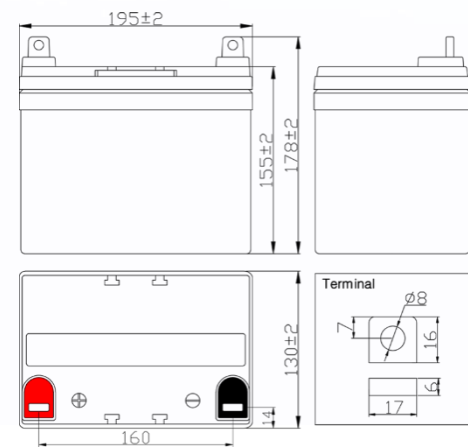


## SPECIFICATION

|                                    |                                     |                                |
|------------------------------------|-------------------------------------|--------------------------------|
| <b>Nominal Voltage</b>             | 12V (6 cells in series)             |                                |
| <b>Rated Capacity</b>              | 35.0Ah                              | (C <sub>10</sub> , 1.80V/cell) |
| <b>Dimensions(mm)</b>              | Length                              | 195±2 mm                       |
|                                    | Width                               | 130±2 mm                       |
|                                    | Height                              | 155±2 mm                       |
|                                    | Total Height                        | 178±2 mm                       |
| <b>Nominal Capacity @25°C (Ah)</b> | 20 Hour rate (1.876A to 10.8 volts) | 37.5Ah                         |
|                                    | 10 Hour rate (3.535A to 10.8 volts) | 35.3Ah                         |
|                                    | 5 Hour rate (6.052A to 10.8 volts)  | 30.2Ah                         |
|                                    | 1 Hour rate (22.16A to 10.5 volts)  | 22.1Ah                         |
| <b>Approx. Weight</b>              | 9.7 kg                              |                                |
| <b>Terminal</b>                    | T8                                  |                                |
| <b>Max.Discharge Current</b>       | 280A @25°C (5s)                     |                                |
| <b>Internal Resistance</b>         | 8.5mΩ @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   |                                |



**Self Discharge**  
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



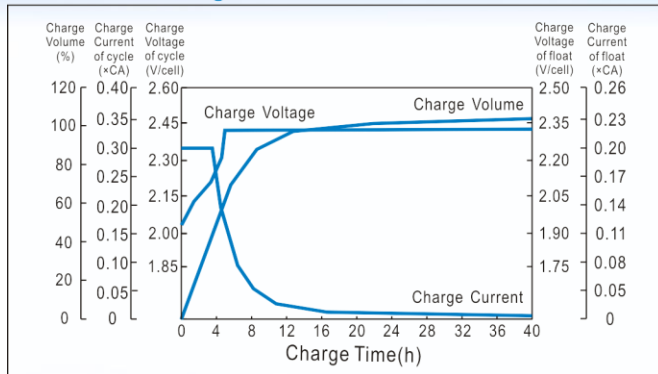
## CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A), (25°C)

| F.V/Time   | 5min  | 10min | 15min | 30min | 60min | 2H    | 3H    | 5H    | 8H    | 10H   | 20H   |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V/cell | 117.3 | 75.25 | 61.25 | 39.38 | 22.75 | 13.60 | 9.408 | 6.311 | 4.347 | 3.675 | 2.016 |
| 1.70V/cell | 103.3 | 68.25 | 58.63 | 38.33 | 22.44 | 13.42 | 9.293 | 6.237 | 4.277 | 3.605 | 1.946 |
| 1.75V/cell | 92.75 | 63.00 | 55.48 | 37.28 | 22.16 | 13.25 | 9.188 | 6.143 | 4.235 | 3.570 | 1.911 |
| 1.80V/cell | 80.50 | 57.05 | 51.98 | 35.84 | 21.70 | 13.07 | 9.013 | 6.052 | 4.172 | 3.535 | 1.876 |

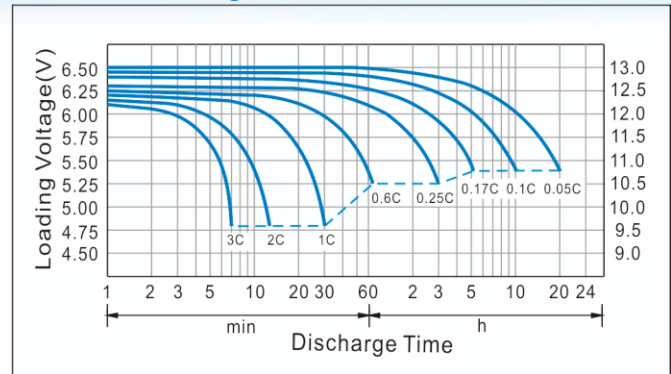
## CONSTANT WATTAGE DISCHARGE CHARACTERISTICS (WATT), (25°C)

| F.V/Time   | 5min  | 10min | 15min | 30min | 60min | 2H    | 3H    | 5H    | 8H    | 10H   | 20H   |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V/cell | 202.3 | 134.2 | 111.3 | 73.50 | 43.60 | 26.52 | 18.66 | 12.55 | 8.651 | 7.319 | 4.029 |
| 1.70V/cell | 182.4 | 124.0 | 108.0 | 72.18 | 43.19 | 26.29 | 18.48 | 12.43 | 8.533 | 7.198 | 3.892 |
| 1.75V/cell | 166.2 | 116.0 | 103.1 | 70.82 | 42.83 | 26.05 | 18.31 | 12.27 | 8.470 | 7.140 | 3.822 |
| 1.80V/cell | 146.2 | 106.5 | 97.45 | 68.69 | 42.13 | 25.91 | 18.01 | 12.10 | 8.344 | 7.070 | 3.752 |

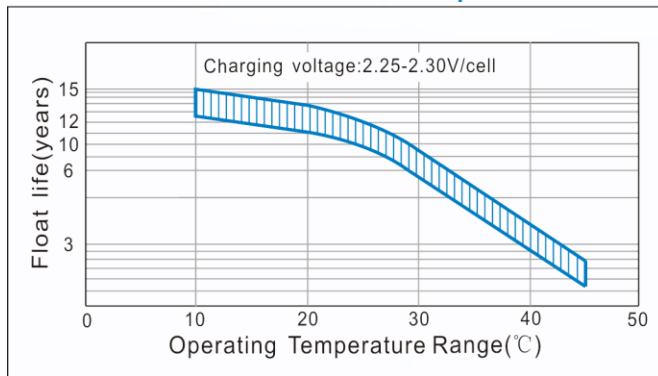
### Charge Characteristics Curve



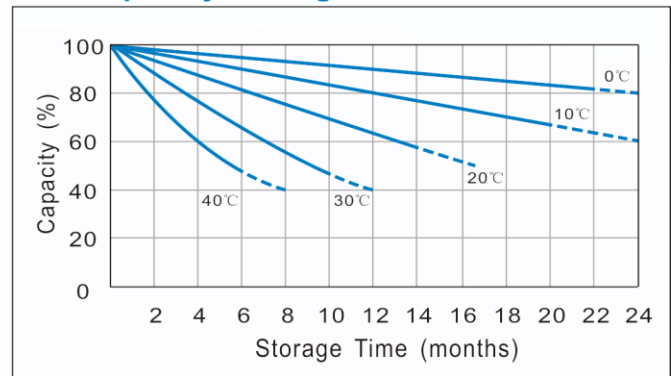
### Discharge Characteristics Curve



### 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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