

## 1.5V Lithium ion rechargeable battery

## **Product Description**

The rechargeable battery is mainly constituted a built-in Lithium ion battery cell, and it fulfills the charging and discharging control management and protection system by the cell. The rechargeable battery's electrode, appearance dimension and discharge voltage corresponds to the IEC 60086-2 technical manual, and it can replace the alkaline battery, Ni-MH rechargeable battery, Nickel-cadmium rechargeable battery and Nickel-zine rechargeable battery with the same specification. The battery is a patented product, and it obtain the patents as follow: ZL201110219892.0, ZL201320588986.X, ZL201320588983.6, ZL201310436748.1 and ZL201310436714.2.

### **Operation introductions**

- 1. The rechargeable battery discharge by 1.5V constant voltage output and it will transfer to 1.1V constant voltage output when the residual capacity is less than 7%. It will automatically cut-off the discharge output when the capacity is close to depleted. When it applies on the electronic products which has a low capacity detection function(let's say a digital camera), these products will prompt when the capacity is lower than 7%.
- 2. The battery in the same specification permits to use together even when they are old and new in pairs (include the non-equal residual capacity). When these pairs are applied on the electronic products which has a low capacity detection function, be noted that it will probably influence the products' ability to sense the battery's residual capacity.
- 3. The rechargeable battery permits a short time(less than 5 seconds) short circuit. This short circuit will not damage the battery's rechargeable ability, but the short circuit current will rise up to 2500mAh, and its temperature will be higher than normal.
- 4. The rechargeable battery must charge with the matched charger. Set a LED on the anode side to instruct the charging state of the rechargeable battery.

### **Charger Operation introductions**

- 1. The charger's input connector model is Micro USB. Mobile phone with the same input connector model can use the rechargeable battery to charge.
- 2. The charger has a built-in charging protection circuit, it will prevent to damage the rechargeable battery when it connect to over voltage phone charge connector. It also has a power indicator LED, and the LED flashes up when it's electrify.
- 3. When the charger is electrified, the battery's anode side LED will indicate the rechargeable battery's charging state:
  - OLED flash up: represent the rechargeable battery is charging;



- **©**LED cut-off: represent the rechargeable battery has full charged;
  - **©**LED intermittently light on: represent the charging abnormal warning
- 4. If the charging battery anode side's LED appear the intermittently light on state, the reason may be as follow:

If you charge two or more batteries together, and one or more batteries appear intermittently light on, then you can leave just one battery to charge and observe if it turns to flash up state, that means the battery is a good one. The reason why occurs intermittently light on when two or more batteries charge together is that the charger's power is two low. By using a charger with higher output current will solve this problem.

If there's just one battery's LED appear intermittently light on, that may probably the charger's output voltage is too low or the output current is too small. If charger's output voltage is between 4.7V to 5.5V, and the output current is more than 100mAh, that will means the Lithium ion rechargeable battery is not good, you need to contact the battery manufacturer immediately.

# **Product Specification Model**

Product Model: RG5G1500

Product Specification: AA(international R6)

Typical capacity: 1500mAh Typical energy: 2200mAh Typical output voltage: 5V+/- 0.4V 530mAh Max charging current: ≤2h Complete charging time: Storage time (After full charge): 6 month Cycle time: ≥500cycles -10 °C to 35 °C Operation temperature: -20 °C to 50 °C Storage temperature:

#### **Cautions**

- a. The rechargeable battery must use the matched charger
- b. The rechargeable battery must put on the place where children can not reach
- c. When install the battery into the electrical machine, keep in mind to the anode and cathode
  - d. Please do not disassemble the rechargeable battery or store on above 50  $\,^\circ\mathrm{C}$
- e. Please keep in full charge if long time no use the rechargeable battery, but do not store above the storage time.
  - f. Please contact the battery manufacturer when occur any problems.