



Specification

| | | |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Nominal Voltage | 12V | |
| Nominal Capacity(20HR) | 50.0AH | |
| Dimension | Length | 229±1mm (9.02 inches) |
| | Width | 138±1mm (5.43 inches) |
| | Container Height | 205±1mm (8.07 inches) |
| | Total Height (with Terminal) | 211±1mm (8.31 inches) |
| Approx Weight | Approx 16.6 kg (36.60lbs) | |
| Terminal | T6 | |
| Container Material | ABS | |
| Rated Capacity | 50.0 AH/2.50A | (20hr, 1.80V/cell, 25°C/77°F) |
| | 46.5 AH/4.65A | (10hr, 1.75V/cell, 25°C/77°F) |
| | 40.0 A H/8.00A | (5hr, 1.75V/cell, 25°C/77°F) |
| | 34.8 AH/11.6A | (3hr, 1.75V/cell, 25°C/77°F) |
| | 27.5 AH/27.5A | (1hr, 1.67V/cell, 25°C/77°F) |
| Max. Discharge Current | 500A (5s) | |
| Internal Resistance | Approx 9.0mΩ | |
| Operating Temp. Range | Discharge | -20~55°C (-4~131°F) |
| | Charge | 0~40°C (32~104°F) |
| | Storage | -20~50°C (-4~122°F) |
| Nominal Operating Temp. Range | 25±3°C (77±5°F) | |
| Cycle Use | Initial Charging Current less than 12A. | |
| | Voltage 14.1V~14.4V (14.1V is optimum) at 25°C(77°F). | |
| Standby Use | No limit on Initial Charging Current .Voltage 13.5V~13.8V | |
| | (13.5V is optimum) at 25°C(77°F) . Coefficient -18mV/°C | |
| Capacity affected by Temperature | 40°C (104°F) | 103% |
| | 25°C (77°F) | 100% |
| | 0°C (32°F) | 86% |
| Self Discharge | GEL series batteries may be stored for up to 9 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. | |

Applications

- ◆ Telecommunications
- ◆ Solar system
- ◆ Wind power system
- ◆ Engine starting
- ◆ Wheelchair
- ◆ Floor cleaning machines
- ◆ Golf trolley
- ◆ Boats

Constant Current Discharge (Amperes) at 25 °C (77°F)

| F.V/Time | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 7h | 8h | 9h | 10h | 20h |
|------------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 42.3 | 33.2 | 25.3 | 21.2 | 13.5 | 10.3 | 8.49 | 7.33 | 6.33 | 5.60 | 5.05 | 4.62 | 4.37 | 2.40 |
| 1.80V/cell | 48.5 | 37.1 | 27.9 | 23.4 | 14.6 | 11.0 | 9.00 | 7.70 | 6.64 | 5.86 | 5.29 | 4.86 | 4.56 | 2.50 |
| 1.75V/cell | 54.5 | 40.8 | 30.2 | 25.1 | 15.4 | 11.6 | 9.43 | 8.00 | 6.88 | 6.07 | 5.46 | 5.00 | 4.65 | 2.55 |
| 1.70V/cell | 58.7 | 43.7 | 32.1 | 26.5 | 16.4 | 12.1 | 9.74 | 8.25 | 7.12 | 6.27 | 5.63 | 5.13 | 4.76 | 2.58 |
| 1.67V/cell | 61.1 | 45.4 | 33.2 | 27.5 | 16.8 | 12.5 | 10.0 | 8.42 | 7.23 | 6.36 | 5.71 | 5.20 | 4.82 | 2.61 |
| 1.60V/cell | 66.2 | 48.6 | 35.7 | 29.2 | 17.5 | 13.0 | 10.4 | 8.68 | 7.41 | 6.50 | 5.81 | 5.31 | 4.91 | 2.65 |

Constant Power Discharge (Watts) at 25 °C (77°F)

| F.V/Time | 20min | 30min | 45min | 1h | 2h | 3h | 4h | 5h | 6h | 7h | 8h | 9h | 10h | 20h |
|------------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 81.0 | 64.0 | 49.1 | 41.3 | 26.3 | 20.1 | 16.7 | 14.5 | 12.5 | 11.1 | 10.0 | 9.20 | 8.70 | 4.79 |
| 1.80V/cell | 91.5 | 70.8 | 53.8 | 45.3 | 28.3 | 21.4 | 17.6 | 15.1 | 13.1 | 11.6 | 10.5 | 9.65 | 9.07 | 4.98 |
| 1.75V/cell | 101.7 | 77.2 | 57.7 | 48.3 | 29.9 | 22.6 | 18.4 | 15.7 | 13.5 | 12.0 | 10.8 | 9.93 | 9.24 | 5.08 |
| 1.70V/cell | 108.4 | 81.9 | 60.8 | 50.8 | 31.6 | 23.5 | 19.0 | 16.1 | 14.0 | 12.4 | 11.1 | 10.2 | 9.45 | 5.14 |
| 1.67V/cell | 111.5 | 84.2 | 62.6 | 52.4 | 32.2 | 24.1 | 19.4 | 16.4 | 14.2 | 12.5 | 11.3 | 10.3 | 9.55 | 5.18 |
| 1.60V/cell | 119.5 | 89.3 | 66.7 | 55.3 | 33.3 | 25.0 | 20.0 | 16.9 | 14.5 | 12.7 | 11.4 | 10.5 | 9.72 | 5.25 |

