

- Lead Carbon Battery
- Constant Current Discharge Characteristics - new technology
- Fully certified
- More cycles, 2000 Cycles at 80% DOD
- Longer life time
- It is more suitable for application of PSOC
- Smart power grid and micro-grid system
- Distributed energy storage system
- Solar and wind energy storage system
- Solar power generation grid or off-grid energy storage system
- Generation and battery hybrid energy storage system
- Storage system



### SPECIFICATION

|                                    |   |
|------------------------------------|---|
| Cells Per Unit                     | 6   |
| Voltage Per Unit                   | 12  |
| Capacity                           | 200Ah@20hr-rate to 1.75V per cell @25°C   |
| Weight                             | Approx. 62.5 Kg (Tolerance% 1.5±)   |
| Internal Resistance                | Approx. 4.0 mΩ  |
| Terminal                           | F10(M8)/F16(M8)   |
| Max. Discharge Current             | 2000A (5 sec)   |
| Design Life                        | 15 years  |
| Maximum Charging Current           | 85.0A   |
| Cycle Use Voltage                  | 13.8 V~14.4 V @ 25C Temperature Compensation: -4mV/Cell   |
| Operating Temperature Range        | Discharge: -20°C~60°C, Charge: 0°C~50°C, Storage: -20°C~60°C  |
| Normal Operating Temperature Range | 100% rate capacity discharge, then put 14.6 to 14.8 V/block at 25°C   |
| Self Discharge                     | The batteries can be stored for up to 6 months at 25C and then recharging is recommended. Monthly Self-discharge ratio is less than 4% at 25c. Please charged batteries before using. |

#### Constant Current Discharge Characteristics: A(25°C)

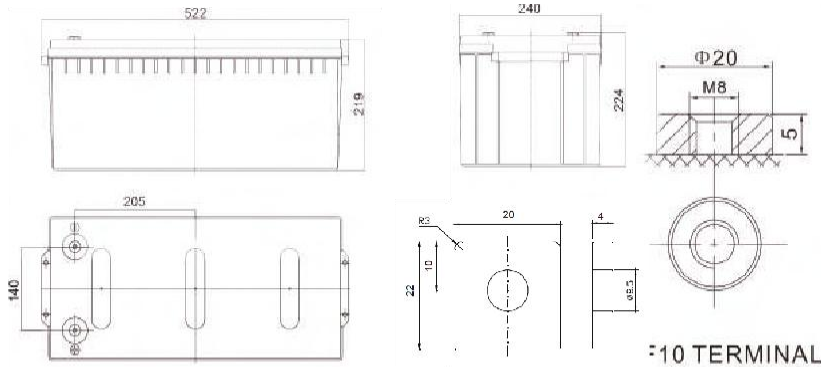
| F.V/Time | 1HR   | 2HR  | 3HR  | 4HR  | 5HR  | 8HR  | 10HR | 20HR | 48HR | 72HR | 100HR | 120HR |
|----------|-------|------|------|------|------|------|------|------|------|------|-------|-------|
| 1.60V    | 110.9 | 65.0 | 48.4 | 38.3 | 32.3 | 22.0 | 19.3 | 10.4 | 4.47 | 3.06 | 2.25  | 1.92  |
| 1.65V    | 108.8 | 63.9 | 47.6 | 37.8 | 31.9 | 21.8 | 19.1 | 10.3 | 4.42 | 3.03 | 2.23  | 1.90  |
| 1.70V    | 106.1 | 62.4 | 46.6 | 37.1 | 31.3 | 21.5 | 18.9 | 10.2 | 4.36 | 2.99 | 2.20  | 1.87  |
| 1.75V    | 102.3 | 60.4 | 45.3 | 36.1 | 30.6 | 21.0 | 18.5 | 10.0 | 4.28 | 2.93 | 2.16  | 1.84  |
| 1.80V    | 97.0  | 57.6 | 43.4 | 34.8 | 29.6 | 20.4 | 18.0 | 9.73 | 4.16 | 2.85 | 2.10  | 1.79  |
| 1.85V    | 89.6  | 53.6 | 40.7 | 32.8 | 28.1 | 19.4 | 17.3 | 9.33 | 3.99 | 2.74 | 2.01  | 1.71  |

