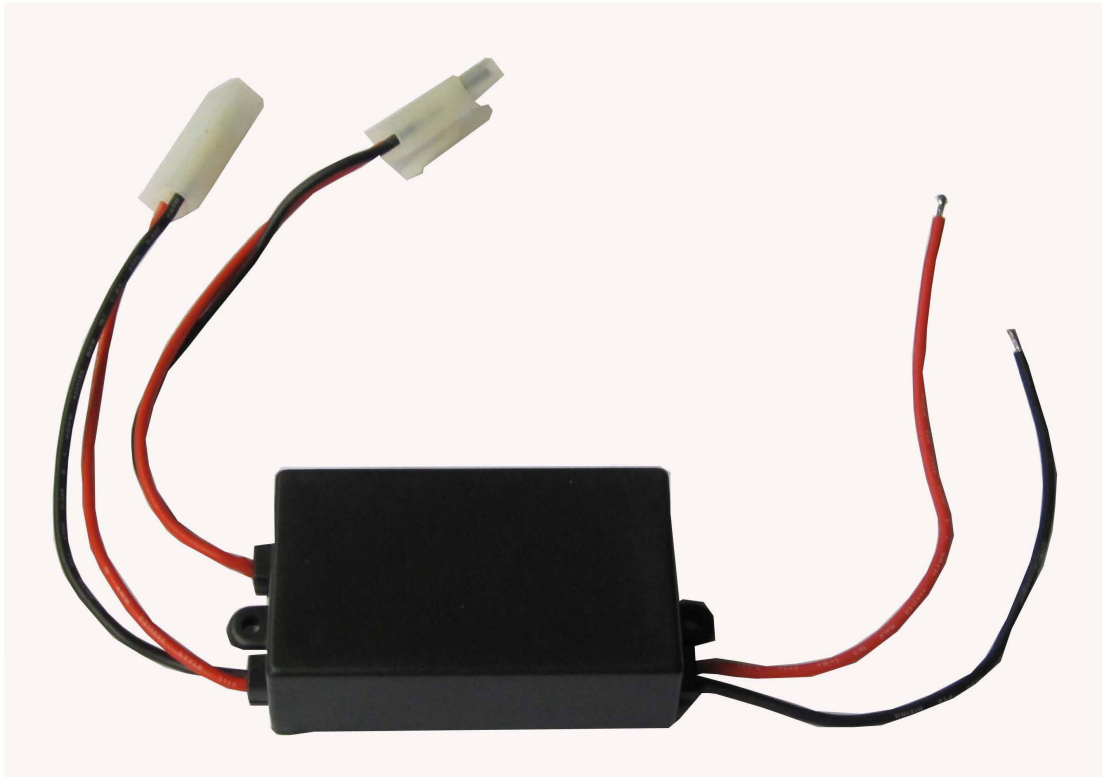


# Specification of balancer

**Product name:** single cell equalizer for lithium battery

**product photo**



## Introduction:

Single cell equalizer for lithium battery, is a mutual energy transferring system working with the way of high-frequency pulse. It is characterized by high efficiency, lower loss and keeping on maintenance of the batteries, activation and conservation batteries really-timely. once it detects any cells' voltage unbalanced, it is able to charge and discharge the batteries via energy transferring. Thus the equalizer makes the power of the batteries among each single cell flow dynamically and finally ensure the balancing of voltage of each cell and sharing the power of all batteries. Finally it helps prolong the lifespan of the battery pack.

## Different ways of balance:

- 1) distributed and centralized type, centralized type wiring is complex, distributed type wiring is simple.
- 2) parallel and serial type, parallel type has no voltage drop, doesn't affect normal use of the battery pack.
- 3) dynamic type and static type, dynamic type balance the batteries voltage all the time within the range of battery working voltage.
- 4) two-way type and One-way type, two-way type use two-way converter, two-way adjust charging and discharging of single cell
- 5) parallel type and progressive type, parallel type balanced, fast, efficient;
- 6) energy transfer type and energy consumption type, Energy transfer Type is to transfer energy to achieve the result of balancing single cells. little loss, less heat.

LGBBM equalizer module adopts distributed ,parallel,two-way,energy transferring type which is the ideal balance solution.Using the latest circuit technology and devices, such as synchronous rectification, soft switches, etc., to achieve high efficiency and high product reliability.

