

GEL Series Battery

The GL series batteries use AGM separators technology with Gel electrolyte, Electrolytes don't undergo stratification, Reduce plate grid corrosion rate, effectively extending the battery's service life.
 GL series Batteries are designed for 8 years life time floating design life at 25°C.
 Meet with IEC, BS,JIS and Eurobat standard .

Application

- * Emergency Power System
- * Communication equipment
- * Telecommunication systems
- * Uninterruptible power supplies
- * Electric toy car and wheelchairs, etc.
- * Generator, Power tools
- * Golf cars and buggies
- * Marine equipment
- * Medical equipment
- * Solar and wind power system



General Features

- * Safety Sealing
- * Non-spillable construction
- * High power density
- * Excellent recovery from Deep discharge
- * Thick plates and high active materials
- * Longer Life and low self-discharge design

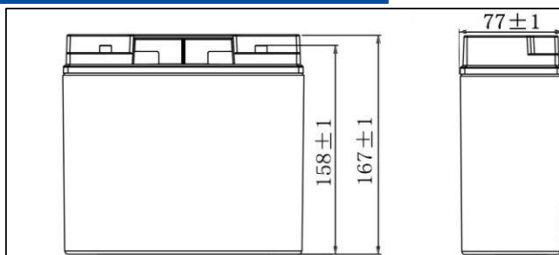
Construction

- * Positive Lead dioxide
- * Electrolyte . . . Sulfuric acid
- * Separator Fiber glass
- * Container ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDM
- * Terminal Copper

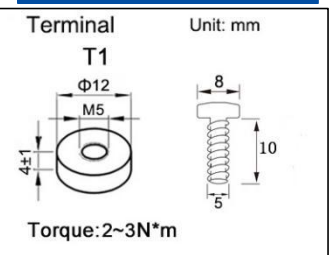
Specification

| Battery Model | Nominal Voltage | | 12V (6 cells per unit) | |
|----------------------------------|--|-------------------------------|------------------------------|---------------------------|
| | Rated capacity (20 Hour rate) | | 20Ah | |
| Dimension | Length | Width | Height | Total Height |
| | | 182mm (7.16 inches) | 77mm (3.03 inches) | 167mm (6.57 inches) |
| Approx Weight | 5.35kg(11.79 lbs) ± 3% | | | |
| Internal Resistance | Full charged at 25°C(77°F):Approx 11.6mΩ | | | |
| Maximum Charge Current | 6.0A | | | |
| Max.discharge current | 300A (5Sec.) | | | |
| Short-circuit current | 620A | | | |
| Operating Temperature Range | Nominal Operating Temperature | Discharge | Charge | Storage |
| | 25°C(77°F) | -15°C~ 50°C(5°F~122°F) | -15°C~ 40°C(5°F~104°F) | -15°C~ 40°C(5°F~104°F) |
| Capacity @ 25°C (77°F) | 20 hour rate(1.004A, 10.5V) | 10 hour rate(1.873A, 10.5V) | 3 hour rate(5.22A, 10.2V) | 1 hour rate(12.83A, 9.6V) |
| | 20.08Ah | 18.73Ah | 15.66Ah | 12.83Ah |
| Capacity affected by Temp.(10HR) | 40°C (104°F) | 25°C (77°F) | 0°C (32°F) | -15°C (5°F) |
| | 102% | 100% | 85% | 65% |
| Charge method at 25°C(77°F) | Float Charging Voltage | | Cycle Use Voltage | |
| | 13.5~13.8 VDC (-3mV/cell/°C) | | 14.4~15.0 VDC (-5mV/cell/°C) | |
| | | Equalization Charging Voltage | | |
| | | 14.1~14.4 VDC (-4mV/cell/°C) | | |

Outer dimension (mm)



Terminal Type



Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

| F.V/Time | | 5min | 10min | 15min | 20min | 30min | 1h | 2h | 3h | 5h | 8h | 10h | 20h |
|------------|---|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|
| 1.85V/cell | A | 53.8 | 37.4 | 29.3 | 24.0 | 18.8 | 11.57 | 6.77 | 4.93 | 3.18 | 2.147 | 1.814 | 0.972 |
| | W | 101.9 | 72.0 | 56.9 | 46.9 | 37.1 | 23.02 | 13.50 | 9.84 | 6.36 | 4.307 | 3.655 | 1.962 |
| 1.80V/cell | A | 58.8 | 39.8 | 31.2 | 25.5 | 19.7 | 11.91 | 6.95 | 5.04 | 3.25 | 2.198 | 1.845 | 0.989 |
| | W | 109.8 | 76.0 | 60.3 | 49.5 | 38.6 | 23.63 | 13.83 | 10.02 | 6.49 | 4.398 | 3.711 | 1.992 |
| 1.75V/cell | A | 63.5 | 42.2 | 32.9 | 26.8 | 20.5 | 12.22 | 7.11 | 5.13 | 3.32 | 2.240 | 1.873 | 1.004 |
| | W | 116.9 | 80.0 | 63.3 | 51.8 | 40.0 | 24.18 | 14.10 | 10.19 | 6.60 | 4.474 | 3.759 | 2.018 |
| 1.70V/cell | A | 67.9 | 44.5 | 34.6 | 28.1 | 21.0 | 12.50 | 7.25 | 5.22 | 3.36 | 2.277 | 1.897 | 1.017 |
| | W | 123.5 | 83.8 | 66.0 | 53.9 | 41.2 | 24.68 | 14.35 | 10.35 | 6.70 | 4.542 | 3.801 | 2.041 |
| 1.67V/cell | A | 70.1 | 45.6 | 35.4 | 28.7 | 21.5 | 12.64 | 7.31 | 5.26 | 3.39 | 2.291 | 1.906 | 1.022 |
| | W | 126.8 | 85.7 | 67.3 | 54.9 | 41.8 | 24.91 | 14.44 | 10.41 | 6.74 | 4.566 | 3.814 | 2.049 |
| 1.60V/cell | A | 73.6 | 47.7 | 36.8 | 29.5 | 22.1 | 12.83 | 7.40 | 5.32 | 3.42 | 2.315 | 1.921 | 1.030 |
| | W | 132.1 | 88.8 | 69.5 | 56.5 | 42.7 | 25.25 | 14.61 | 10.51 | 6.80 | 4.609 | 3.841 | 2.063 |

