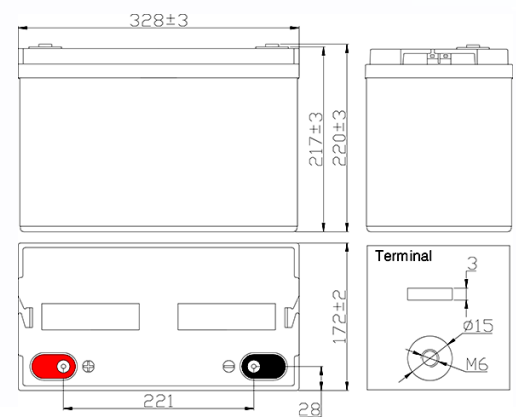


## SPECIFICATION

|                                    |   |                                |
|------------------------------------|---|--------------------------------|
| <b>Nominal Voltage</b>             | 12V (6 cells in series)   |                                |
| <b>Rated Capacity</b>              | 100.0Ah   | (C <sub>10</sub> , 1.80V/cell) |
| <b>Dimensions(mm)</b>              | Length  | 328±3 mm                       |
|                                    | Width   | 172±2 mm                       |
|                                    | Height  | 217±3 mm                       |
|                                    | Total Height  | 220±3 mm                       |
| <b>Nominal Capacity @25°C (Ah)</b> | 20 Hour rate (5.360A to 10.8 volts)   | 107.2Ah                        |
|                                    | 10 Hour rate (10.10A to 10.8 volts)   | 101.0Ah                        |
|                                    | 5 Hour rate (17.29A to 10.8 volts)  | 86.4Ah                         |
|                                    | 1 Hour rate (63.30A to 10.5 volts)  | 63.3Ah                         |
| <b>Approx. Weight</b>              | 28.0 kg   |                                |
| <b>Terminal</b>                    | T12   |                                |
| <b>Max.Discharge Current</b>       | 800A @25°C (5s)   |                                |
| <b>Internal Resistance</b>         | 5.0mΩ @25°C (Full Charged Battery)  |                                |
| <b>Floating Design Life</b>        | 10 years @25°C  |                                |
| <b>Ambient Temperature</b>         | Charge: -15°C~50°C  |                                |
|                                    | Discharge: -20°C~60°C   |                                |
|                                    | Storage: -20°C~50°C   |                                |
| <b>Container Material</b>          | A.B.S, UL94-HB, UL94-V0, Optional   |                                |
| <b>Self Discharge</b>              | VRLA batteries can be stored for more than 6 months at 25°C. Self-Discharge ratio less than 3% per month at 25°C. Please charge batteries before using. |                                |



## COMPANY CERTIFICATION



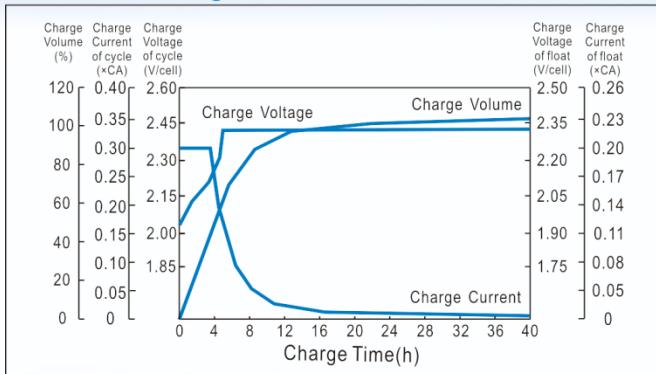
## CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A), (25°C)

| F.V/Time   | 5min  | 10min | 15min | 30min | 60min | 2H    | 3H    | 5H    | 8H    | 10H   | 20H   |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V/cell | 335.0 | 215.0 | 175.0 | 112.5 | 65.00 | 38.85 | 26.88 | 18.03 | 12.42 | 10.50 | 5.760 |
| 1.70V/cell | 295.0 | 195.0 | 167.5 | 109.5 | 64.10 | 38.35 | 26.55 | 17.82 | 12.22 | 10.30 | 5.560 |
| 1.75V/cell | 265.0 | 180.0 | 158.5 | 106.5 | 63.30 | 37.85 | 26.25 | 17.55 | 12.10 | 10.20 | 5.460 |
| 1.80V/cell | 230.0 | 163.0 | 148.5 | 102.4 | 62.00 | 37.33 | 25.75 | 17.29 | 11.92 | 10.10 | 5.360 |

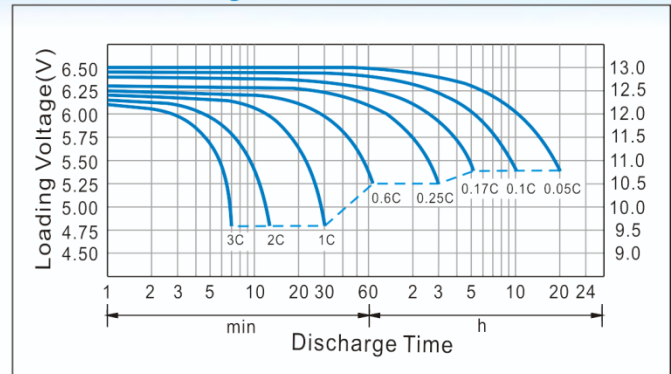
## CONSTANT WATTAGE DISCHARGE CHARACTERISTICS (WATT), (25°C)

