

## Deep Cycle Long Life GEL Battery

## DC2-1200G

DC2 GEL series uses the newly developed nano gel electrolyte with super-C additive plus heavy duty plates design inside. The HTB series has a long service life and can provide optimum and reliable service under extreme condition such as high temperature and frequent power failure, This series is highly suited for tropical area in outdoor applications such as Telecom BTS stations and Off-grid PV system.

2V  
1200Ah

GEL  
Technology

Deep  
Cycle



### COMPLIED STANDARDS



### Applications

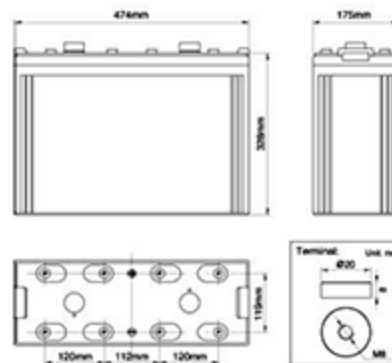
- > BTS Stations
- > Solar & Wind energy system
- > UPS system
- > Telecom systems
- > Wheel chair, Golf Car

### General Features

- ✓ Able to operate at 40-60°C
- ✓ DOD 50% 1500 times Cycles
- ✓ Integrated design to ensure the best Uniformity and reliability
- ✓ Long life and high stability under high temp. environment (no air-con needed)
- ✓ Use super-C additives: Deep discharge recovery capability

### Dimensions & Weight

|                       |          |
|-----------------------|----------|
| Length(mm/inch)       | 475/18.7 |
| Width(mm/inch)        | 175/6.89 |
| Height(mm/inch)       | 328/13   |
| Total Height(mm/inch) | 365/14.4 |
| Weight(kg/lbs)        | 69/152   |



### Technical Specifications

|  |                           |   |
|--|---------------------------|---|
| Nominal Voltage                                  |                           | 2V(Single Cell)   |
| Design Floating Life @25°C                       |                           | 20 Years  |
| Nominal Capacity @25°C(10 hour rate@120.0A,1.8V) |                           | 1200Ah  |
| Capacity @25°C                                   | 20hour rate (63.6A,1.8V)  | 1272Ah  |
|  | 5 hour rate (212A,1.75V)  | 1060Ah  |
|  | 1 hour rate (726A,1.6V)   | 726Ah   |
| Internal Resistance                              | Full Charged Battery@25°C | ≤0.19mΩ   |
| Ambient Temperature                              | Discharge                 | -20°C~60°C  |
|  | Charge                    | -10°C~60°C  |
|  | Storage                   | -20°C~60°C  |
| Max.Discharge Current@25°C                       |                           | 2000A(5s)   |
| Capacity affected by Temperature (10 hour)       | 40°C                      | 102%  |
|  | 25°C                      | 100%  |
|  | 0°C                       | 90%   |
|  | -15°C                     | 70%   |
| Self-Discharge@25°C per Month                    |                           | 3%  |
| Charge (Constant Voltage) @25°C                  | Standby Use               | Initial Charging Current Less than 180A<br>Voltage 2.23-2.27V |
|  | Cycle Use                 | Initial Charging Current Less than 180A<br>Voltage 2.33-2.37V |

### Battery Discharge Table

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

| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h  | 2h  | 3h  | 5h  | 8h  | 10h   | 20h  |
|----------|------|-------|-------|-------|-------|-----|-----|-----|-----|-----|-------|------|
| 1.60V    | 3353 | 2165  | 1795  | 1188  | 884   | 726 | 462 | 330 | 224 | 148 | 132.0 | 70.0 |
| 1.65V    | 3292 | 2125  | 1763  | 1166  | 868   | 713 | 454 | 324 | 220 | 145 | 129.6 | 68.7 |
| 1.70V    | 3231 | 2086  | 1730  | 1145  | 852   | 700 | 445 | 318 | 216 | 142 | 127.2 | 67.4 |
| 1.75V    | 3170 | 2047  | 1697  | 1123  | 836   | 686 | 437 | 312 | 212 | 140 | 124.8 | 66.1 |
| 1.80V    | 3048 | 1968  | 1632  | 1080  | 804   | 660 | 420 | 300 | 204 | 134 | 120.0 | 63.6 |

