



Warranty Certificate

To All Of Our Respected Clients:

We (Shenzhen CSPower Battery Tech Co.,Ltd.) is a battery factory who owns 15 years of history of production battery plates and batteries. so far we have series different as below:

- CS12 series: 12V SLA AGM battery with 5-10 years design float life;
- CL2 series: 2V Deep Cycle AGM battery with 10-15 years design float life;
- FT12 series: 12V front terminal AGM battery with 8-10 years design float life;
- HTD6/12 series: 6V/12V Deep Cycle AGM battery with 10-15 years design float life;
- CG12 series: 12V durable GEL battery with 10-15 years design float life;
- FL12 series: 12V front terminal Gel battery with 10-15 years design float life;
- CG2 series: 2V Deep Cycle GEL battery with 15-20 years design float life;
- HTL12 series: 2V Deep cycle Gel battery with 15-20 years design float life;
- OPzV2 series: 2V Gel tubular plates battery with 20-25 years design float life;

Basing on different design float life, we provide different warranty by years:

- CS12 series: 1-3 years warranty by floating use at 25 degree
- CL2 series: 3 years warranty by floating use at 25 degree
- FT12 series: 2-3 years warranty by floating use at 25 degree
- HTD6/12 series: 2-3 years warranty by floating use at 25 degree
- CG12 series: 2-3 years warranty by floating use at 25 degree
- FL12 series: 2-3 years warranty by floating use at 25 degree
- CG2 series: 3 years warranty by floating use at 30 degree
- HTL12 series: 3 years warranty by floating use at 30 degree
- OPzV2 series: 5 years warranty by floating use at 30 degree

During above mentioned warranty period, if you find battery has any factory quality problem which leads battery can not give correct performance, please take photo to show us: 1. Battery code 2. What is the problem of the battery. We will give replacement generally in next of your shipment (in special situation, we can arrange ship them separately as soon as possible).

But following situations can show us that fault of battery comes from incorrect usage instead of factory fault. We will not give replacement with following situations:

1. Over Discharge:

The reasons of resulting in over discharge :

- A, The voltage of the battery charging system was set too low or fails, eg : when floating use, the voltage is lower than 13.2V, the voltage is less than 14V when cycling use, etc. ;
- B, The voltage of discharge protection for the battery load system was set too low, or there is a fault , for example: the discharge voltage is lower than the 10V, etc. , still no deadline discharge;
- C, In the solar systems, the power of the solar charging panels is configured not enough (or no supplemental of wind , etc.) ,or haven't do recharge for the battery after discharge every time.

How to judge over discharge of battery:

open voltage of this fault battery is significantly low, generally less than 12V .



Step one: use fixed 0.1C current charging this fault battery for 12 ~ 15hrs , the battery voltage returns to normal , then it means this battery was over discharge and now it comes back to normal and can be used continually.

Step two: if even after step one, this fault battery does not come back. Then please try to open top cover of one piece of fault battery (by professional person) and check voltage of each cell with a multimeter. If each cell's voltage are relatively consistent , there is no any one or two cell's voltage is significantly lower. Then it still means this battery was over discharged but it can not come back to normal.

2. Over Charge:

The reasons of resulting in over charge :

The voltage of the battery charging system was set too high or faults , eg : when floating use, the voltage is higher than 13.8V, and the voltage is higher than 14.9V when cycling use, etc.

How to judge over charge of the battery: open voltage of fault battery is significantly high (but there are a few cases, the voltage is low).

Step one: Try to open top cover of one piece fault battery (by professional person), check inside of cell, you will find every cell batteries are relatively dry, check with a multimeter, you can found that every single cell voltage are also more consistent.

Step two: try to fill in right amount of distilled water into each single cell (by professional person), then recharge the battery, battery voltage comes back to normal and it can give normal performance.

3. Improper operation:

Resulting in man-made damage to the battery, eg : battery casing damaged by dropping , etc. , over tighten the screws when wiring , causing terminals ignition when using the battery , etc. ;

