

### Gel Series Battery

GE series batteries are designed with AGM separator and use colloidal or foamed silica gel to immobilize the electrolyte, which further enhances the cycling stability.

GE series Batteries are the special design batteries with 12 years floating design life at 25 °C. Meet with IEC, BS, JIS and Eurobat standard. UL (MH62092), CE approved.

### Application

- \* Emergency Power System
- \* Communication equipment
- \* Telecommunication systems
- \* Uninterruptible power supplies
- \* Electric toy car and wheelchairs, etc.

- \* Power tools
- \* Alarm system
- \* Marine equipment
- \* Medical equipment
- \* Fire and Security System



### General Features

- \* Heavy Duty Grid
- \* Mechanized assembly
- \* Non-spillable construction
- \* High Reliability and Stability
- \* Sealed and Maintenance-free
- \* Long Life and low self-discharge design

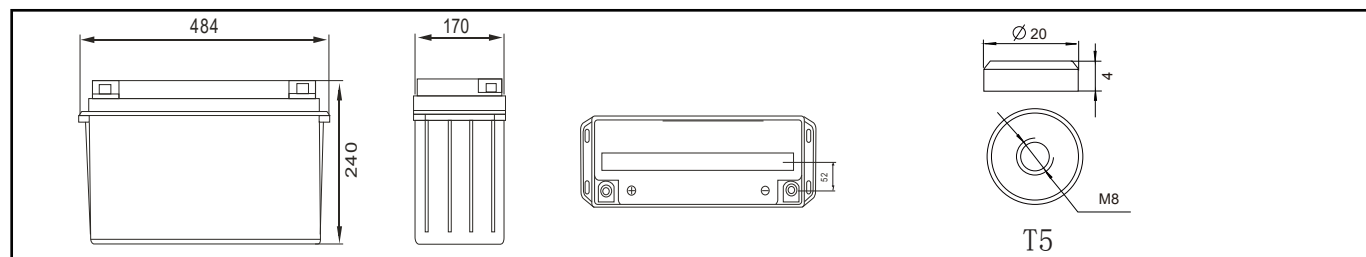
### Construction

- \* Positive . . . . . Lead dioxide
- \* Electrolyte . . . . . Sulfuric acid thixotropic Gel
- \* Separator . . . . . Macromolecule polymer
- \* Container . . . . . ABS (UL94-HB) / Flame Retardant ABS (UL94-V0)
- \* Negative . . . . . Lead
- \* Safety Valve . . . . . EPDR
- \* Terminal . . . . . Copper

### Specification

| Battery Model                     | Nominal Voltage                                       |                        | 12V                    |                         |
|-----------------------------------|-------------------------------------------------------|------------------------|------------------------|-------------------------|
|                                   | Rated capacity (10 Hour rate)                         |                        | 150Ah                  |                         |
|                                   | Cells Per battery                                     |                        | 6                      |                         |
| Dimension                         | Length                                                | Width                  | Height                 | Total Height            |
|                                   | 484mm (19.06 inches)                                  | 170mm (6.69 inches)    | 240mm (9.45 inches)    | 240mm (9.45 inches)     |
| Approx Weight                     | 41.0kg(90.39lbs) ± 3%                                 |                        |                        |                         |
| Capacity @ 25°C (77°F)            | 10 hour rate(15A,10.8V)                               | 5 hour rate(24A,10.5V) | 3 hour (35.7A,10.8V)   | 1 hour (90A,9.6V)       |
|                                   | 150Ah                                                 | 120Ah                  | 107.1Ah                | 90Ah                    |
| Max.discharge current             | 1200A (5 Sec.)                                        |                        |                        |                         |
| Internal Resistance               | Full charged at 25°C: Approx 2.8mΩ                    |                        |                        |                         |
| Capacity affected by Temp.(10 HR) | 40°C (104°F)                                          | 25°C (77°F)            | 0°C (32°F)             | -15°C (5°F)             |
|                                   | 102%                                                  | 100%                   | 85%                    | 65%                     |
| Self Discharge @25°C (77°F)       | After 3 months storage                                |                        | After 6 months storage | After 12 months storage |
|                                   | 91%                                                   |                        | 82%                    | 64%                     |
| Charge method @25°C (77°F)        | Cycle Use                                             |                        | Float Use              |                         |
|                                   | 14.40-14.70V (Initial charging current less than 45A) |                        | 13.50-13.80V           |                         |

