

**GENERAL FEATURES**

- Longer cycle life: special paste formula, over dimensioned negative plate, optimized manufacturing process, additives for deep discharge.
- Special separators boost up the battery internal performance.
- Using oxygen recombination technology, maintenance-free and little water losing.
- ABS material: enhanced strength of the battery container. (Flame-retardant ABS is optional).
- Designed to have a lifespan of 15 years for float charging at 25°C

**APPLICATIONS**

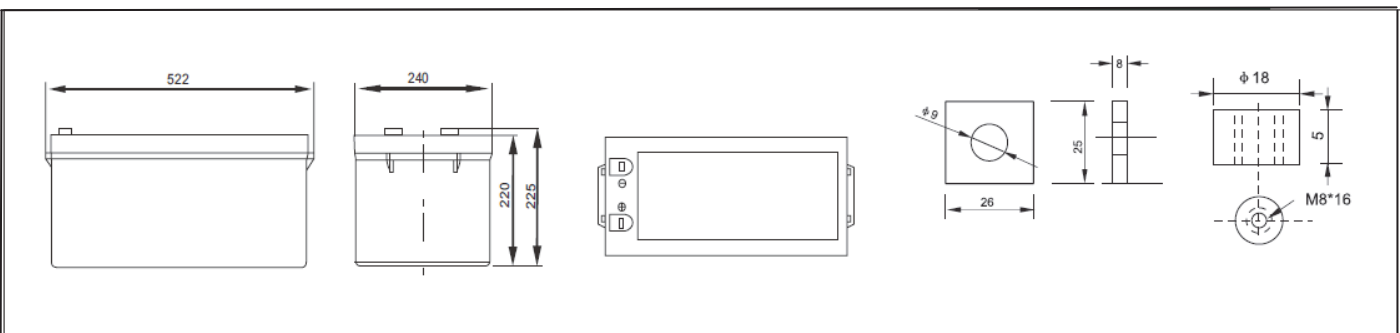
- Electric tools
- Vehicle in place of walking
- Lawn mowers
- Golf trolleys and golf cart
- Power system of special network or local area network
- Electric toys
- Railway and marine systems
- Fire alarms
- Solar and wind power system
- Electric wheelchairs
- Medical equipment



**SPECIFICATIONS**

|                                          |                                                         |                        |                         |                     |
|------------------------------------------|---------------------------------------------------------|------------------------|-------------------------|---------------------|
| <b>Model</b>                             | Nominal Voltage                                         | 12V                    |                         |                     |
|                                          | Rated Capacity (10Hr rate)                              | 200Ah                  |                         |                     |
| <b>Dimensions</b>                        | Length                                                  | Width                  | Height                  | Total Height        |
|                                          | 522mm                                                   | 240mm                  | 220mm                   | 244mm               |
| <b>Weight</b>                            | Approx. 60.0kg +/-3%                                    |                        |                         |                     |
| <b>Capacity @25°C (77°F)</b>             | 10 Hour (20A,10.8V)                                     | 5 Hour (34A,10.8V)     | 3 Hour (50A,10.8V)      | 1 Hour (110A,10.5V) |
|                                          | 200Ah                                                   | 170Ah                  | 150Ah                   | 110Ah               |
| <b>Internal Resistance</b>               | Fully charged at 25°C, approx. 2.5mΩ                    |                        |                         |                     |
| <b>Max. Discharge current</b>            | 2000A (5 Sec.)                                          |                        |                         |                     |
| <b>Capacity Affected by Temp. (20Hr)</b> | 40°C (104°F)                                            | 25°C (77°F)            | 0°C (32°F)              | -15°C (5°F)         |
|                                          | 112%                                                    | 100%                   | 80%                     | 68%                 |
| <b>Self Discharge Rate @25°C (77°F)</b>  | After 3 months Storage                                  | After 6 months Storage | After 12 months Storage |                     |
|                                          | 91%                                                     | 82%                    | 64%                     |                     |
| <b>Charge Method</b>                     | Cycle Use                                               |                        | Float Charging          |                     |
|                                          | 14.1-14.4V (Initial current less than 73A) @25°C (77°F) |                        | 13.5-13.8V@25°C (77°F)  |                     |

