

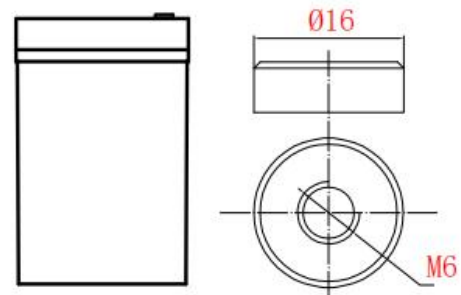
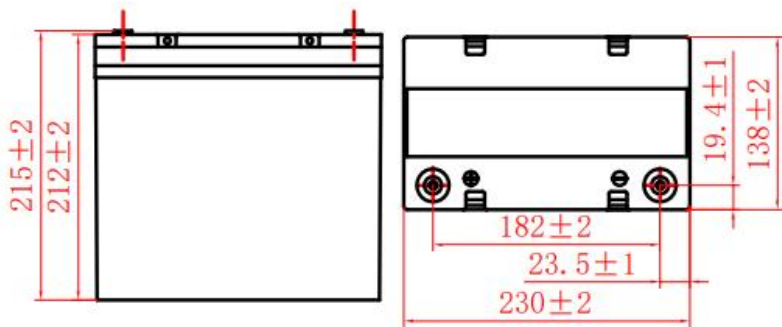
## General Features

- ▶ High corrosion resistant performance: Pb-Ca multi-alloy grid
- ▶ High energy density and power density
- ▶ Optimized capability of instant high-current discharging
- ▶ Excellent charge acceptance ability
- ▶ Excellent deep cycle discharge capability
- ▶ Strong high and low temperature performance
- ▶ Precision sealing technology
- ▶ Long life



**Dimension: 230(L) × 138(W) × 212(H) × 215(TH)**

**Unit: mm**



Terminal Dimensions

| Specification                               |   |
|---|---|
| Nominal Voltage                             | 12V   |
| Nominal Capacity                            | 55Ah(210W@15min-rate to 1.67V percell@25°C) |
| Design life                                 | 10 years                                    |
| Terminal                                    | M6  |
| Approx. Weight                              | Approx 17.5kg (38.6lbs)                     |
| Container Material                          | ABS(UL94-HB, UL94-V0 Optional)              |
| short-circuit current                       | 1538A                                       |
| Internal resistance(Full charged at 25°C: ) | 7.8 mΩ                                      |
| Self discharge                              | 3% of capacity declined per month at 25°C   |
| Operating Temperature                       |   |
| Discharge:                                  | -20 ~50°C(-4~ 122°F)                        |
| Charge :                                    | -20 ~50°C(-4~ 122°F)                        |
| Storage:                                    | -20 ~50°C(-4~ 122°F)                        |
| Charge Method(25 °C)                        |   |
| Charge current:                             | Max. 13.8A;Recom.5.5A                       |
| Float charge:13.5-13.8V                     | recom.13.8V(-18mV/ °C)                      |
| Equalize charge:13.8-14.1V                  | recom.14.1V(-24mV/ °C)                      |
| Cycle charge:14.4-15.0V                     | recom.14.7V(-30mV/ °C)                      |

## Standards

Executive standard YD/T 3427-2018

## Applications

- ▶ UPS/EPS
- ▶ Power systems
- ▶ Telecommunications system
- ▶ Emergency lighting, Auto control system
- ▶ Solar/wind generating storage cyclic
- ▶ Other general purpose

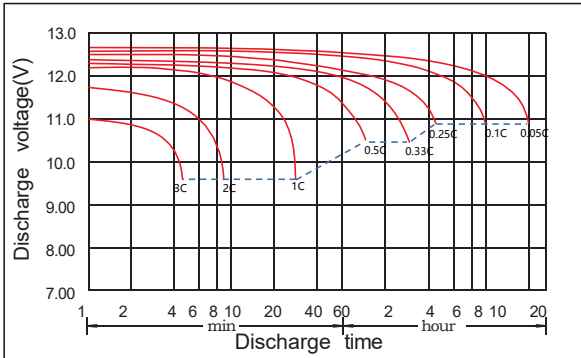
## Rated Capacity

|                              |        |
|------------------------------|--------|
| 10Hour Rate (5.50A to 10.8V) | 55.0Ah |
| 3Hour Rate (15.1A to 10.2V)  | 45.3Ah |
| 1Hour Rate (37.0A to 9.6V)   | 37.0Ah |