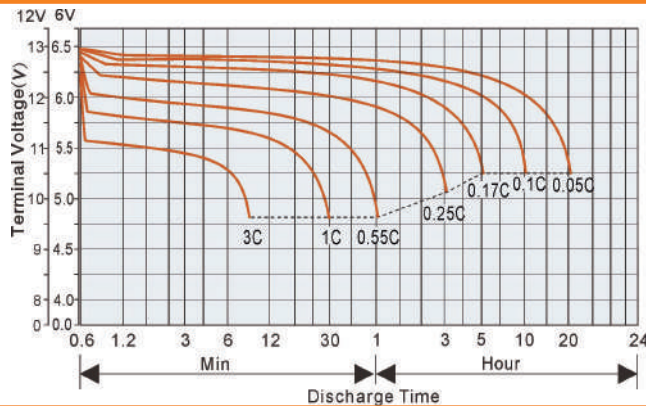
### Outer dimension (mm)



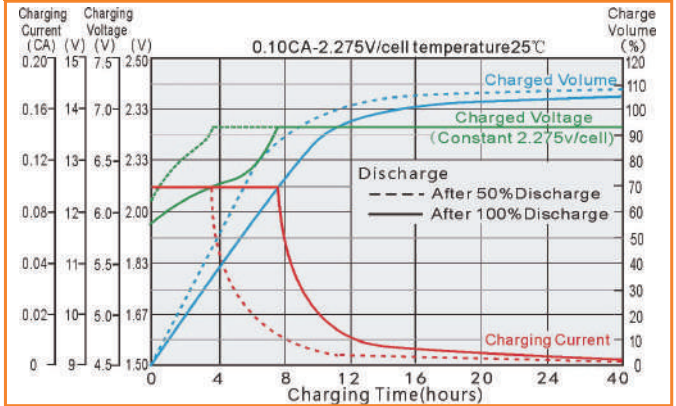
### Terminal Type (mm)

| Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F) |   |        |        |        |        |       |       |       |       |       |       |       |       |
|-------------------------------------------------------------------------------|---|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| F.V.TIME                                                                      |   | 5min   | 10min  | 15min  | 30min  | 1 hr  | 2 hr  | 3 hr  | 4 hr  | 5 hr  | 8 hr  | 10 hr | 20 hr |
| 9.60V                                                                         | A | 480.5  | 316.5  | 255.2  | 171.0  | 90.0  | 52.5  | 38.6  | 30.0  | 24.8  | 17.6  | 15.8  | 8.5   |
|                                                                               | W | 4958.2 | 3380.2 | 2735.7 | 1838.6 | 972.0 | 576.5 | 429.1 | 337.5 | 281.4 | 201.1 | 181.9 | 98.9  |
| 10.20V                                                                        | A | 465.3  | 285.6  | 240.3  | 163.5  | 84.6  | 50.1  | 37.5  | 29.3  | 24.3  | 17.1  | 15.5  | 8.3   |
|                                                                               | W | 4969.4 | 3189.0 | 2689.0 | 1835.5 | 956.8 | 577.5 | 434.3 | 340.1 | 283.3 | 200.1 | 181.5 | 96.8  |
| 10.50V                                                                        | A | 450.2  | 255.5  | 210.2  | 153.0  | 81.9  | 48.9  | 36.6  | 28.8  | 24.0  | 17.0  | 15.2  | 8.3   |
|                                                                               | W | 4915.6 | 2906.0 | 2398.2 | 1760.7 | 948.4 | 567.1 | 426.5 | 337.0 | 281.4 | 199.3 | 179.3 | 97.5  |
| 10.80V                                                                        | A | 433.8  | 240.8  | 195.3  | 141.0  | 79.2  | 47.7  | 35.7  | 28.4  | 23.4  | 16.5  | 15.0  | 8.1   |
|                                                                               | W | 4867.2 | 2776.3 | 2249.9 | 1633.6 | 921.9 | 558.7 | 420.9 | 334.8 | 276.6 | 195.5 | 178.3 | 96.5  |
| 11.10V                                                                        | A | 419.3  | 225.6  | 180.3  | 126.0  | 76.5  | 46.5  | 34.5  | 27.6  | 22.8  | 16.1  | 14.3  | 7.7   |
|                                                                               | W | 4754.3 | 2612.4 | 2098.7 | 1474.2 | 899.6 | 549.6 | 409.9 | 328.7 | 272.1 | 192.2 | 172.0 | 92.7  |

