



# **Battery introduction and maintenance**

## 1. The composition of the battery

- (1) A battery consists of three parts:cell, protection circuit, and housing;
- (2) The cell factory produces cell and the battery company assembles cell, protection circuit and housing together.

## 2. Testing standards

#### 2.1 The battery company will perform the following tests after assembling the finished battery

- (1) 8-hour high-temperature aging troubleshooting defective: check for leaking bulging phenomenon;
- (2) Simultaneous detection of internal resistance and other indicators;
- (3) Appearance detection:

According to GB/T18287-2014 testing standards for the battery industry, the remaining capacity of the battery after 300 cycles is  $\geq$ 85%. After the battery is tested for 300 cycles according to the regulations, the appearance of the battery shall be free from obvious deformation, corrosion, smoke or explosion. The commonly used criterion for judgment without obvious deformation is that the thickness does not change by more than 8%. When the battery is used more than 300 times, the probability of bulging will increase dramatically and it is recommended to replace it.

#### 2.2 Our quality control:

- (1) IQC conducts spot checks on the appearance, size, internal resistance and voltage of each batch of batteries;
- (2) IQC extracts some proportion of batteries from each batch of batteries for cycle aging test;
- (3) 100% inspection of battery internal resistance, voltage and power during packaging; The defective rate of batteries is about 1-2‰.

### 3. Battery maintenance

- (1) According to UN38.3 regulations on air transportation, the battery power to be transported needs to be <30% capacity; therefore, the factory battery is not fully charged, otherwise it cannot be transported. It is recommended to charge the device or battery first after you get the cargo, and charge the device before using for the first time;
- (2) Use the original charger and USB cable to charge the device;
- (3) Please charge the battery in time before the battery running out to prevent over-discharge;
- (4) If the battery is not used for a long time, please charge it every three months, and keep battery at about 50%;
- (5) After charging is completed, please disconnect the charge in time, and do not continue to charge for a long time what will can overcharge;
- (6) Do not charge the device during use;
- (7) Do not place the device and battery in harsh environments such as high temperature or corrosive substances;
- (8) If the battery is bulging, please do not continue to use it and replace it with a new battery;
- (9) Batteries are consumables. As the charging times increase, the actual capacity of the battery will decrease. When the battery life is exhausted (battery life is 300 -500 charges and discharges), we recommend to replace with a new battery.