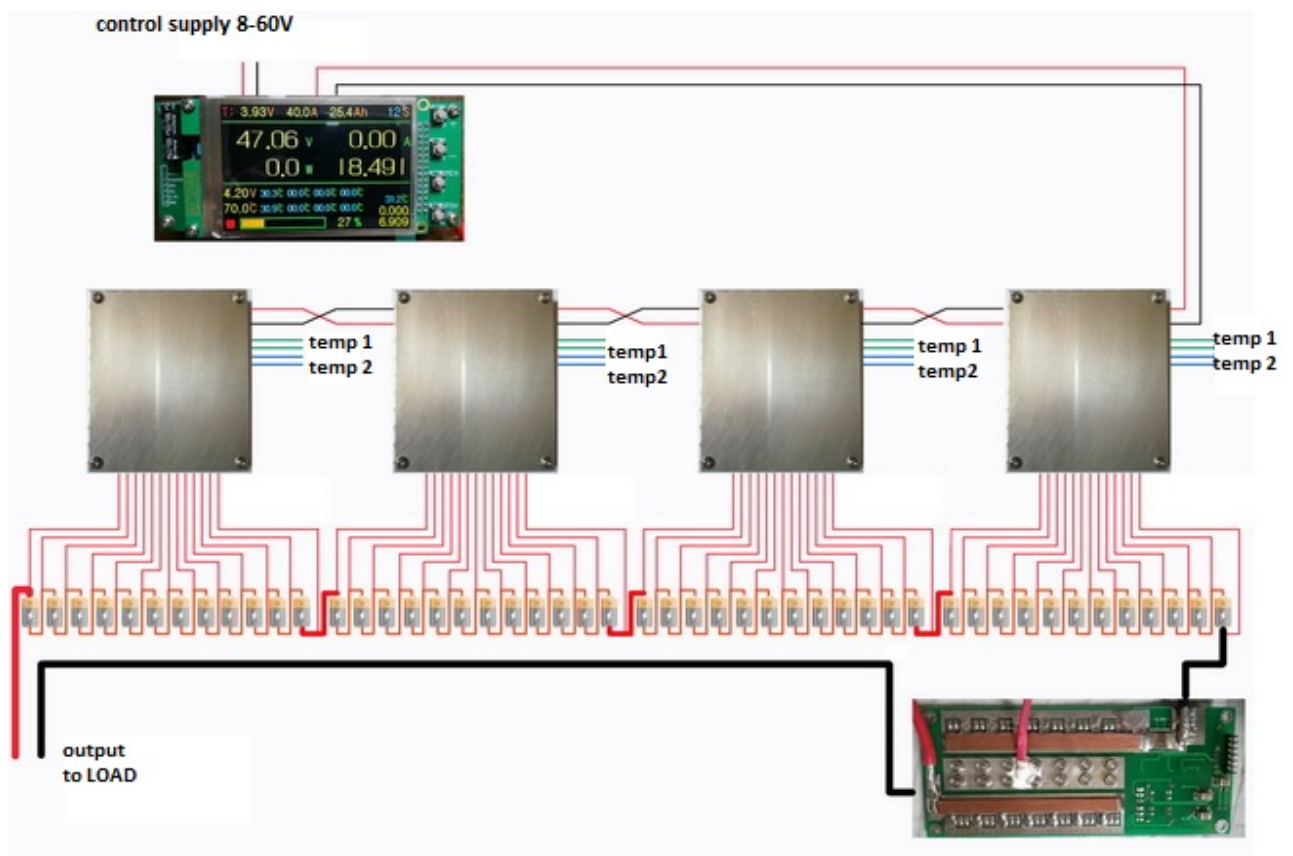
14. Use Bluetooth 4.0 to connect with the mobile phone APP, all parameters are clear at a glance, you can modify the host parameters through the mobile phone, due to the use of Bluetooth 4.0, it can only support Android 4.3 and above operating systems, not for older mobile phones

Note: The battery assembly has certain dangers, especially the multi-string high voltage. To pay attention to safety, you must have professional knowledge in this area to start. I will not bear any responsibility for burns and losses caused by wrong wiring.

