

## Applications

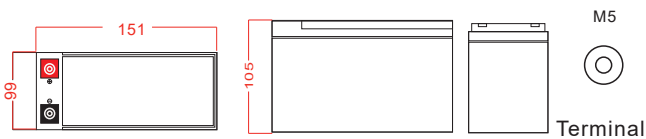
- > Electric vehicle
- > Electric wheelchair
- > Electric scooter
- > Electric play car for children
- > Garbage truck
- > Patrol car

## General Features

- > High Corrosion Resistant Performance: Pb-Ca multi-alloy grid
- > High Energy Density and Power Density
- > Excellent Charge Acceptance Ability
- > Strong High and Low Temperature Performance
- > Optimized Capability of instant High-current Discharging
- > Low self-discharge rate



Dimension: 151(L)×99(W)×98(H)×105(TH) Unit: mm



## Specification

|                       |  |
|-----------------------|--|
| Nominal Voltage       | 12V  |
| Nominal Capacity      | 14Ah   |
| Design life           | 5 years  |
| Terminal              | M5   |
| Approx. Weight        | Approx 4.25kg (9.38lbs)  |
| Container Material    | ABS  |
| Rated Capacity        | <b>15.4Ah</b> 10Hour Rate (1.54A to 10.5V)<br><b>14.0Ah</b> 2Hour Rate (6.00A to 10.5V)<br><b>10.5Ah</b> 1Hour Rate (10.5A to 10.5V) |
| Operating Temperature | Discharge: -20 ~50°C (-4 ~ 122°F)<br>Charge: -20 ~50°C (-4 ~ 122°F)<br>Storage: -20 ~50°C (-4 ~ 122°F)                               |
| Charge Method (25 °C) | Float Use: 13.7-13.9V@25°C<br>Cycle Use : 14.7-14.9V,@25°C<br>Max charge current 1.8A  |
| Self discharge        | 3% of capacity declined per month at 25°C  |

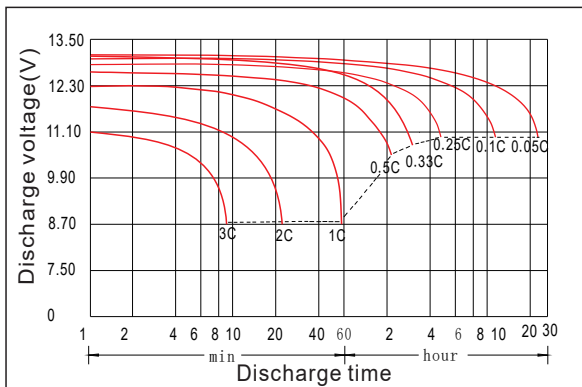
## Constant Current Discharge Characteristics Unit: A (25 °C, 77 °F)

| F.V/Time | 5Min | 15Min | 30Min | 1h   | 2h   | 3h   | 5h   | 8h   | 10h  | 20h  |
|----------|------|-------|-------|------|------|------|------|------|------|------|
| 1.60V    | 56.2 | 30.2  | 18.4  | 10.8 | 6.18 | 4.57 | 3.00 | 1.93 | 1.58 | 0.83 |
| 1.65V    | 54.7 | 29.3  | 18.1  | 10.7 | 6.13 | 4.52 | 2.98 | 1.91 | 1.57 | 0.83 |
| 1.70V    | 52.5 | 28.7  | 17.8  | 10.6 | 6.09 | 4.46 | 2.93 | 1.89 | 1.55 | 0.82 |
| 1.75V    | 48.3 | 27.8  | 17.6  | 10.5 | 6.00 | 4.41 | 2.91 | 1.88 | 1.54 | 0.82 |
| 1.80V    | 43.2 | 25.8  | 16.9  | 10.2 | 5.89 | 4.39 | 2.85 | 1.87 | 1.52 | 0.81 |
| 1.85V    | 38.6 | 23.2  | 15.4  | 9.44 | 5.58 | 4.12 | 2.69 | 1.79 | 1.48 | 0.80 |