| F.V/Time   | 5min  | 10min | 15min | 30min | 60min | 2H    | 3H    | 5H    | 8H    | 10H   | 20H   |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V/cell | 577.9 | 383.4 | 317.9 | 210.0 | 124.6 | 75.76 | 53.31 | 35.85 | 24.72 | 20.91 | 11.51 |
| 1.70V/cell | 521.2 | 354.3 | 308.5 | 206.2 | 123.4 | 75.10 | 52.79 | 35.52 | 24.38 | 20.57 | 11.12 |
| 1.75V/cell | 474.8 | 331.5 | 294.5 | 202.4 | 122.4 | 74.44 | 52.33 | 35.07 | 24.20 | 20.40 | 10.92 |
| 1.80V/cell | 417.8 | 304.3 | 278.4 | 196.3 | 120.4 | 74.04 | 51.46 | 34.58 | 23.84 | 20.20 | 10.72 |

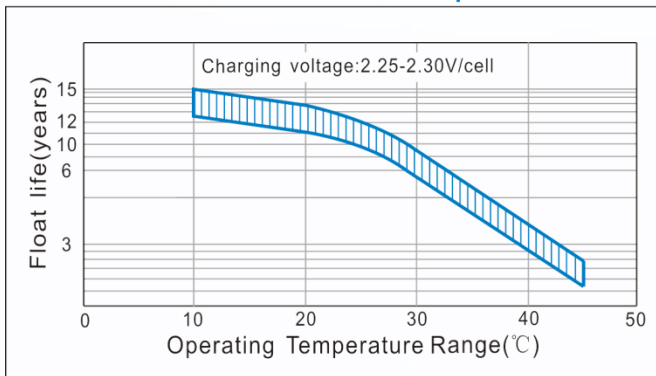
### Charge Characteristics Curve



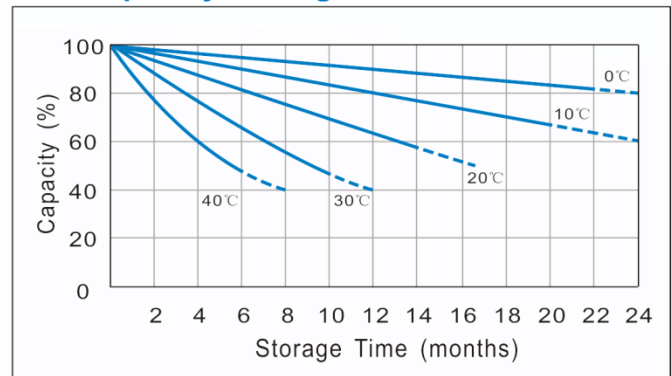
### Discharge Characteristics Curve



### Float Service Life VS Temperature



### Capacity Storage Characteristics



## CAPACITY FACTORS WITH DIFFERENT TEMPERATURE

| Battery type |          | -20°C | -10°C | 0°C | 5°C | 10°C | 20°C | 25°C | 30°C | 40°C | 45°C |
|--------------|----------|-------|-------|-----|-----|------|------|------|------|------|------|
| GEL Battery  | 6V & 12V | 50%   | 70%   | 83% | 85% | 90%  | 98%  | 100% | 102% | 104% | 105% |
|              | 2V       | 60%   | 75%   | 85% | 88% | 92%  | 99%  | 100% | 103% | 105% | 106% |
| AGM Battery  | 6V & 12V | 46%   | 66%   | 76% | 83% | 90%  | 98%  | 100% | 103% | 107% | 109% |
|              | 2V       | 55%   | 70%   | 80% | 85% | 92%  | 99%  | 100% | 104% | 108% | 110% |

## MAINTENANCE & CAUTIONS

- ☑ Charging Procedure:

| Application              | Charging method                                      | Charge voltage at 25°C | Temperature compensation coefficient of charging voltage | Max. charging current | Temperature |
|--------------------------|--|------------------------|--|-----------------------|-------------|
| For standby power source | Constant voltage charging (With current restriction) | 2.25-2.30 V/cell       | -3mV/°C/cell   | 0.2CA                 | -15~50°C    |
| For cycle service        |  | 2.40-2.45 V/cell       | -4mV/°C/cell   | 0.3CA                 |             |

- ☑ Every month, recommend inspection every battery voltage.
- ☑ Every three months, recommend equalization charge for one time. **Equalization charge method:**  
 Step 1: Discharge: 100% rate capacity discharge.  
 Step 2: Charge: Max. Current 0.3CA, constant voltage 2.40-2.45V/Cell charge 24h.
- ☑ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, Ambient temperature and charging voltage.
- ☑ Charge the batteries at least once every six months, if they are stored at 25°C. **Charging Method:**  
 Constant Voltage: -0.2Cx2h+2.40~2.45V/cellx24h, Max. Current 0.25CA  
 Constant Current: -0.2Cx2h+0.1Cx12h  
 Fast: -0.2Cx2h+0.3Cx4h

- ☑ Terminal of torque:

| Bolt     | M5     | M6                | M8              |
|----------|--------|-------------------|-----------------|
| Terminal | T3、T10 | T4、T7、T11、T12、T13 | T5、T6、T8、T9、T14 |
| Torque   | 6~7N.m | 8~10N.m           | 10~12N.m        |

**Note:** The manufacturer reserves the right to change and modify the design and specifications without prior notice

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