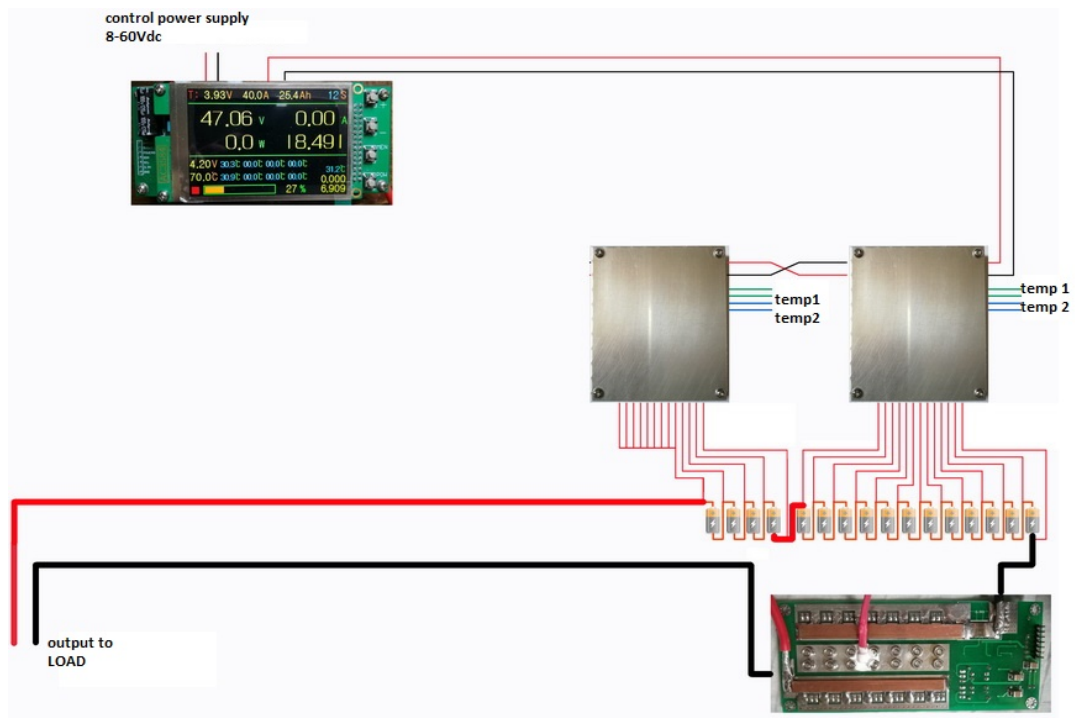




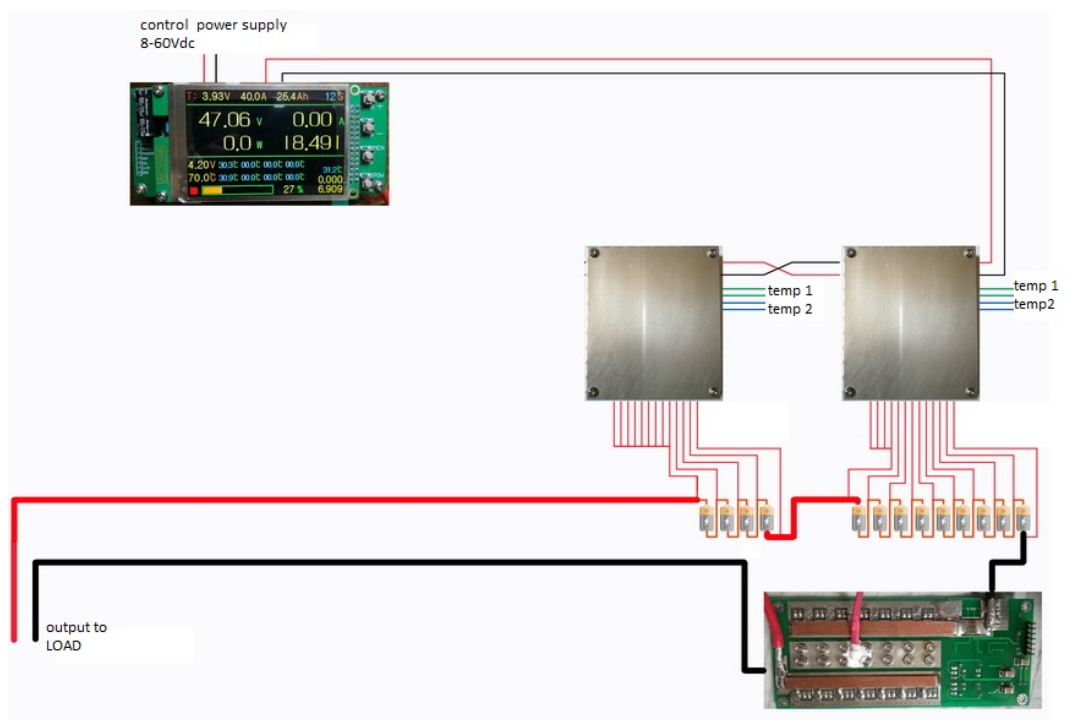
48S DEMO



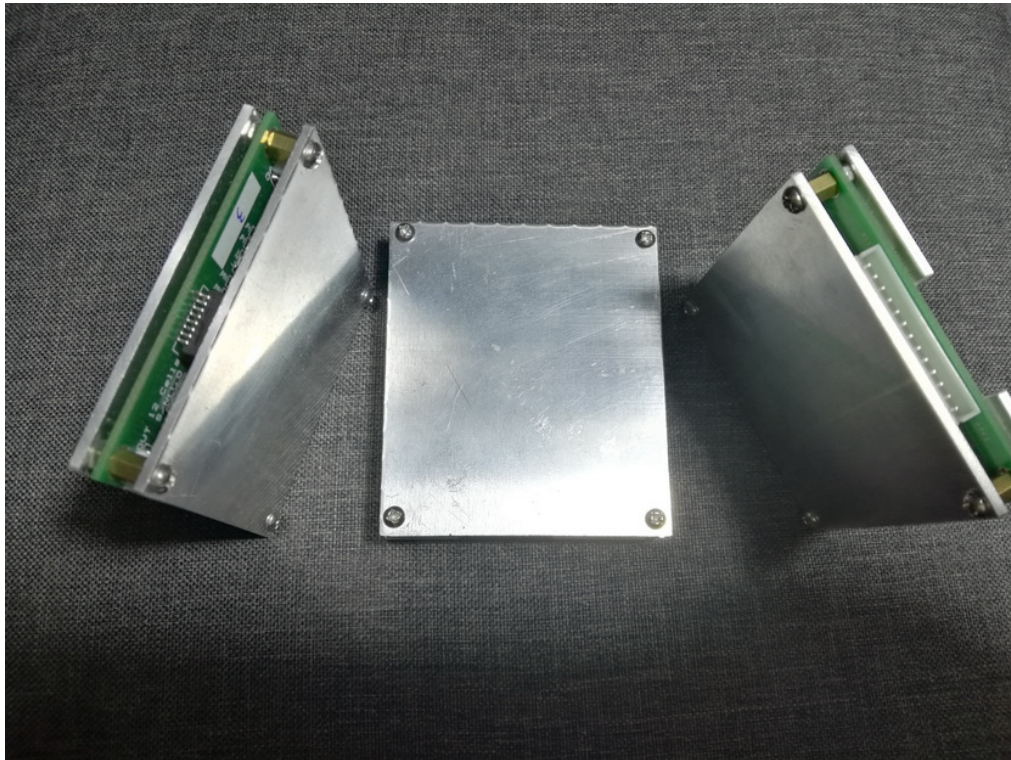
## 16S DEMO



## 13S DEMO



## Data acquisition module



Now, only android APP, no IOS version.  
Have English version.



### Battery Management System

Charging...

Total Voltage **16.06 V**      Total Current **1.01 A**  
Total Power **16.2 W**      Discharge capacity **0.00 AH**