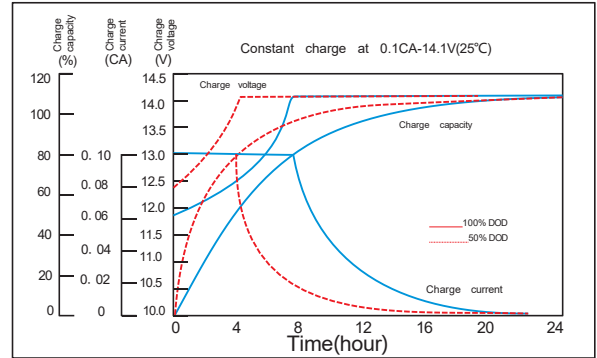
## Attain Certificate



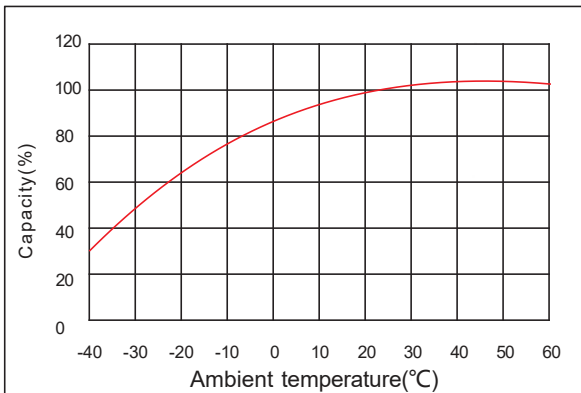
## Discharge characteristic



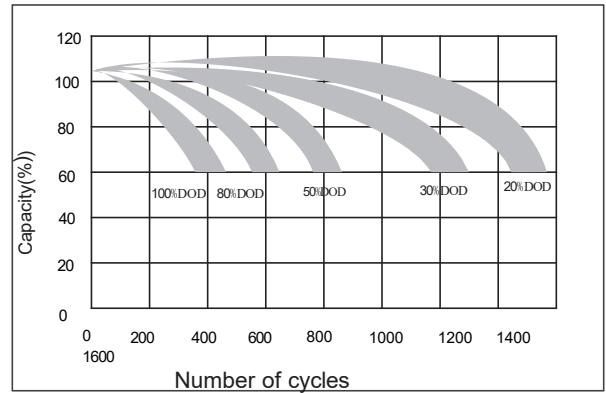
## Charging characteristic



## The effect of temperature on capacity



## The effect of discharge depth on cycle life



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

| FV/Time | 5min | 10min | 15min | 30min | 45min | 1h   | 1.5h | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
|---------|------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 1.60V   | 210  | 157   | 113   | 63.3  | 45.4  | 37.0 | 23.2 | 21.2 | 15.4 | 11.1 | 10.4 | 8.41 | 6.79 | 5.72 | 3.00 |
| 1.67V   | 184  | 138   | 108   | 62.3  | 45.1  | 36.8 | 23.0 | 21.1 | 15.3 | 11.1 | 10.2 | 8.35 | 6.73 | 5.67 | 2.98 |
| 1.70V   | 171  | 130   | 106   | 61.2  | 44.8  | 36.5 | 22.8 | 21.0 | 15.1 | 10.9 | 10.1 | 8.22 | 6.66 | 5.61 | 2.97 |
| 1.75V   | 153  | 118   | 105   | 60.6  | 44.2  | 36.0 | 22.6 | 20.6 | 14.9 | 10.9 | 10.0 | 8.15 | 6.60 | 5.56 | 2.96 |
| 1.80V   | 137  | 107   | 96.4  | 58.0  | 43.1  | 35.1 | 22.4 | 20.3 | 14.8 | 10.7 | 9.77 | 8.09 | 6.60 | 5.50 | 2.94 |
| 1.85V   | 120  | 95.9  | 87.2  | 52.9  | 39.9  | 32.5 | 21.7 | 19.3 | 13.9 | 10.4 | 9.25 | 7.83 | 6.30 | 5.34 | 2.89 |

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

| FV/Time | 5min | 10min | 15min | 30min | 45min | 1h   | 1.5h | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
|---------|------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 1.60V   | 335  | 250   | 221   | 115   | 84.0  | 70.0 | 46.2 | 40.2 | 29.3 | 21.5 | 19.6 | 16.1 | 13.2 | 11.0 | 5.94 |
| 1.67V   | 307  | 231   | 210   | 114   | 83.4  | 69.5 | 45.7 | 40.1 | 28.9 | 21.2 | 19.5 | 16.0 | 13.1 | 10.9 | 5.91 |
| 1.70V   | 292  | 221   | 208   | 114   | 82.7  | 68.9 | 45.4 | 39.9 | 28.8 | 21.1 | 19.4 | 15.9 | 13.0 | 10.8 | 5.89 |
| 1.75V   | 269  | 207   | 204   | 113   | 82.1  | 68.4 | 44.8 | 39.7 | 28.6 | 20.8 | 19.3 | 15.7 | 12.9 | 10.7 | 5.86 |
| 1.80V   | 246  | 192   | 187   | 110   | 81.5  | 67.9 | 44.6 | 39.5 | 28.5 | 20.7 | 19.0 | 15.6 | 12.8 | 10.6 | 5.83 |
| 1.85V   | 223  | 177   | 171   | 101   | 75.6  | 63.0 | 43.5 | 37.8 | 27.1 | 20.2 | 18.2 | 15.2 | 12.4 | 10.4 | 5.78 |