

**Ultra High Rate SLA Battery**

<b>Capacity (25°C)</b>	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
<b>Operating Temperature Range</b>	Charge = -15°C to +50°C Discharge = -20°C to +60°C Storage = -20°C to +60°C
<b>Approx. Weight</b>	23.7kg / 52.3lbs
<b>15 Mins Rate</b>	325W/cell to 1.67V/cell
<b>Max. Discharge</b>	800A (5s)
<b>Capacity Affected by Temp. (20HR)</b>	40°C = 102% 25°C = 100% 0°C = 85% -15°C = 65%
<b>Charge Voltage (25°C)</b>	Cycle Use = 14.1-14.4V (-24mV/°C) Max Current = 25A Float Use = 13.5-13.8V (-18mV/°C)
<b>Dimensions (Nominal)</b>	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-H B (optional UL94-V0)
- Transportation - D.O.T., I.A.T.A. & F.A.A.



**APPLICATIONS**

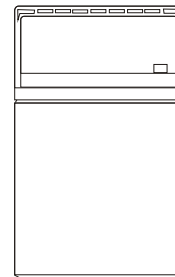
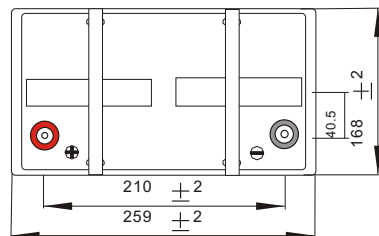
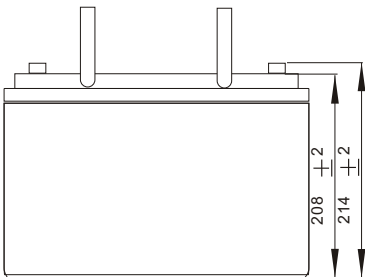
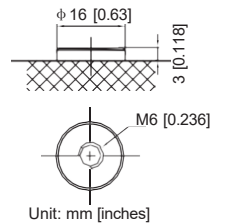
High Power Backup  
Telecommunications  
Critical UPS  
Medical Equipment

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

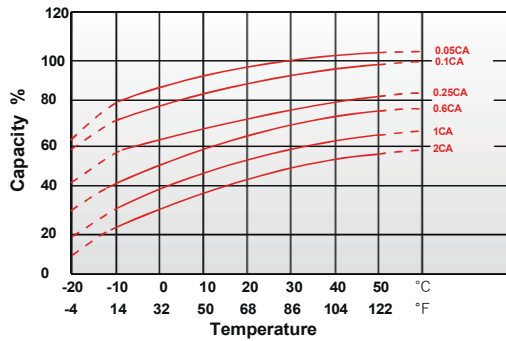
DC Power Supply  
Auto Control System  
Traffic Control Signaling  
Emergency Lighting

**Terminal Type**

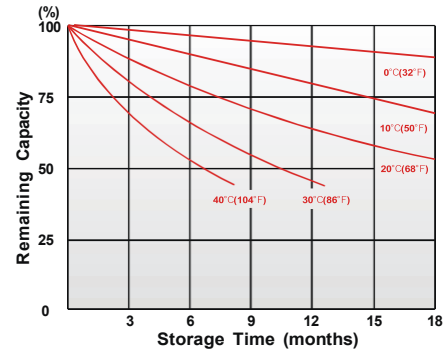
**M6**



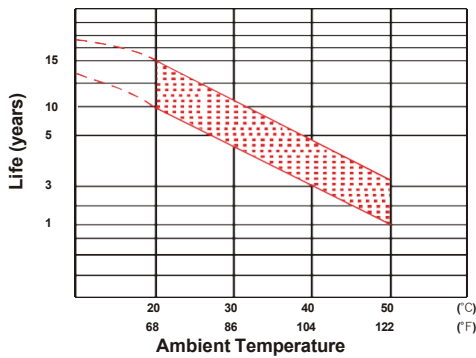
## Effect of Temperature on Capacity 25°C (77°F)



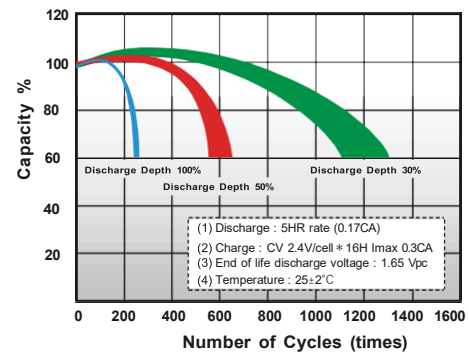
## Capacity Retention Characteristic



## 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