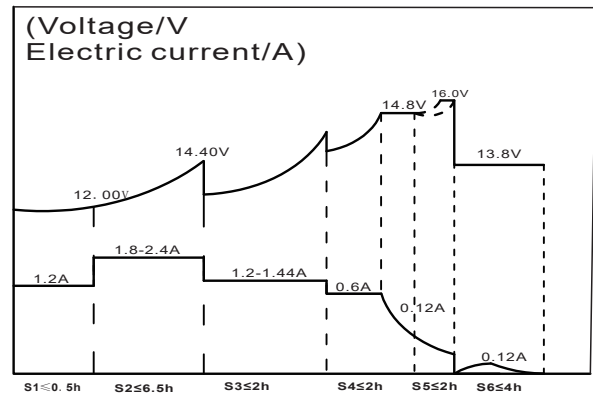
## Constant Power Discharge Characteristics Unit: W/cell(25 °C, 77 °F)

| F.V/Time | 5Min | 15Min | 30Min | 1h   | 2h   | 3h   | 5h   | 8h   | 10h  | 20h  |
|----------|------|-------|-------|------|------|------|------|------|------|------|
| 1.60V    | 85.6 | 48.4  | 30.2  | 18.4 | 10.6 | 7.88 | 5.16 | 3.40 | 2.76 | 1.49 |
| 1.65V    | 82.4 | 47.4  | 30.0  | 18.3 | 10.6 | 7.78 | 5.14 | 3.36 | 2.74 | 1.48 |
| 1.70V    | 82.0 | 47.0  | 30.0  | 18.2 | 10.5 | 7.74 | 5.10 | 3.36 | 2.70 | 1.48 |
| 1.75V    | 76.4 | 46.6  | 29.8  | 18.0 | 10.5 | 7.70 | 5.06 | 3.32 | 2.68 | 1.47 |
| 1.80V    | 70.2 | 44.0  | 29.0  | 17.9 | 10.4 | 7.66 | 5.02 | 3.30 | 2.64 | 1.46 |
| 1.85V    | 62.6 | 39.4  | 26.6  | 16.6 | 10.0 | 7.30 | 4.78 | 3.18 | 2.60 | 1.45 |

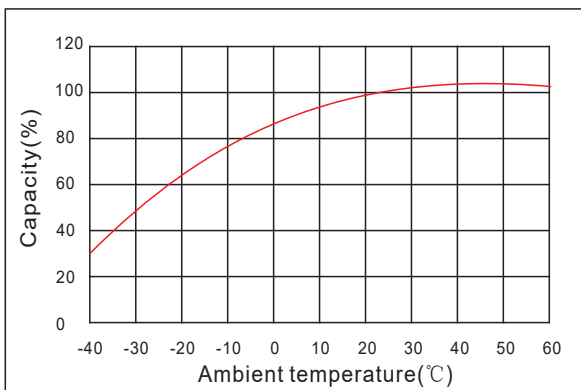
## Discharge characteristic



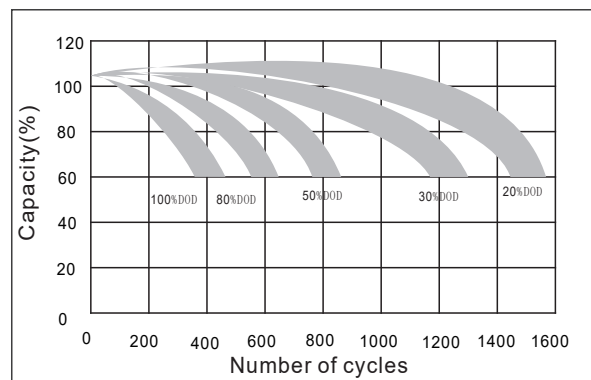
## Charging characteristic



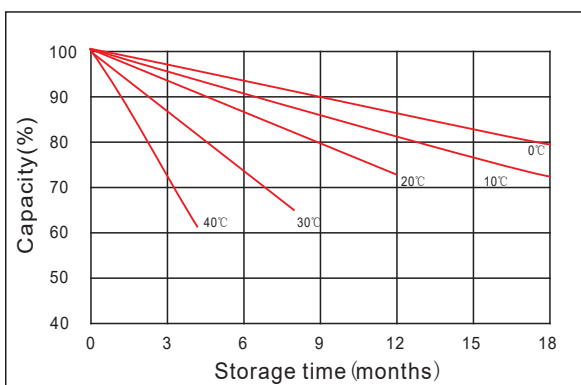
## The effect of temperature on capacity



## The effect of discharge depth on cycle life



## Curves of selfdischarge



## Curves of open circuit voltage vs. capacity