MOS TEMP **32.5 °C**    Charging CAP. **0.18 AH**      **0.20 AH**

Module 1 **31.6 °C**    **31.9 °C** Module 2 **0.0 °C**    **0.0 °C**

Module 3 **0.0 °C**    **0.0 °C** Module 4 **0.0 °C**    **0.0 °C**

【01】	4.016 V	【17】	0.000 V	【33】	0.000 V
【02】	3.954 V	【18】	0.000 V	【34】	0.000 V
【03】	4.117 V	【19】	0.000 V	【35】	0.000 V
【04】	3.968 V	【20】	0.000 V	【36】	0.000 V
【05】	0.000 V	【21】	0.000 V	【37】	0.000 V
【06】	0.000 V	【22】	0.000 V	【38】	0.000 V
【07】	0.000 V	【23】	0.000 V	【39】	0.000 V
【08】	0.000 V	【24】	0.000 V	【40】	0.000 V
【09】	0.000 V	【25】	0.000 V	【41】	0.000 V
【10】	0.000 V	【26】	0.000 V	【42】	0.000 V
【11】	0.000 V	【27】	0.000 V	【43】	0.000 V
【12】	0.000 V	【28】	0.000 V	【44】	0.000 V
【13】	0.000 V	【29】	0.000 V	【45】	0.000 V
【14】	0.000 V	【30】	0.000 V	【46】	0.000 V
【15】	0.000 V	【31】	0.000 V	【47】	0.000 V
【16】	0.000 V	【32】	0.000 V	【48】	0.000 V

Channel

SETUP

Auto Balance



# Battery Management System

Charging...

Project	Machine Parameter	Setup
Discharge cut-off V.	2.50 V	<input type="text"/> Setup
Discharge protection Current	5.0 A	<input type="text"/> Setup
Maximun Battery Cap.	0.2 AH	<input type="text"/> Setup
Total number of battery	4 S	<input type="text"/> Setup
Charging Start V.	4.20 V	<input type="text"/> Setup
Protection Temp.	70.0 °C	<input type="text"/> Setup

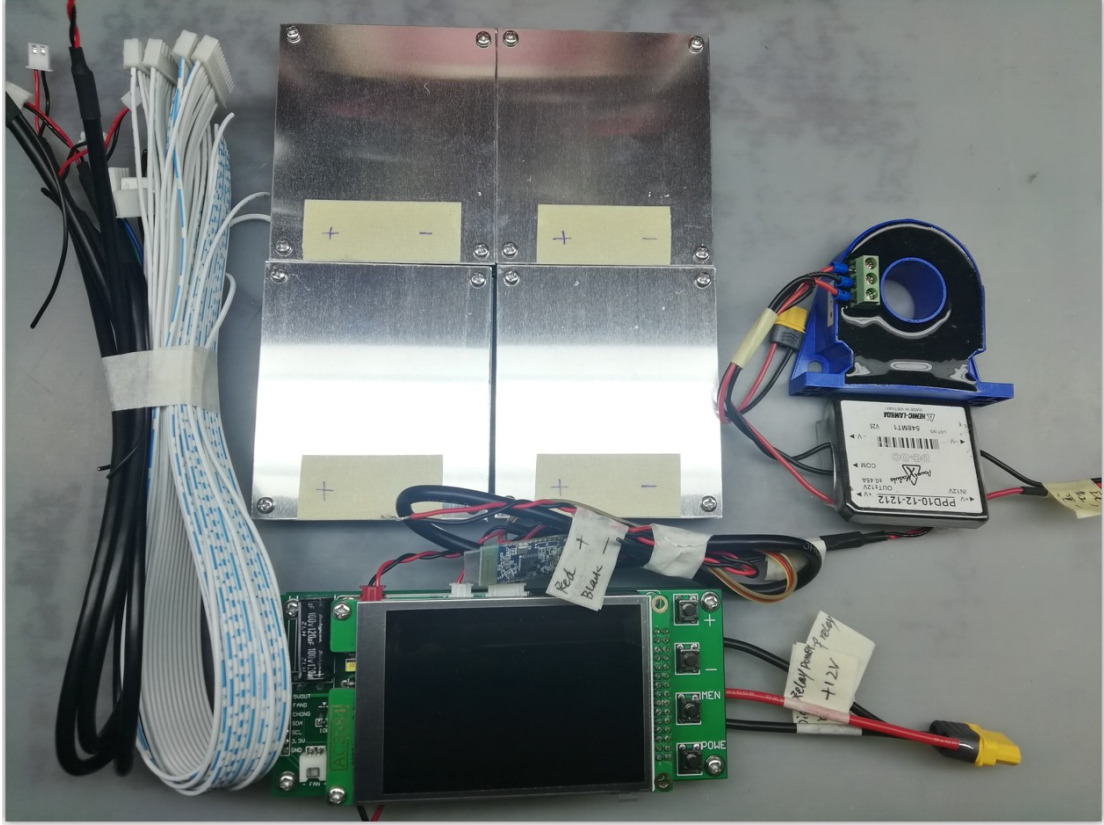
Discharge Cap.