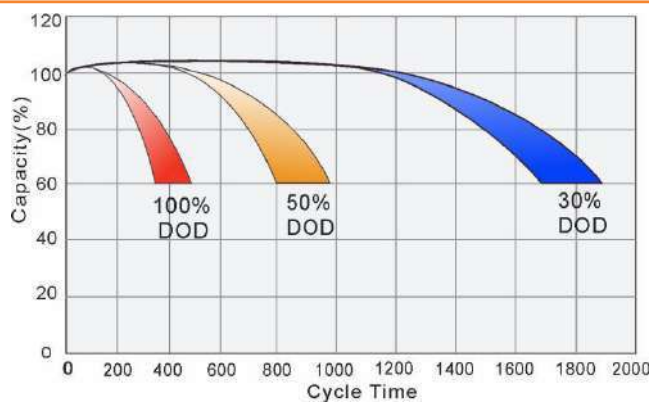
### Discharge characteristic Curve



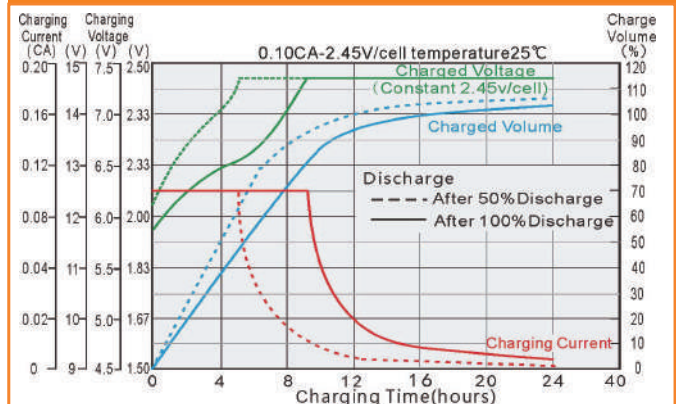
### Charge characteristic Curve for standby use



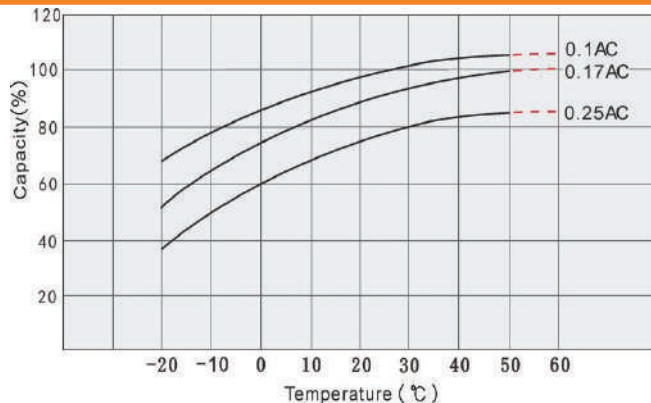
### Cycle service life in relation to depth of discharge



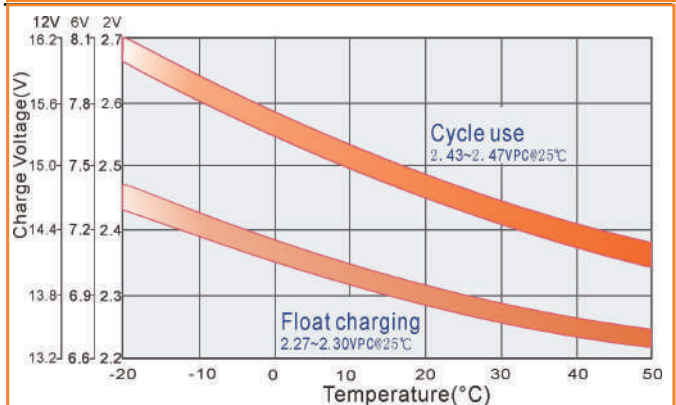
### Cyclic charging characteristic (0.25CA, at 25 C)



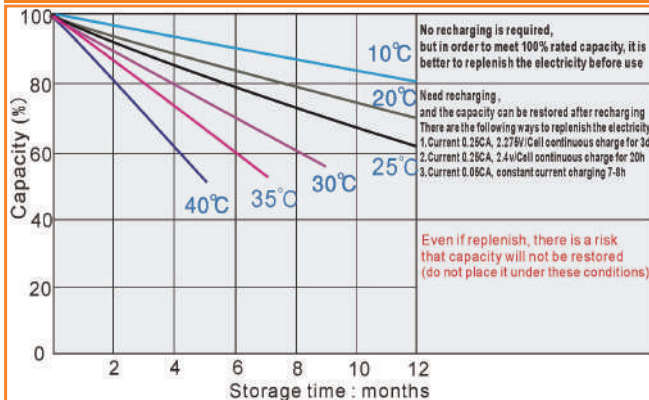
### Relationship between capacity and temperature



### Relationship between charging voltage and temperature



### Self-discharge characteristic



### Temperature effects on float life

