

Gel AGM Battery

100Ah



Product Code: **FSBHG100**
Barcode: **6002844066932**



APPLICATIONS

- Ideal for use with solar power systems (Household systems; solar traffic lights; emergency lighting system; inverter; moveable energy storage system; UPS for high frequency use.)

Solar Hybrid Gel Battery

The Solar Hybrid Gel Battery has gel electrolytes which offers a special fibre separator between the plates. This innovative combination prevents acid stratification, improving the life cycle of the battery.

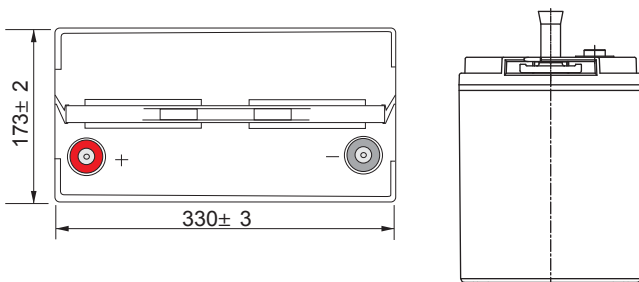
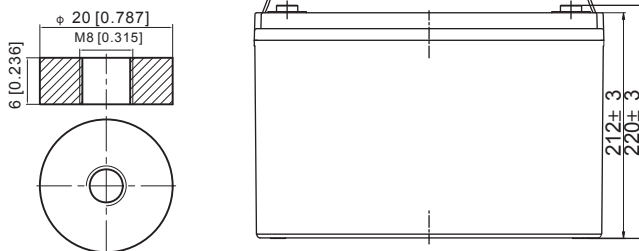
TECHNICAL INFORMATION

Specifications

| | |
|----------------------------------|--|
| Nominal Voltage | 12V |
| Nominal Capacity(10HR) | 100.0AH |
| Terminal | T11(M8,Torque11~14.7N*m) |
| Container Material | ABS |
| Rated Capacity | 105.0 AH/5.36A (20hr, 1.80V/Cell,25 °C) 100.0 AH/10.0A (10hr,1.80V/Cell,25 °C) 89.0 AH/17.8A (5hr,1.75V/Cell,25 °C) 77.1 AH/25.7A (3hr,1.75V/Cell,25 °C) 64.6 AH/64.6A (1hr,1.60V/Cell,25 °C) |
| Max. Discharge Current | 1000A (5s) |
| Internal Resistance | Approx 4.9mΩ |
| Operating Temp.Range | Discharge : -15~50 °C Charge : 0~40 °C Storage : -15~40 °C |
| Nominal Operating Temp. Range | 25±3 °C |
| Cycle Use | Initial charging current less than 20A voltage14.4V~15.0V at 25 °C temp. coefficient -30mV/ °C |
| Standby Use | No limit on initial charging current voltage 13.5V~13.8V at 25 °C temp. coefficient -20mV/ °C |
| Capacity affected by Temperature | 40 °C 103% 25 °C 100% 0 °C 86% |
| Self Discharge | Leoch LPC series batteries may be stored for up to 6 months at 25 °C and then a freshening charge is required. For higher temperatures the time interval will be shorter. |

T11 Terminal

Unit: mm [inches]



THE PACKAGE CONTENT



1 x Gel AGM Battery

PACKAGE DIMENSIONS



| Height (mm) | Length (mm) | Width (mm) | Weight (kg) |
|-------------|-------------|------------|-------------|
| 274 | 356 | 198 | 31,1 |

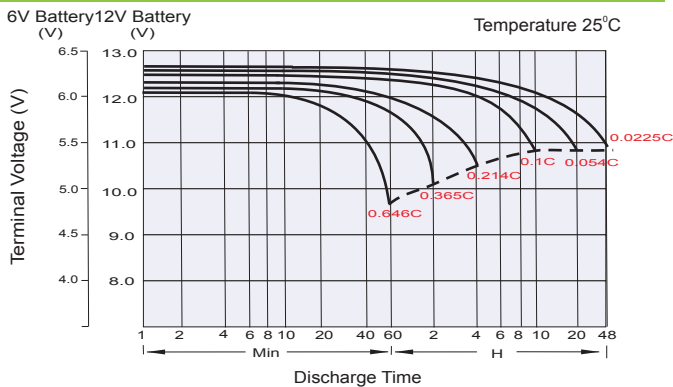
Constant Current Discharge (Amperes) at 25 °C

| F.V/Time | 1H | 2H | 3H | 4H | 5H | 6H | 8H | 10H | 20H | 48H | 72H | 100H | 120H |
|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1.85V/Cell | 52.5 | 29.9 | 23.8 | 19.4 | 16.6 | 15.0 | 11.7 | 9.39 | 4.93 | 2.11 | 1.45 | 1.08 | 0.94 |
| 1.80V/Cell | 55.6 | 31.5 | 25.0 | 20.3 | 17.2 | 15.5 | 12.0 | 10.0 | 5.25 | 2.25 | 1.55 | 1.15 | 1.00 |
| 1.75V/Cell | 59.0 | 33.0 | 25.7 | 21.1 | 17.8 | 15.9 | 12.2 | 10.2 | 5.36 | 2.30 | 1.58 | 1.17 | 1.02 |
| 1.70V/Cell | 61.7 | 34.2 | 26.5 | 21.6 | 18.1 | 16.2 | 12.4 | 10.3 | 5.41 | 2.32 | 1.60 | 1.18 | 1.03 |
| 1.67V/Cell | 63.9 | 35.2 | 27.3 | 22.1 | 18.4 | 16.5 | 12.6 | 10.4 | 5.46 | 2.34 | 1.61 | 1.20 | 1.04 |
| 1.60V/Cell | 64.6 | 35.8 | 27.8 | 22.4 | 18.7 | 16.7 | 12.7 | 10.5 | 5.51 | 2.36 | 1.63 | 1.21 | 1.05 |

