

### DC SERIES

DC (Deep cycle) Series batteries are designed for deep discharge application, with special chemical formula for plates active paste material, slightly stronger electrolyte and low temperature design, which can withstand repeated deep cyclic application, such as Solar Energy System, Golf Trolley, Electric

### Application

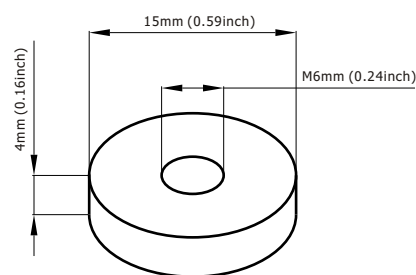
- Solar Energy System
- Golf Cars and Buggies
- Electric Powered Vehicles
- Wheel Chairs
- Power Tools
- Electric Powered Toys
- Control System
- Vacuum Cleaners
- Medical Equipments
- UPS

### General Features

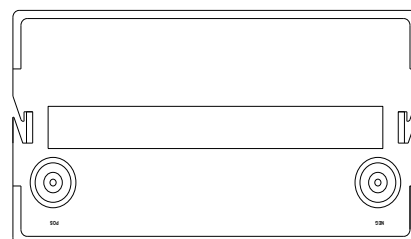
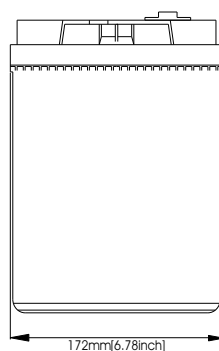
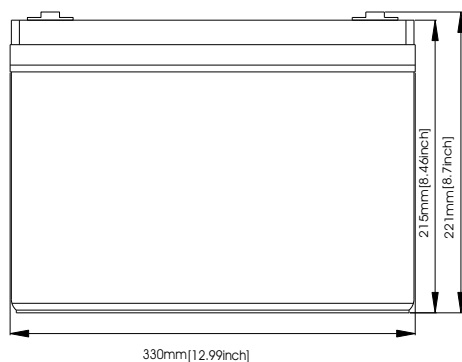
- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers(UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof.
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexibility design for multiple install positions.

### Construction

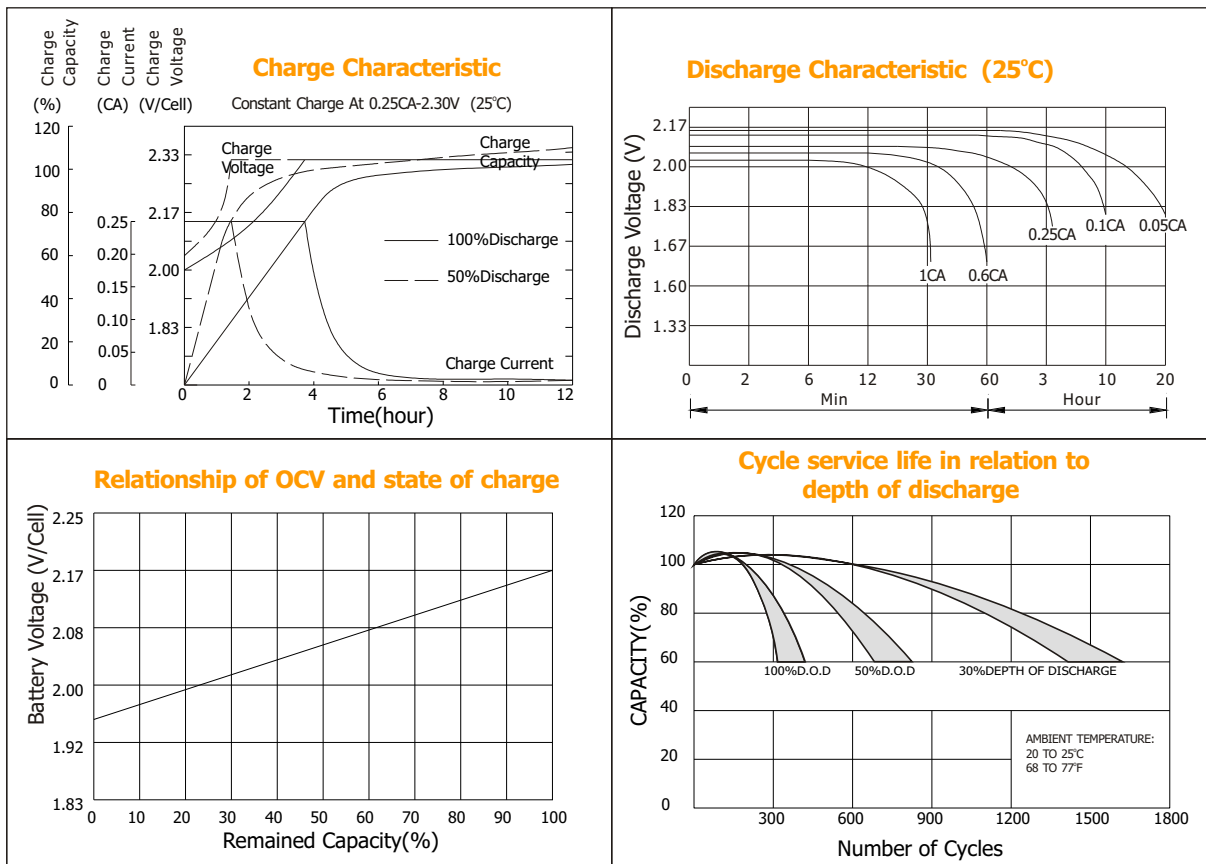
- Component .....Raw material
- Positive .....Lead dioxide
- Negative .....Lead
- Container .....ABS
- Cover .....ABS
- Sealant .....Epoxy Resin
- Safety valve ....EPDR
- Terminal .....Copper
- Separator .....Fibre glass
- Electrolyte .....Sulfuric acid