#### Constant Power Discharge Characteristics : W(25°C)

| F.V/Time | 1HR   | 2HR   | 3HR  | 4HR  | 5HR  | 8HR  | 10HR | 20HR | 48HR | 72HR | 100HR | 120HR |
|----------|-------|-------|------|------|------|------|------|------|------|------|-------|-------|
| 1.60V    | 207.4 | 123.1 | 92.4 | 73.5 | 62.2 | 43.0 | 38.0 | 20.5 | 8.78 | 6.01 | 4.42  | 3.77  |
| 1.65V    | 205.6 | 121.9 | 91.5 | 72.9 | 61.8 | 42.7 | 37.7 | 20.4 | 8.71 | 5.97 | 4.39  | 3.74  |
| 1.70V    | 201.1 | 119.5 | 89.8 | 71.7 | 60.8 | 42.1 | 37.2 | 20.1 | 8.60 | 5.89 | 4.33  | 3.69  |
| 1.75V    | 194.9 | 116.2 | 87.6 | 70.1 | 59.6 | 41.3 | 36.5 | 19.7 | 8.45 | 5.78 | 4.26  | 3.62  |
| 1.80V    | 185.8 | 111.4 | 84.3 | 67.7 | 57.8 | 40.1 | 35.6 | 19.2 | 8.23 | 5.63 | 4.14  | 3.53  |
| 1.85V    | 172.8 | 104.3 | 79.4 | 64.2 | 55.1 | 38.4 | 34.2 | 18.5 | 7.91 | 5.41 | 3.98  | 3.39  |

All mentioned values are average values.

### DIMENSIONS



Unit: mm

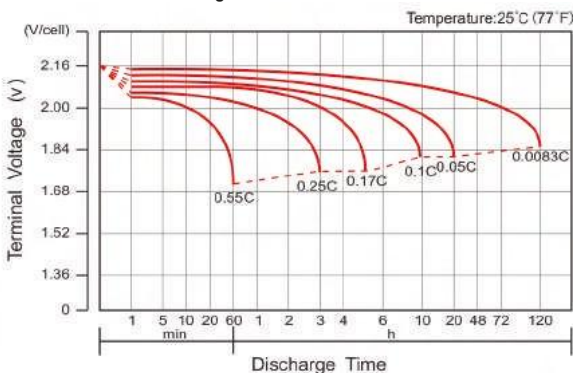
|              |                       |
|--------------|-----------------------|
| Length       | 522±2mm (20.6 inches) |
| Width        | 240±2mm (9.45 inches) |
| Height       | 219±2mm (8.62 inches) |
| Total Height | 224±2mm (8.82 inches) |
| Terminal     | Value                 |
| M5           | 6~7 N*m               |
| M6           | 8~10 N*m              |
| M8           | 10~12 N*m             |

### REFERENCE CAPACITY

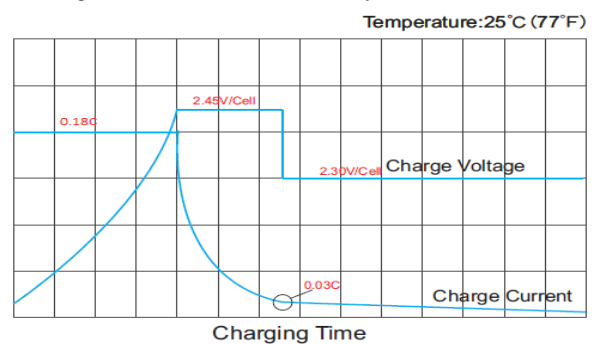
| Hour Rate     | C20   | C72 (Ah) | C100  | C120  |
|---------------|-------|----------|-------|-------|
| F.V (V/Cell)  | 1.75  | 1.85     | 1.85  | 1.85  |
| Capacity (Ah) | 200.0 | 197.3    | 201.0 | 205.2 |

### CHARACTERISTIC CURVE

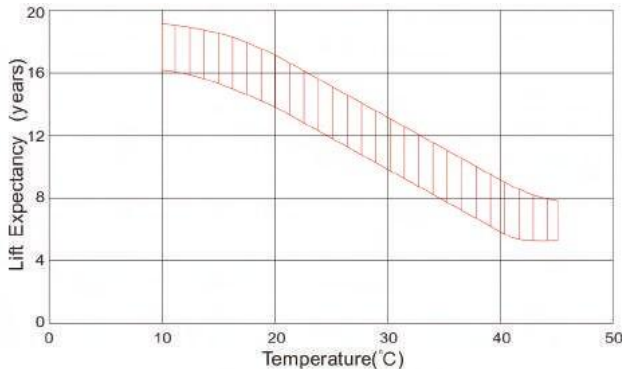
Discharge Characteristics Curve



Charge Characteristic Curve for Standby Use



Effect of Temperature on Long Term Life



Cycle Life in Relation to Depth of Discharge