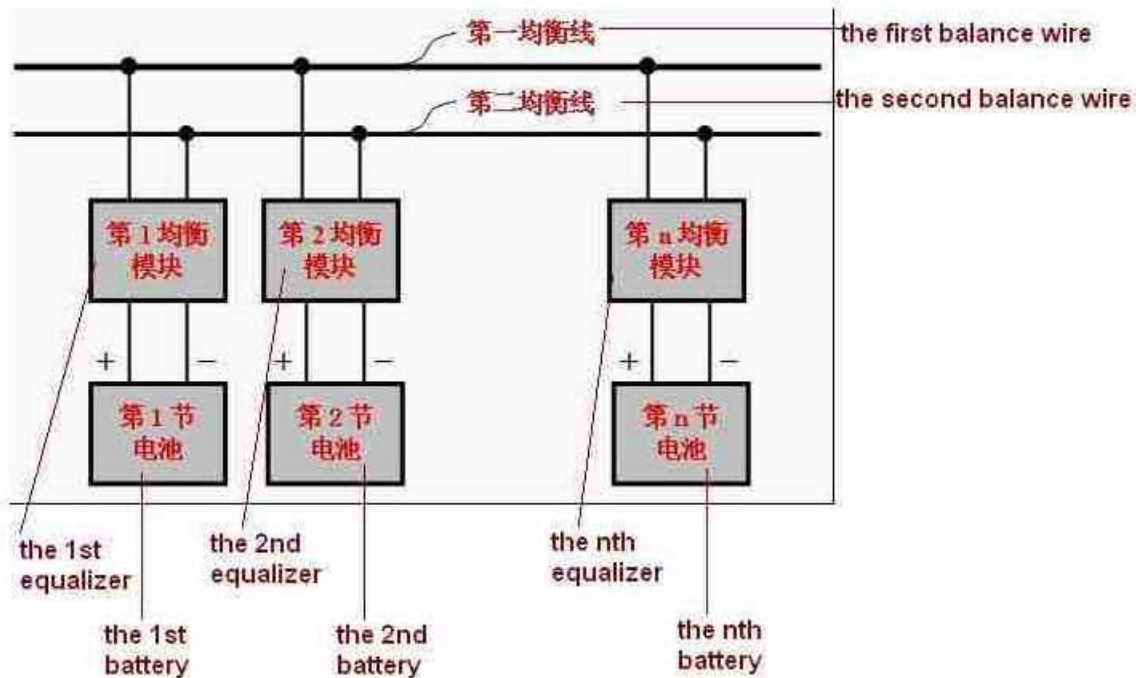
## Functions and features:

- 1)unlimited expansion: no limitation for the number and way of connection of the batteries;
- 2)Simple coordination: coordination group is simple: to allow different models of battery voltage directly with the same group, allows group of cells with some differences in performance;
- 3) dynamic equilibrium: either charge or discharge or static set, balance the batteries automatically.
- 4) parallel balanced: all high-voltage batteries will transfer to all low-voltage batteries;
- 5) no pressure drop in series:the balanced modules are connected in parallel on the battery, battery charge and discharge does not affect the work;
- 6) Power sharing: all single battery charge sharing, maximize the use of battery power the whole group;
- 7) high balance current : the peak current up to 10A, to allow continuous current 6A;
- 8) balanced with high precision: after balancing, the voltage difference of each cell is less than 10mV;
- 9) low loss of energy: when the balance of current is 1A,the efficiency is as high as 94% ;
- 10) wide application :applied for all types and sizes of lithium batteries.

## Technical Parameters

- 1)each module matches one serial of lithium battery
- 2)energy transfer and dynamic way of balance
- 3)maximum balance current can reaches 10A
- 4)to allow long term continuous balance current 6A
- 5)voltage difference of each single cell after balance<10mV
- 6)efficiency>94% when the balance current is 1A
- 7)small in size,high performance with reasonable price
- 8)applied for 50~1000ah lithium batteries of all types
- 9)working temperature:-40~+80℃
- 10)storage temperature:-40~+100℃
- 11)Dimension:80(L)\*38(W)\*21(H)mm

## Wiring



## Application

- 1)power battery: electric car,/bus/scooter/truck/golf cart /boat and so on
- 2)storage battery: storage power station,wind power,solar power and so on
- 3) Communication power: communication base stations, substations, etc.