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

| F.V/Time | 5min | 10min | 15min | 30min | 45min | 1h   | 2h  | 3h  | 5h  | 8h  | 10h   | 20h   |
|----------|------|-------|-------|-------|-------|------|-----|-----|-----|-----|-------|-------|
| 1.60V    | 6454 | 4167  | 3456  | 2287  | 1702  | 1398 | 889 | 635 | 432 | 285 | 254.1 | 134.7 |
| 1.65V    | 6337 | 4091  | 3393  | 2245  | 1672  | 1372 | 873 | 624 | 424 | 279 | 249.5 | 132.2 |
| 1.70V    | 6219 | 4016  | 3330  | 2204  | 1641  | 1347 | 857 | 612 | 416 | 274 | 244.9 | 129.8 |
| 1.75V    | 6102 | 3940  | 3267  | 2162  | 1610  | 1321 | 841 | 601 | 408 | 269 | 240.2 | 127.3 |
| 1.80V    | 5867 | 3788  | 3142  | 2079  | 1548  | 1271 | 809 | 578 | 393 | 259 | 231.0 | 122.4 |

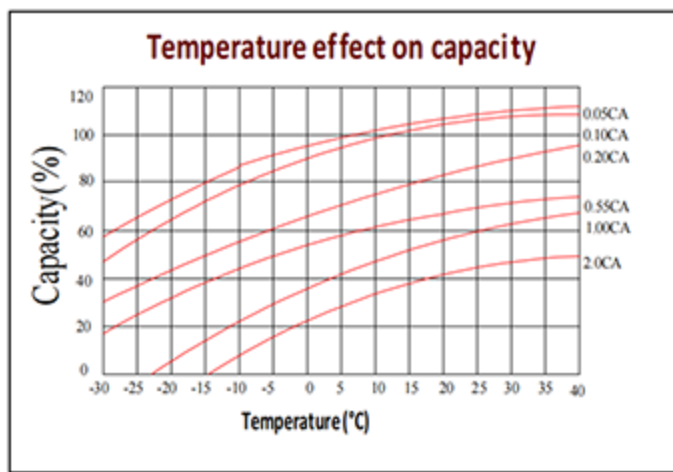
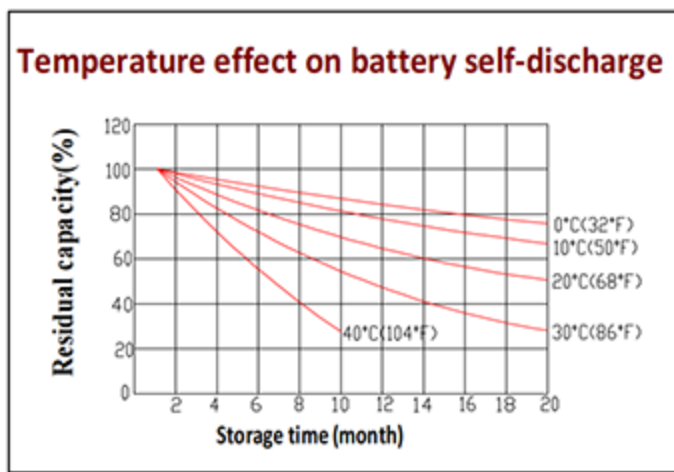
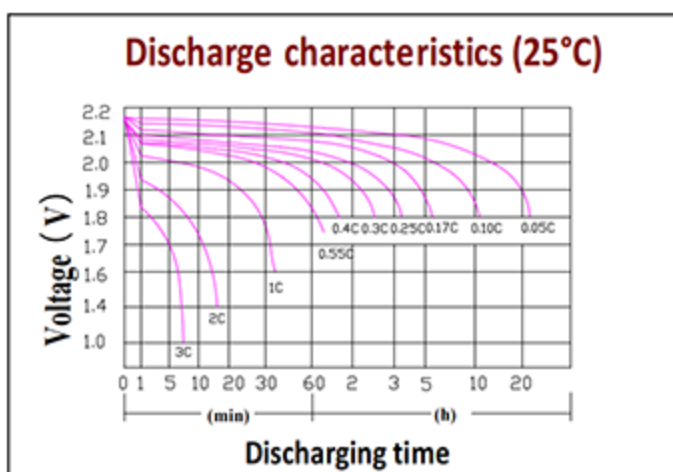
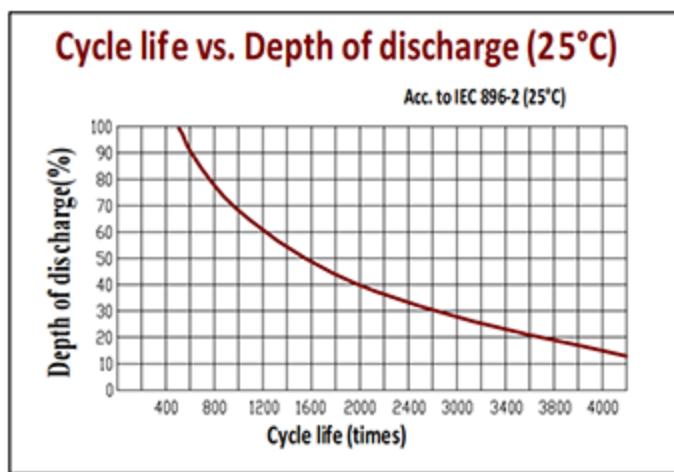
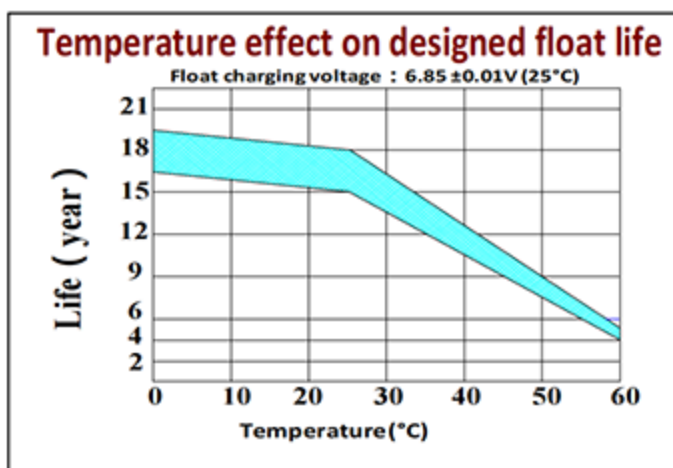
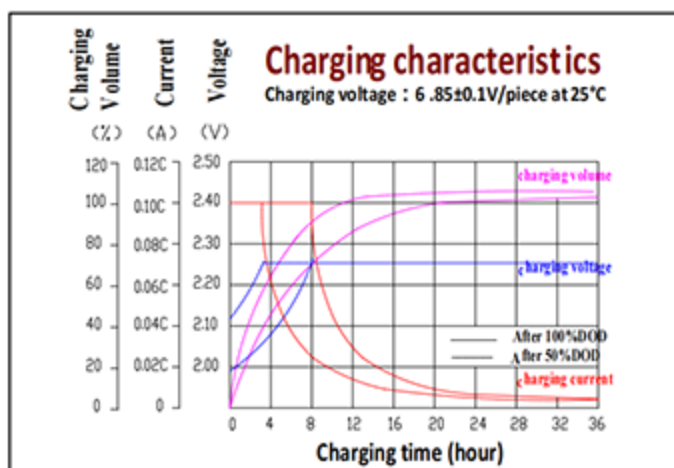
**Note:** The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Contact CSBattery for the latest information.

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## Deep Cycle Long Life GEL Battery

## DC2-1000G

### 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 resistant e ABS (UL94-V0 optional) | Flame Si-Rubber and aging resistance | Female Copper Insert M8 | Advanced PVC /AGM separator for high pressure cell design | Silicon Gel | Two layers epoxy resin seal |