

## EDC2-800 (2V 800Ah)

### Specifications

|                                  |   |                                |
|----------------------------------|---|--------------------------------|
| Nominal Voltage                  | 2V  |                                |
| Nominal Capacity(10 Hr)          | 800Ah   |                                |
| Dimension                        | Length  | 410±1mm(16.14 inches)          |
|                                  | Width   | 176±1mm(6.93 inches)           |
|                                  | Containeriner Height  | 330±1mm(12.99 inches)          |
|                                  | Total Height (With terminal)  | 365±1mm(14.37 inches)          |
|                                  | Approx Weight   | Approx51.6kgs(113.75lbs)       |
| Design life                      | 15 years  |                                |
| Terminal                         | M8  |                                |
| Container Material               | ABS   |                                |
| Rated Capacity                   | 848.0Ah/42.4A   | (20hr, 1.75V/Cell, 25 °C/77°F) |
|                                  | 800.0h/80.0A  | (10hr, 1.80V/Cell, 25 °C/77°F) |
|                                  | 704.0Ah/140.8A  | (5hr, 1.75V/Cell, 25 °C/77°F)  |
|                                  | 512.8Ah/512.8A  | (1hr, 1.60V/Cell, 25 °C/77°F)  |
| Max. Discharge Current           | 4000A(5s)   |                                |
| Internal Resistance              | Appro≤0.40mΩ  |                                |
| Operating Temp. Range            | Discharge: -20 °C~50 °C   |                                |
|                                  | Charge: -20 °C~50 °C  |                                |
|                                  | Storage: -20 °C~50 °C   |                                |
| Nominal Operating Temp. Range    | 25±3 °C(77±5°F )  |                                |
| Cycle Use                        | Initial Charging Current Less than 120.0 A. Voltage 2.33V-2.37V at 25 °C(77°F ) Temp. Coefficient-20mV/C  |                                |
|                                  | Standby Use<br>No limit on Intital Charging Current Voltage 2.23V-2.27V at 25 °C(77°F ) Temp. Coefficient-20mV/C  |                                |
| Capacity affected by Temperature | 40 °C( 104°F )  | 102%                           |
|                                  | 25 °C( 77°F )   | 100%                           |
|                                  | 0 °C( 32°F )  | 85%                            |
| Self Discharge                   | EDC series batteries may be stored for up to 6 months at25 °C(77°F ) and then a freshening charge is required. For higher temperatures the time interval will be shorter. |                                |



### Application

- ◆ All purpose
- ◆ Uninterruptable Power Supply(UPS)
- ◆ Electric Power System(EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and securitysystem
- ◆ Electronic apparatus & equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto controlsystem

### Constant Current Discharge (Amperes) at 25 °C ( 77F )

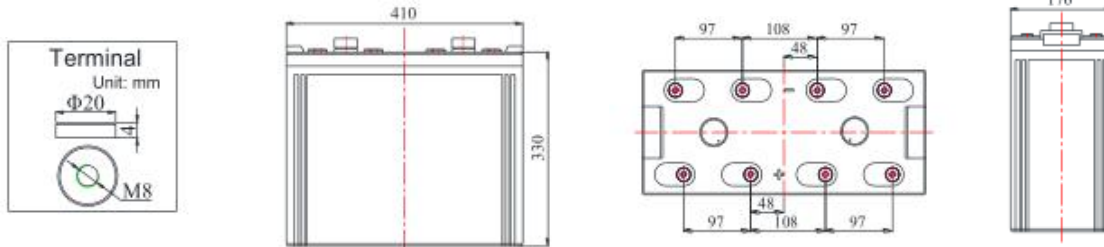
| F.V/Time | 30min | 45min | 1h    | 2h    | 3h    | 4h    | 5h    | 6h    | 8h    | 10h  | 20h   |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 1.60V    | 850.4 | 644.0 | 512.8 | 300.0 | 228.8 | 177.6 | 148.8 | 129.6 | 104.0 | 84.0 | 44.40 |
| 1.65V    | 805.6 | 619.2 | 496.0 | 290.4 | 221.6 | 173.6 | 146.4 | 127.2 | 103.2 | 82.4 | 44.00 |
| 1.70V    | 782.4 | 596.8 | 482.4 | 282.4 | 216.0 | 169.6 | 143.2 | 124.8 | 101.6 | 81.6 | 43.52 |
| 1.75V    | 748.0 | 570.4 | 464.8 | 275.2 | 211.2 | 165.6 | 140.8 | 122.4 | 100.8 | 80.8 | 43.12 |
| 1.80V    | 720.8 | 549.6 | 448.8 | 264.8 | 204.8 | 161.6 | 137.6 | 120.0 | 97.6  | 80.0 | 42.40 |