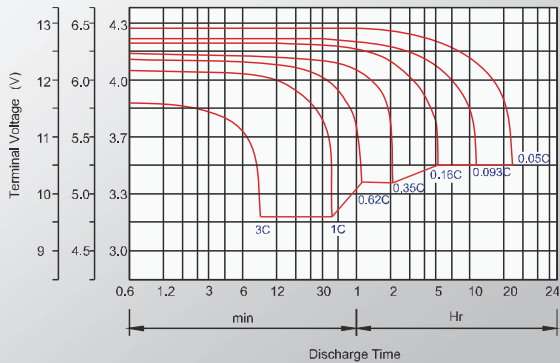
**DIMENSIONS & TERMINALS**



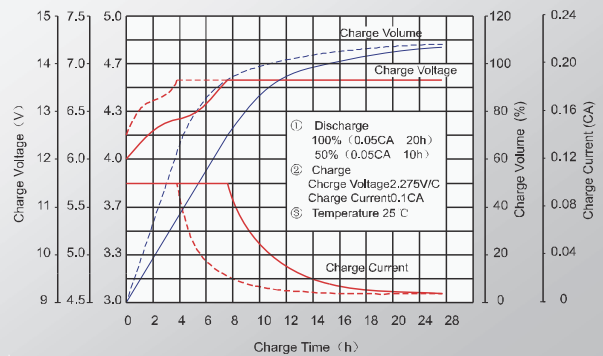
PERFORMANCE CHARACTERISTICS

| Constant Current (Amp.) and Constant Power (Watt) Discharge Table @25°C (77°F) |      |         |        |        |        |        |        |        |       |       |       |       |       |
|--------------------------------------------------------------------------------|------|---------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| Cell Voltage                                                                   | Time | 5min    | 15min  | 30min  | 45min  | 1hr    | 2hr    | 3hr    | 4hr   | 5hr   | 8hr   | 10hr  | 20hr  |
| 1.60V                                                                          | A    | 650.00  | 350.00 | 212.00 | 153.00 | 124.00 | 71.20  | 55.80  | 42.80 | 38.40 | 25.00 | 20.90 | 10.90 |
|                                                                                | W    | 1172.00 | 662.00 | 412.00 | 310.00 | 252.00 | 145.00 | 106.00 | 83.80 | 70.60 | 47.20 | 38.80 | 20.80 |
| 1.70V                                                                          | A    | 604.00  | 332.00 | 206.00 | 151.00 | 122.00 | 70.20  | 54.40  | 42.20 | 37.61 | 24.60 | 20.40 | 10.80 |
|                                                                                | W    | 1122.00 | 642.00 | 410.00 | 308.00 | 250.00 | 144.00 | 104.70 | 83.40 | 69.60 | 46.60 | 38.20 | 20.80 |
| 1.75V                                                                          | A    | 556.00  | 320.00 | 204.00 | 150.00 | 121.00 | 68.40  | 53.80  | 41.80 | 37.20 | 24.20 | 20.20 | 10.70 |
|                                                                                | W    | 1060.00 | 638.00 | 408.00 | 308.00 | 246.00 | 143.00 | 103.00 | 83.00 | 69.60 | 46.20 | 38.00 | 20.80 |
| 1.80V                                                                          | A    | 498.00  | 300.00 | 195.00 | 144.00 | 117.00 | 67.80  | 53.40  | 41.60 | 36.20 | 24.00 | 20.00 | 10.60 |
|                                                                                | W    | 972.00  | 602.00 | 398.00 | 300.00 | 246.00 | 143.00 | 103.00 | 83.00 | 68.40 | 46.00 | 38.00 | 20.80 |
| 1.85V                                                                          | A    | 446.00  | 266.00 | 177.00 | 134.00 | 109.00 | 64.40  | 50.20  | 39.20 | 34.20 | 23.00 | 19.10 | 10.40 |
|                                                                                | W    | 892.00  | 538.00 | 366.00 | 280.00 | 228.00 | 136.00 | 97.80  | 79.00 | 65.40 | 44.20 | 36.60 | 17.20 |

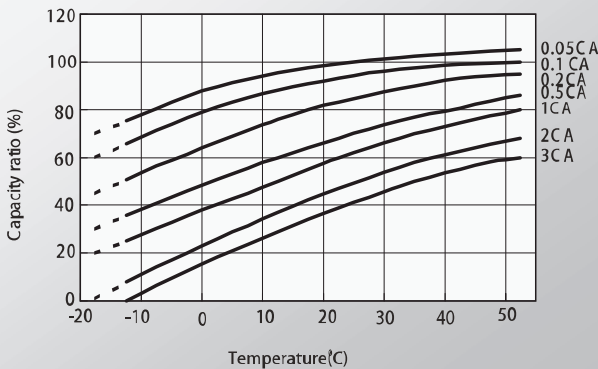
DISCHARGE CHARACTERISTICS



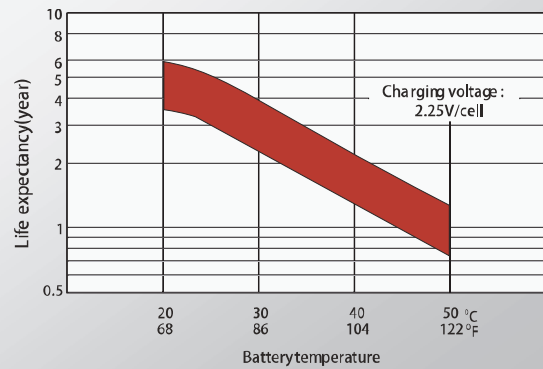
CHARGING CHARACTERISTICS (STANDBY)



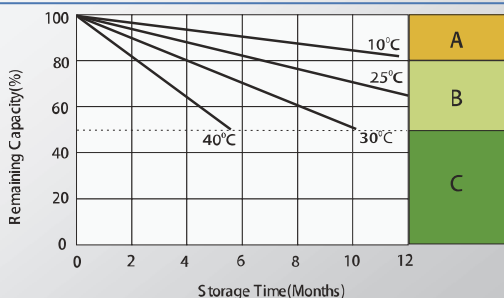
TEMP. EFFECTS IN RELATION TO BATTERY CAPACITY



EFFECT OF TEMP. ON LONG TERM FLOAT DESIGNED LIFE



SELF DISCHARGE CHARACTERISTICS



A. No supplementary charge required. (Carry out supplementary charge before use if 100% capacity is required.)  
 B. Supplementary charge required before use. Optional charging way as below:  
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
 2. Charged for above 20hours at limited current 0.25CA and constant voltage 2.45V/cell.  
 3. Charged for 8-10hours at limited current 0.05CA.  
 C. Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.

CYCLE LIFE IN RELATION TO THE DEPTH OF DISCHARGE