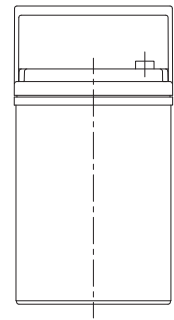
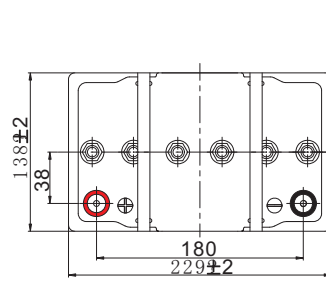
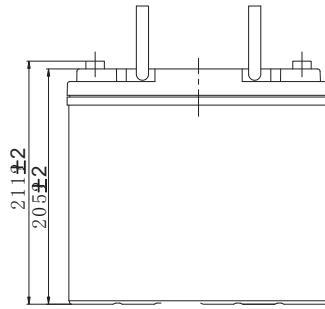
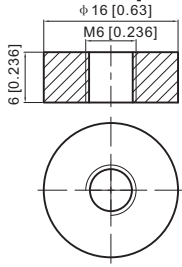
Specifications subject to change without notice.



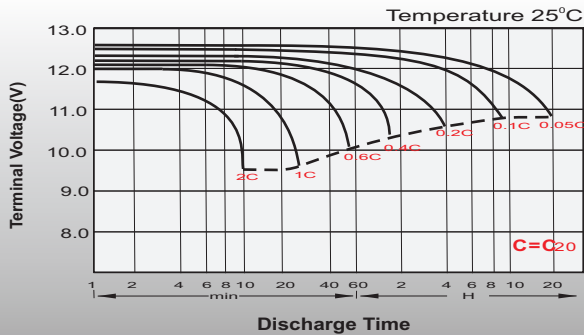
Dimensions

T6 Terminal

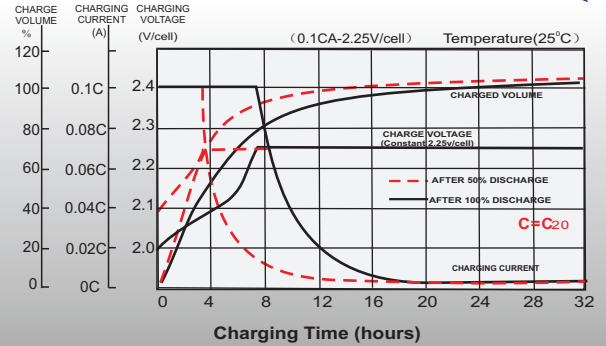
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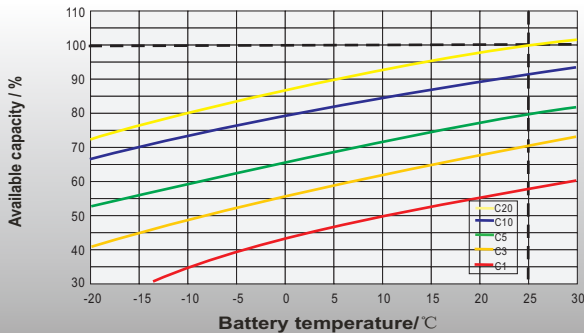
Discharge Characteristics



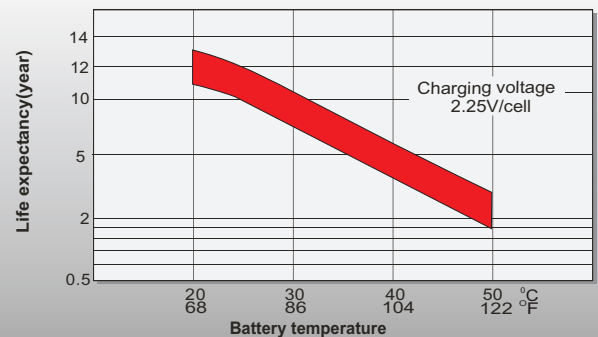
Float Charging Characteristics



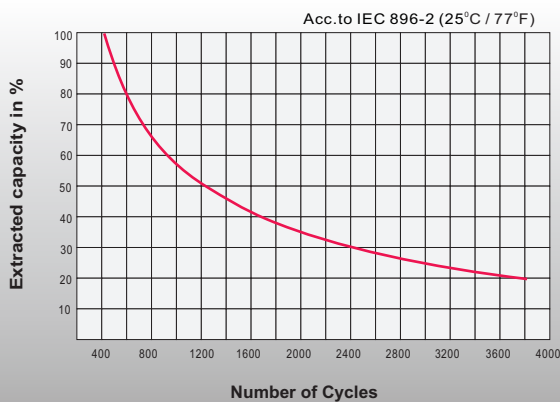
Temperature Effects in Relation to Battery Capacity



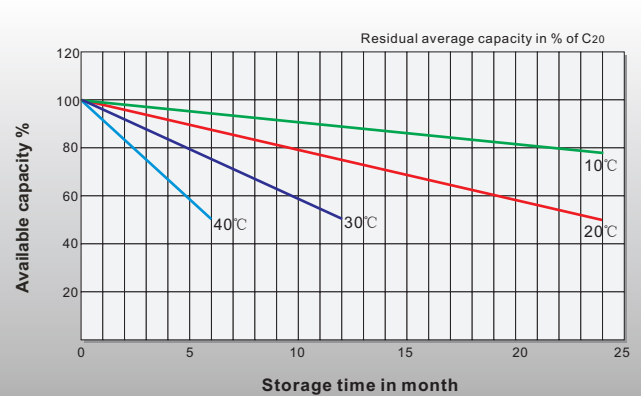
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



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