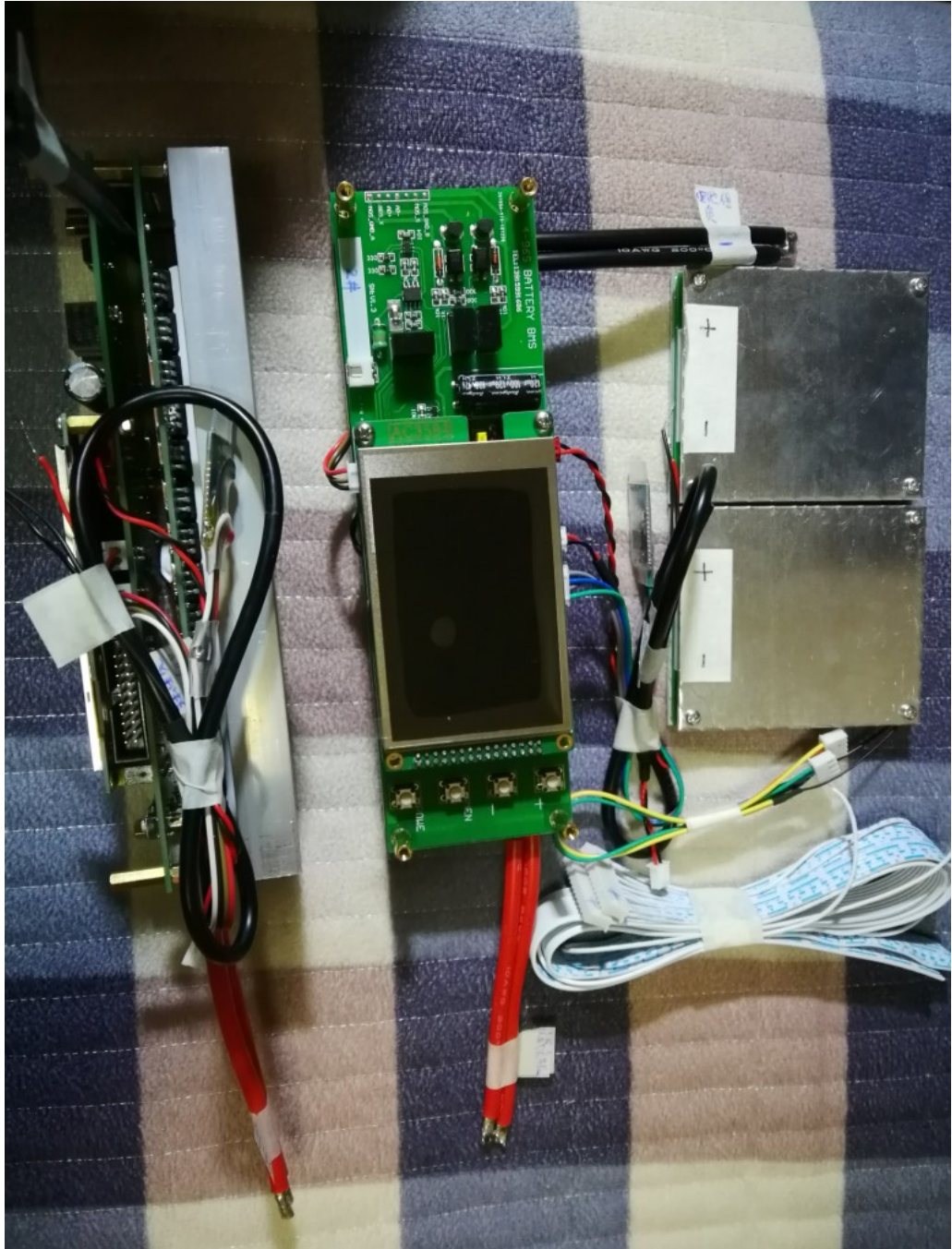
Real-time  
Parameters

Scanning Device













Relay solution, DEMO

