



Ultra High Rate SLA Battery

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| Capacity (25°C) | 20HR (4.17A, 10.5V) = 83.4AH 10HR (8.00A, 10.5V) = 80.0AH 5HR (14.2A, 10.5V) = 71.0AH 1HR (54.3A, 10.5V) = 54.3AH |
| Operating Temperature Range | Charge = -15°C to +50°C Discharge = -20°C to +60°C Storage = -20°C to +60°C |
| Approx. Weight | 23.7kg / 52.3lbs |
| 15 Mins Rate | 325W/cell to 1.67V/cell |
| Max. Discharge | 800A (5s) |
| Capacity Affected by Temp. (20HR) | 40°C = 102% 25°C = 100% 0°C = 85% -15°C = 65% |
| Charge Voltage (25°C) | Cycle Use = 14.1-14.4V (-24mV/°C) Max Current = 25A Float Use = 13.5-13.8V (-18mV/°C) |
| Dimensions (Nominal) | Length: 259mm (10.2 in.) Width: 168mm (6.61 in.) Height: 208mm (8.19 in.) Total Height: 214mm (8.43 in.) |

- Completely sealed, maintenance-free, low self-discharge
- State of the art hybrid grid and alloy formula
- Non-spillable, stable quality and high reliability with excellent re-charging performance
- Floating and standby use up to: 12 years
- Cycle use: Up to 260 cycles at 100% DoD
- Cycle use : Up to 600 Cycles at 50% DoD
- Container and Cover Material – ABS UL94-HB (optional UL94-V0)
- Transportation - D.O.T., I.A.T.A. & F.A.A.

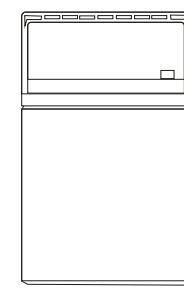
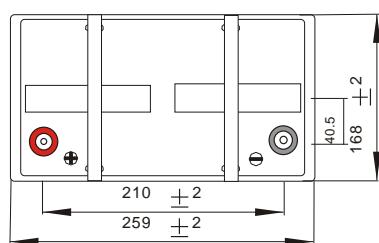
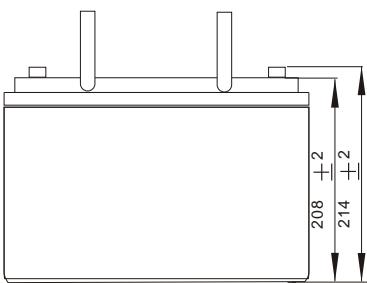


APPLICATIONS

High Power Backup
Telecommunications
Critical UPS
Medical Equipment

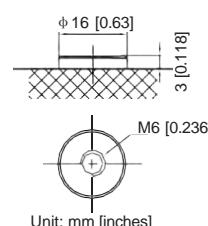
Alarm & Security System
Electric Start
Elec. Power System (EPS)
Emergency Backup Power

DC Power Supply
Auto Control System
Traffic Control Signaling
Emergency Lighting



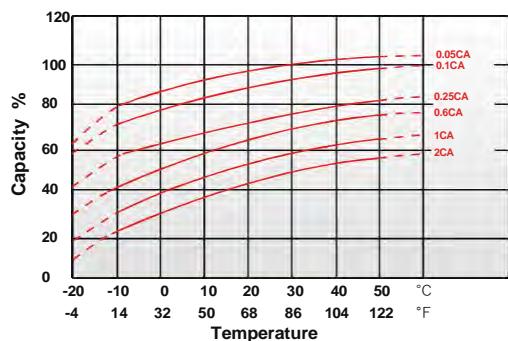
Terminal Type

M6

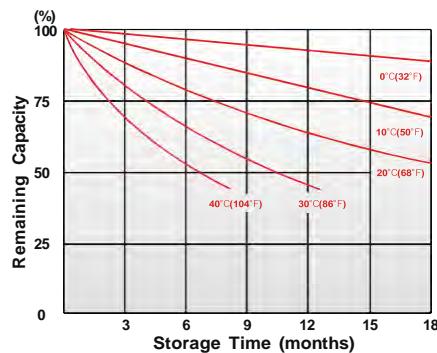


REV A

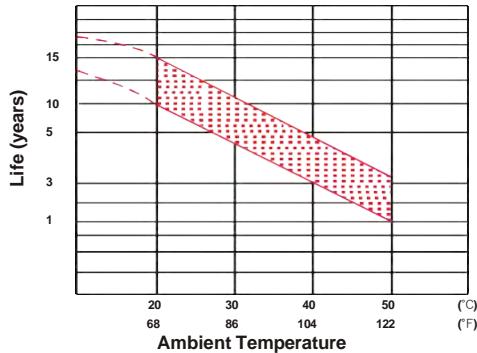
Effect of Temperature on Capacity 25°C (77°F)



