FIRSTPOWER TECHNOLOGY CO., LTD



RmL,M&N,15/F,Building A,Fortune Plaza,No. 7002 ShenNan Blvd,ShenZhen,

518034 China.

Tel: +86-755-83021387 Fax: +86-755-83021927

BATTERY LIFE CERTIFICATE

PRODUCT LFP12100AFTHT 12V100AH VRLA BATTERIES WITH DESIGNED FLOATING APPLICATION OF 14 YEARS AT 25 CENTIGRADE DEGRAEES

Note :

1. The positive plates dimensions are 228*120*3.1mm

The negative plates dimensions are 228*120*2.0mm

The material of positive plate are PbO₂.

The material of negative plates is Pb.

The grid of positive plate is Pb-Ca(0.08%) -Sn(0.9%)-Al(0.025%)alloy grids.

The grid of negative plate is Pb-Ca(0.1%)-Sn(0.25%)-Al(0.025%) alloy grids.

2. This battery is with dimensions of 395*110*286mm at present .

Floating life at temperature (60℃)

Battery model : LFP12100AFTHT (Gel, 12V100AH)

Method: The battery will be subject to charge at constant voltage (2.3V/cell)

under the ambient temperature at $140^\circ F(60^\circ {\rm C})$.Then check the capacity

every 3 weeks (3h current discharge up to 1.70V/cell at $77^{\circ}F$,25 $^{\circ}C$) 3 weeks are equivalent to one cycle .

Standard: The floating life will be ended if the residual capacity less than 80% of the nominal capacity(C3).

Note : One cycle is equivalent to One year float life at 25° C.

Test results:

| Cycle | LFP12100AFT HT (12V100AH) |
|---------|---------------------------|
| | Discharge time |
| Initial | 3h30min |
| 1 | 3h33min |
| 2 | 3h34min |
| 3 | 3h31min |
| 4 | 3h28min |
| 5 | 3h25min |
| 6 | 3h20min |
| 7 | 3h16min |
| 8 | 3h09min |
| 9 | 3h05min |
| 10 | 3h01min |
| 11 | 2h55min |
| 12 | 2h50min |
| 13 | 2h44min |
| 14 | 2h35min |
| 15 | |
| Results | 14 cycles |

Conclusion :

LFP12100AFTHT battery can operate at high temperatures(140°F (60°C)

for floating charge over 14 cycles, it is equal to battery floating life is 14 years

at 25℃(equal to 7years at 35℃)



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