### Constant Power Discharge (Watts) at 25 °C ( 77F )

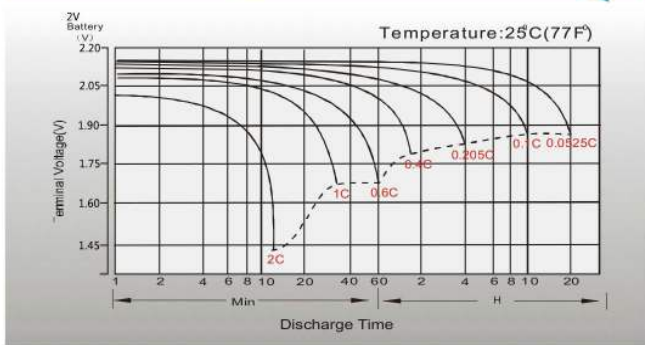
| F.V/Time | 30min  | 45min  | 1h    | 2h    | 3h    | 4h    | 5h    | 6h    | 8h    | 10h   | 20h  |
|----------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1.60V    | 1640.8 | 1223.2 | 987.2 | 568.8 | 437.6 | 340.8 | 287.2 | 250.4 | 204.8 | 164.0 | 87.2 |
| 1.65V    | 1567.2 | 1181.6 | 960.8 | 553.6 | 426.4 | 334.4 | 282.4 | 246.4 | 203.2 | 162.4 | 85.6 |
| 1.70V    | 1500.8 | 1144.0 | 928.0 | 540.8 | 416.8 | 328.0 | 278.4 | 243.2 | 200.0 | 160.8 | 84.8 |
| 1.75V    | 1426.4 | 1098.4 | 894.4 | 528.0 | 408.8 | 320.8 | 274.4 | 239.2 | 195.2 | 159.2 | 84.0 |
| 1.80V    | 1366.4 | 1061.6 | 865.6 | 510.4 | 397.6 | 313.6 | 268.8 | 235.2 | 191.2 | 158.4 | 83.2 |

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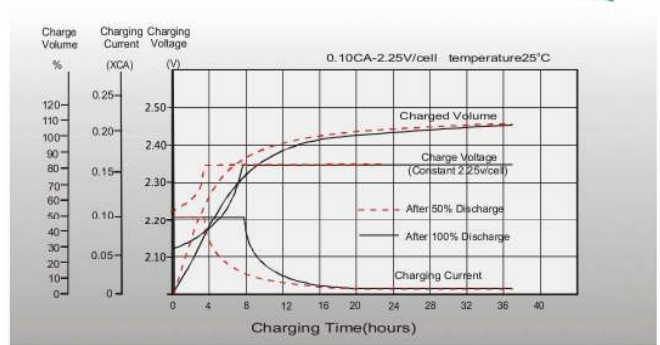
## Dimensions



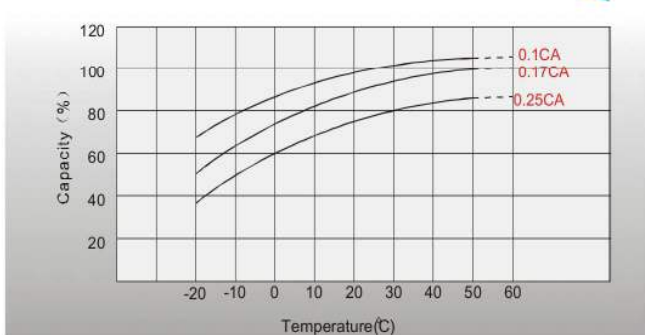
## Discharge Characteristics



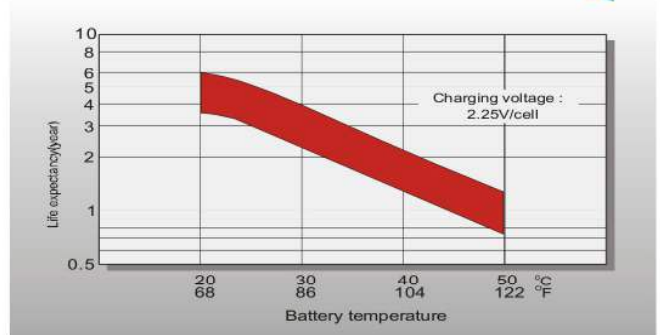
## Float Charging Characteristics



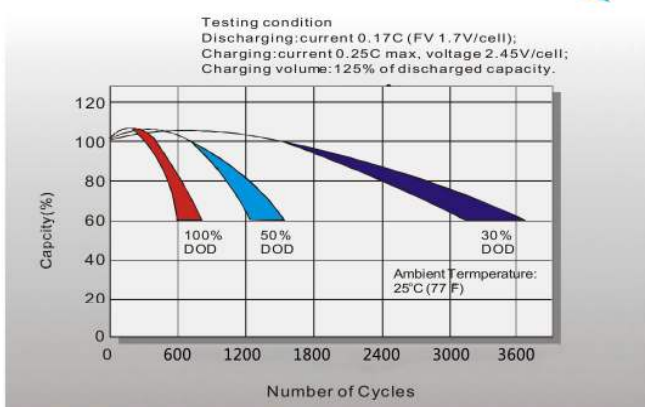
## Temperature Effects in Relation to Battery Capacity



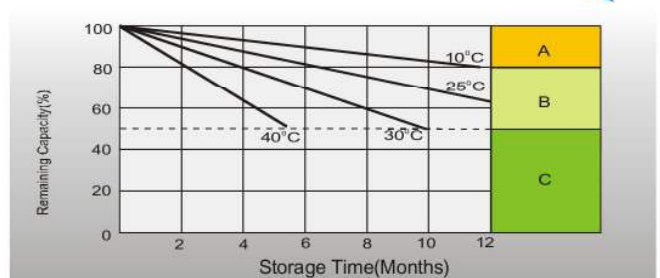
## Effect of Temperature on Long Term Float Life



## 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:  
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.  
3. 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.

Specifications subject to change without prior notice.