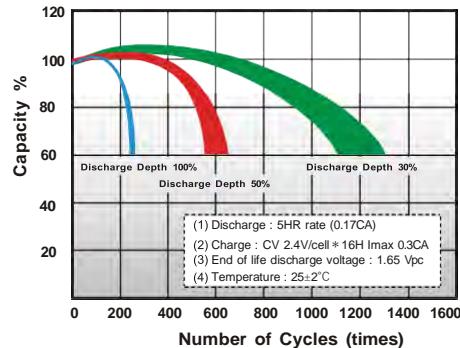
Capacity Retention Characteristic



Trickle (or Float) Service Life



Cycle Service Life



Regular Charge / Float Charge / Storage

- Charging voltage temperature compensation needs to be applied when temperature is below 0°C and above +45°C.
- Charging in temperatures below 0°C, the charge current should not exceed 0.1C as the core battery temperature can increase rapidly and damage the battery.
- During floating charge or when in storage, the life of the battery is cut in half for every 8°C temperature rise over 25°C.

Discharge

- Discharging at elevated temperatures improves performance of the battery yet shortens its life due to accelerated aging.
- Low temperature affects the battery internal resistance and lowers its capacity. The battery provides 100% capacity at 25°C. It will deliver 50% of its stated capacity at -20°C with 0.1C discharge current and 20% with 2C discharge current.

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

| F.V/Time | 5min | 10min | 15min | 30min | 1h | 2h | 3h | 4h | 5h | 6h | 10h | 20h |
|------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 1.85V/cell | 187.0 | 144.2 | 126.0 | 85.0 | 51.2 | 29.1 | 20.7 | 16.2 | 13.5 | 11.6 | 7.70 | 4.02 |
| 1.80V/cell | 214.5 | 158.9 | 138.1 | 89.5 | 52.9 | 30.0 | 21.4 | 16.7 | 13.9 | 12.0 | 7.86 | 4.10 |
| 1.75V/cell | 244.0 | 178.4 | 150.2 | 93.3 | 54.3 | 30.9 | 21.9 | 17.1 | 14.2 | 12.3 | 8.00 | 4.17 |
| 1.70V/cell | 268.6 | 193.4 | 160.1 | 98.1 | 55.9 | 31.4 | 22.4 | 17.6 | 14.6 | 12.5 | 8.14 | 4.24 |
| 1.67V/cell | 297.2 | 210.6 | 171.2 | 102.3 | 57.5 | 32.0 | 22.8 | 17.8 | 14.8 | 12.6 | 8.28 | 4.31 |
| 1.60V/cell | 326.7 | 227.3 | 180.7 | 106.3 | 58.8 | 32.6 | 23.1 | 18.2 | 15.1 | 12.9 | 8.43 | 4.36 |

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

| F.V/Time | 5min | 10min | 15min | 30min | 1h | 2h | 3h | 4h | 5h | 6h | 10h | 20h |
|------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 1.85V/cell | 363.7 | 282.0 | 247.8 | 168.9 | 102.5 | 58.4 | 41.9 | 32.9 | 27.4 | 23.7 | 15.8 | 8.30 |
| 1.80V/cell | 413.0 | 307.7 | 269.0 | 176.4 | 105.2 | 59.9 | 42.9 | 33.7 | 28.1 | 24.3 | 16.1 | 8.42 |
| 1.75V/cell | 465.0 | 342.2 | 290.0 | 182.2 | 107.2 | 61.3 | 43.7 | 34.3 | 28.6 | 24.7 | 16.3 | 8.53 |
| 1.70V/cell | 506.0 | 366.8 | 305.4 | 189.6 | 109.5 | 61.9 | 44.4 | 34.9 | 29.1 | 25.0 | 16.5 | 8.61 |
| 1.67V/cell | 555.3 | 396.5 | 324.6 | 196.7 | 112.0 | 62.7 | 44.9 | 35.3 | 29.4 | 25.2 | 16.7 | 8.72 |
| 1.60V/cell | 603.6 | 423.4 | 339.1 | 202.3 | 113.5 | 63.3 | 45.1 | 35.7 | 29.7 | 25.5 | 16.8 | 8.73 |