

## Deep Cycle Long Life AGM Battery

### DC2-800

CSBattery DC series deep cycle long life VRLA AGM battery uses a different chemistry additives in the positive plates and special AGM separators, The DC series features 70% higher cyclic life with 15 years of float life when compared to the standard Duration range. This series is highly suited for very unreliable power applications requiring the batteries to provide extra cyclic life performance such as PV system applications, small RE systems and electric vehicles.

2V  
800Ah

AGM  
Technology

Deep  
Cycle



COMPLIED STANDARDS



### Applications

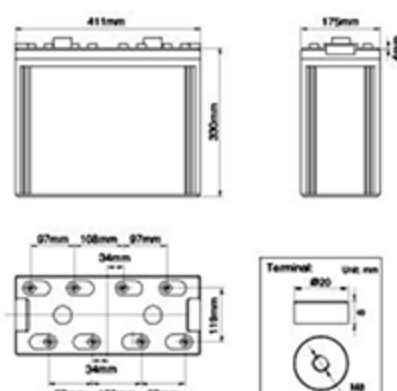
- Solar Systems
- Wheel chair, Golf Cart
- Telecom systems
- Cable TV Systems
- Emergency Power System

### General Features

- Thicker plate with high Tin low Calcium alloy
- High Reliability and Good Quality
- Deep Discharge Recovery
- High Power Density
- Longer Service Life, in both Float or Cyclic

### Dimensions & Weight

|                       |            |
|-----------------------|------------|
| Length(mm/inch)       | 411/16.18  |
| Width(mm/inch)        | 174/6.85   |
| Height(mm/inch)       | 330/13     |
| Total Height(mm/inch) | 365/14.4   |
| Weight(kg/lbs)(±3%)   | 51.6/113.8 |



### Technical Specifications

|  |                           |   |
|--|---------------------------|---|
| Nominal Voltage                                  |                           | 2V(1 cell per unit)   |
| Design Floating Life @25°C                       |                           | 15 Years  |
| Nominal Capacity @25°C(10 hour rate@80.0A, 1.8V) |                           | 800Ah   |
| Capacity @25°C                                   | 20hour rate (42.4A, 1.8V) | 848Ah   |
|  | 5 hour rate (141A, 1.75V) | 705Ah   |
|  | 1 hour rate (484A, 1.6V)  | 484Ah   |
| Internal Resistance                              | Full Charged Battery@25°C | ≤0.26mΩ   |
| Ambient Temperature                              | Discharge                 | -15°C~45°C  |
|  | Charge                    | -15°C~45°C  |
|  | Storage                   | -15°C~45°C  |
| Max. Discharge Current@25°C                      |                           | 1600A(5s)   |
| Capacity affected by Temperature (10 hour)       | 40°C                      | 105%  |
|  | 25°C                      | 100%  |
|  | 0°C                       | 85%   |
|  | -15°C                     | 65%   |
| Self-Discharge@25°C per Month                    |                           | 3%  |
| Charge (Constant Voltage) @25°C                  | Standby Use               | Initial Charging Current Less than 120A<br>Voltage 2.23-2.27V |
|  | Cycle Use                 | Initial Charging Current Less than 120A<br>Voltage 2.33-2.37V |

### Battery Discharge Table

#### Discharge Constant Current per Cell (Amperes at 25° C)

| F.V/Time | 15min | 30min | 45min | 1h  | 2h  | 3h  | 5h  | 8h | 10h  | 20h  |
|----------|-------|-------|-------|-----|-----|-----|-----|----|------|------|
| 1.60V    | 1197  | 792   | 590   | 484 | 308 | 220 | 150 | 99 | 88.0 | 46.6 |
| 1.65V    | 1175  | 778   | 579   | 475 | 302 | 216 | 147 | 97 | 86.4 | 45.8 |
| 1.70V    | 1153  | 763   | 568   | 466 | 297 | 212 | 144 | 95 | 84.8 | 44.9 |
| 1.75V    | 1132  | 749   | 557   | 458 | 291 | 208 | 141 | 93 | 83.2 | 44.1 |
| 1.80V    | 1088  | 720   | 536   | 440 | 280 | 200 | 136 | 90 | 80.0 | 42.4 |