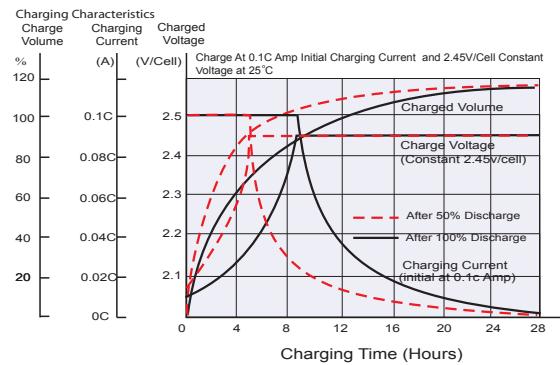
Constant Power Discharge (Watts/cell) at 25 °C

| F.V/Time | 1H | 2H | 3H | 4H | 5H | 6H | 8H | 10H | 20H | 48H | 72H | 100H | 120H |
|------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1.85V/Cell | 102.1 | 58.5 | 46.7 | 38.1 | 32.7 | 29.5 | 23.1 | 18.6 | 9.80 | 4.23 | 2.92 | 2.18 | 1.90 |
| 1.80V/Cell | 107.4 | 61.3 | 48.8 | 39.8 | 33.8 | 30.4 | 23.7 | 19.8 | 10.4 | 4.49 | 3.11 | 2.38 | 2.07 |
| 1.75V/Cell | 113.1 | 63.8 | 50.0 | 41.2 | 34.8 | 31.3 | 24.0 | 20.1 | 10.6 | 4.58 | 3.17 | 2.43 | 2.11 |
| 1.70V/Cell | 117.5 | 65.8 | 51.3 | 42.0 | 35.3 | 31.7 | 24.4 | 20.3 | 10.7 | 4.62 | 3.20 | 2.44 | 2.13 |
| 1.67V/Cell | 121.1 | 67.6 | 52.7 | 42.9 | 35.8 | 32.2 | 24.7 | 20.5 | 10.8 | 4.66 | 3.22 | 2.47 | 2.15 |
| 1.60V/Cell | 121.3 | 68.2 | 53.3 | 43.2 | 36.2 | 32.5 | 24.8 | 20.6 | 10.9 | 4.70 | 3.25 | 2.49 | 2.17 |

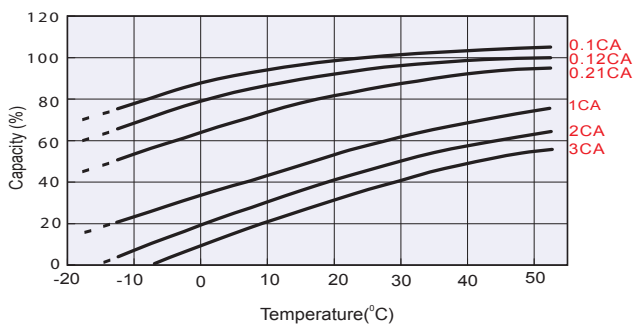
Discharge Characteristics



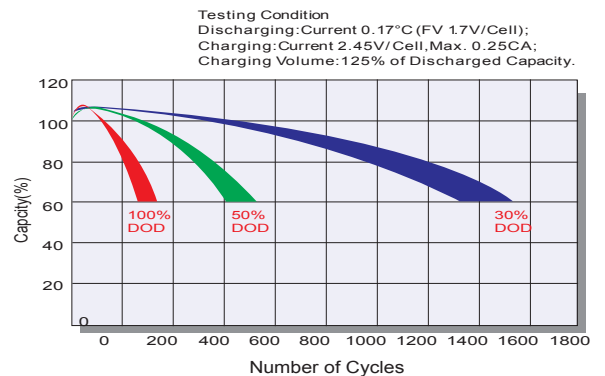
Charging Characteristics (Cycle Use)



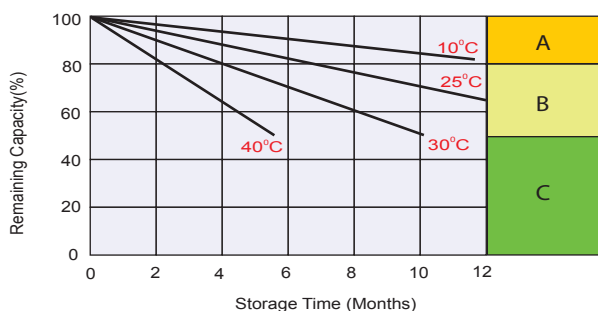
Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 - Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.
 - Charged for above 20 hours at limited current 0.25CA and constant volatge 2.45V/cell.
 - Charged for 8~10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.