Terminal Dimensions



| Battery Model                    | DC 12-100                                   |                 |                       |                |
|----------------------------------|---------------------------------------------|-----------------|-----------------------|----------------|
| Designed Cycle Life              | > 350 cycles @ -0.5CA to 9.6V               |                 |                       |                |
| Capacity(25°C)                   | 20HR(5.04A,1.75V)                           | 10HR(10A,1.75V) | 5HR(16.5A,1.75V)      | 1HR(62A,1.75V) |
|                                  | 101AH                                       | 100AH           | 82.5AH                | 62AH           |
| Dimensions                       | Length                                      | Width           | Height                | Total Height   |
|                                  | 330mm(12.99inch)                            | 172mm(6.77inch) | 215mm(8.46inch)       | 221mm(8.7inch) |
| Approx. Weight                   | 31Kg (68.36 lbs)                            |                 |                       |                |
| Internal Resistance              | Full charged at 25°C: 0.005 Ohm             |                 |                       |                |
| Self Discharge                   | 3% of capacity declined per month at (25°C) |                 |                       |                |
| Capacity Affected by Temp.(20HR) | 40°C                                        | 25°C            | 0°C                   | -15°C          |
|                                  | 102%                                        | 100%            | 85%                   | 65%            |
| Charge Voltage(25°C)             | Cycle use                                   |                 | Float use             |                |
|                                  | 14.4-15V(-30mV/ °C), max. Current: 25A      |                 | 13.6-13.8V(-20mV/ °C) |                |



## Constant current discharge ratings-amperes at 25°C

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR  | 3HR  | 5HR  | 10HR | 20HR |
|----------|------|-------|-------|-------|------|------|------|------|------|
| 1.60V    | 437  | 272   | 205   | 125   | 72.5 | 31.8 | 19.4 | 10.6 | 5.72 |
| 1.67V    | 410  | 258   | 197   | 120   | 71.5 | 30.6 | 19.0 | 10.5 | 5.52 |
| 1.70V    | 376  | 249   | 193   | 109   | 69.4 | 28.6 | 18.6 | 10.4 | 5.44 |
| 1.75V    | 369  | 241   | 187   | 103   | 66.1 | 27.6 | 18.2 | 10.4 | 5.29 |
| 1.80V    | 330  | 230   | 169   | 95.8  | 61.9 | 26.5 | 17.1 | 10.2 | 5.15 |
| 1.85V    | 291  | 219   | 152   | 88.1  | 57.7 | 25.6 | 16.0 | 10.1 | 5.01 |

## Constant power discharge ratings-watts at 25°C

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 3HR  | 5HR  | 10HR | 20HR |
|----------|------|-------|-------|-------|-----|------|------|------|------|
| 1.60V    | 767  | 491   | 375   | 225   | 131 | 56.4 | 32.9 | 21.8 | 11.4 |
| 1.67V    | 740  | 479   | 370   | 221   | 130 | 54.7 | 32.7 | 21.6 | 11.0 |
| 1.70V    | 697  | 474   | 367   | 207   | 128 | 52.2 | 32.3 | 21.5 | 10.9 |
| 1.75V    | 701  | 473   | 364   | 201   | 125 | 51.0 | 32.0 | 21.2 | 10.6 |
| 1.80V    | 642  | 466   | 337   | 191   | 118 | 49.5 | 31.0 | 20.9 | 10.5 |
| 1.85V    | 582  | 442   | 306   | 179   | 111 | 48.0 | 30.0 | 20.5 | 10.3 |