#### Discharge Constant Power per Cell (Watts at 25° C)

| F.V/Time | 15min | 30min | 45min | 1h  | 2h  | 3h  | 5h  | 8h  | 10h   | 20h  |
|----------|-------|-------|-------|-----|-----|-----|-----|-----|-------|------|
| 1.60V    | 2304  | 1525  | 1135  | 932 | 593 | 424 | 288 | 190 | 169.4 | 89.8 |
| 1.65V    | 2262  | 1497  | 1114  | 915 | 582 | 416 | 283 | 186 | 166.3 | 88.1 |
| 1.70V    | 2220  | 1469  | 1094  | 898 | 571 | 408 | 278 | 183 | 163.2 | 86.5 |
| 1.75V    | 2178  | 1441  | 1073  | 881 | 561 | 400 | 272 | 179 | 160.2 | 84.9 |
| 1.80V    | 2094  | 1386  | 1032  | 847 | 539 | 385 | 262 | 172 | 154.0 | 81.6 |

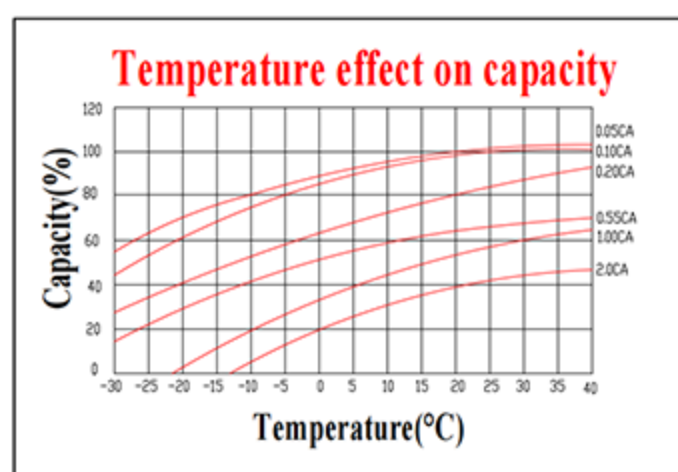
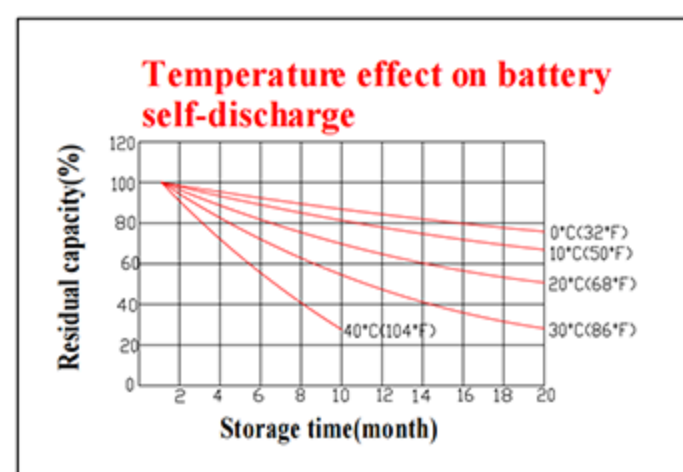
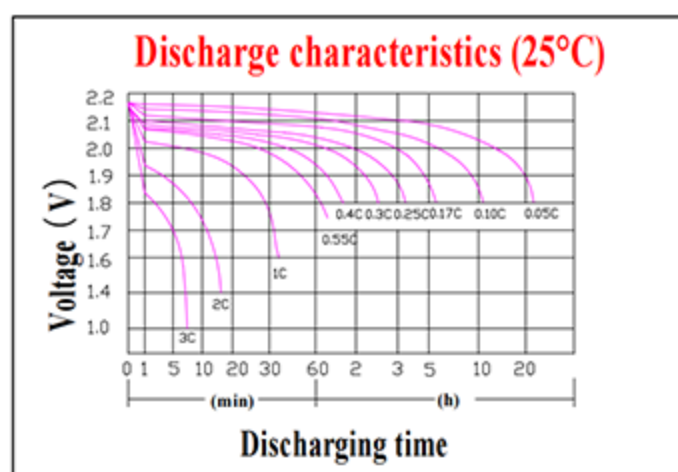
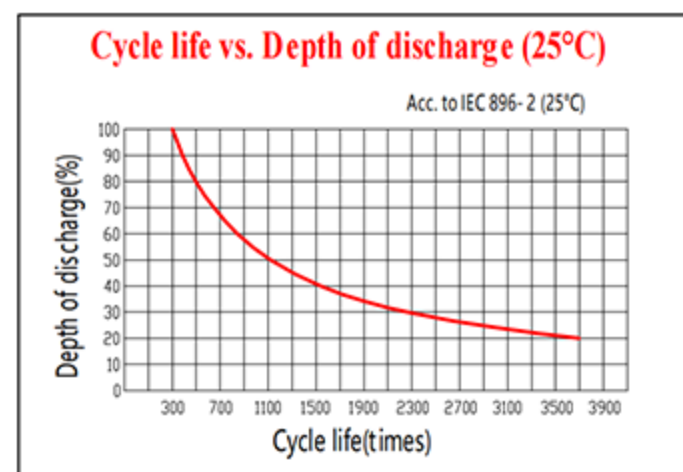
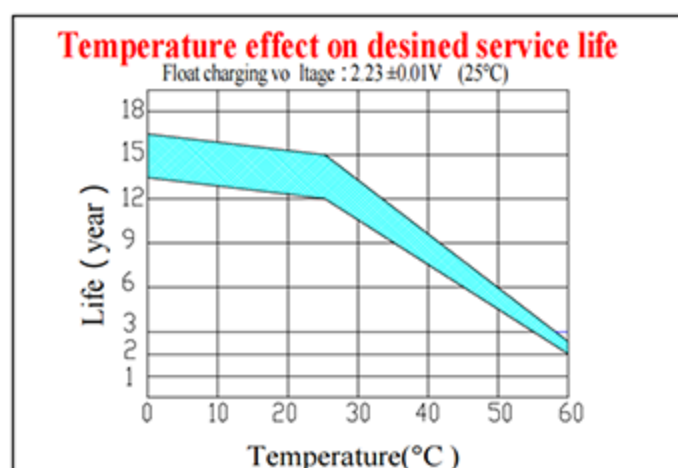
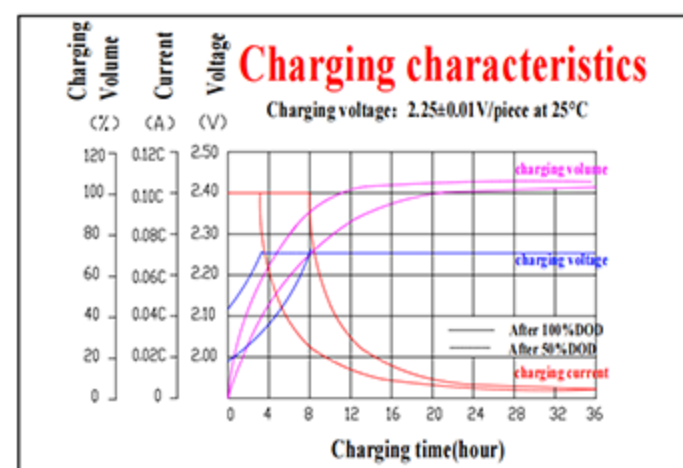
**Note:** The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Contact CSBattery for the latest information.

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## Deep Cycle Long Life AGM Battery

### DC2-800

### Performance Characteristics



### Battery Construction

| Component | Positive plate                               | Negative plate  | Container & Cover             | Safety valve                         | Terminal                | Separator  | Electrolyte                      | Pillar seal                 |
|-----------|--|---|-------------------------------|--------------------------------------|-------------------------|--|----------------------------------|-----------------------------|
| Features  | Thick high Sn low Ca grid with special paste | Balanced Pb-Ca Grid for improved recombination efficiency | Fire resistance ABS (UL94-V0) | Flame Si-Rubber and aging resistance | Female Copper Insert M8 | Advanced AGM separator for high pressure cell design | Dilute high purity sulfuric acid | Two layers epoxy resin seal |

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