

## GENERAL FEATURES

- Environmentally friendly
- Able to operate at 60°C
- Integrated design to ensure the best uniformity and reliability
- Long life and high stability under high temp. environment (no air-con needed)
- Use super-C additives: Deep discharge recovery capability

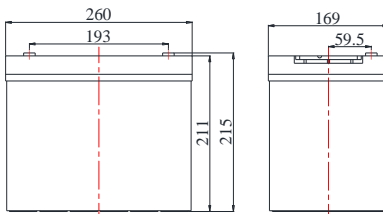
## APPLICATIONS

- Solar & Wind energy system
- BTS Stations
- UPS system
- Telecom systems
- Wheel chair & Golf Car
- Marine Equipment
- Railway Systems



## DIMENSIONS & WEIGHT

|                   |         |
|-------------------|---------|
| Length (mm)       | 260±1   |
| Width (mm)        | 169±1   |
| Height (mm)       | 211±1   |
| Total Height (mm) | 215±1   |
| Weight (kg)       | 26.2±3% |



## COMPLIED STANDARDS

|                 |              |
|-----------------|--------------|
| IEC 60896-21/22 | JIS C8704    |
| YD/T1360        | BS6290 part4 |
| GB/T 19638      | UL 1989      |

## TECHNICAL SPECIFICATIONS



|  |                            |  |
|--|----------------------------|--|
| Nominal Voltage                                    |                            | 12V(6 cells per unit)  |
| Design Floating Life @25°C                         |                            | 15 Years   |
| Nominal Capacity @25°C(20 hour rate@4.25A,10.50V ) |                            | 85Ah   |
| Capacity @25°C                                     | 10 hour rate (7.74A,10.8V) | 77.4Ah   |
|  | 5 hour rate (13.50A,10.5V) | 67.5Ah   |
|  | 1 hour rate (47.3A,9.6V)   | 47.3Ah   |
| Internal Resistance                                | Full Charged Battery@25°C  | ≤7.5mΩ   |
| Ambient Temperature                                | Discharge                  | -30°C~60°C   |
|  | Charge                     | -30°C~60°C   |
|  | Storage                    | -30°C~60°C   |
| Max.Discharge Current@25°C                         |                            | 850A(5s)   |
| Capacity affected by Temperature (10 hr Capacity ) | 40°C                       | 108%   |
|  | 25°C                       | 100%   |
|  | 0°C                        | 90%  |
|  | -15°C                      | 70%  |
| Self-Discharge@25°C per Month                      |                            | 3%   |
| Charge (Constant Voltage) @25°C                    | Standby Use                | Initial Charging Current Less than 19.1A<br>Voltage 13.6-13.8V |
|  | Cycle Use                  | Initial Charging Current Less than 19.1A<br>Voltage 14.4-14.9V |

## BATTERY DISCHARGE TABLE

### Discharge Constant Current per Cell (Amperes at 25°C)

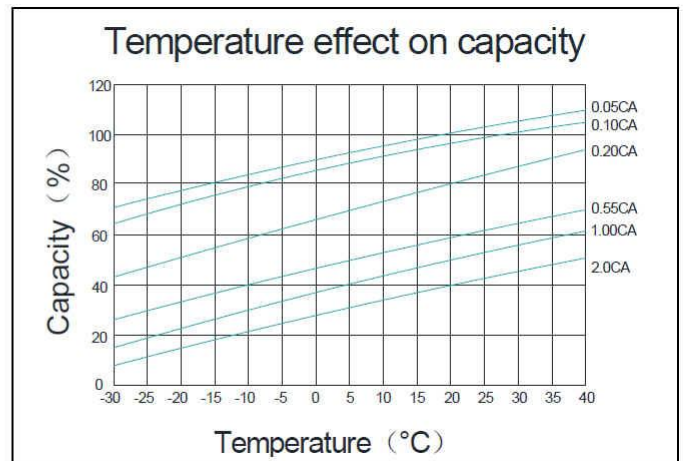
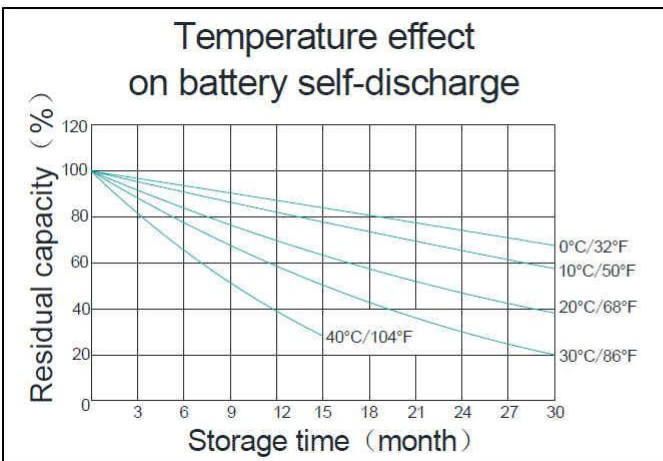
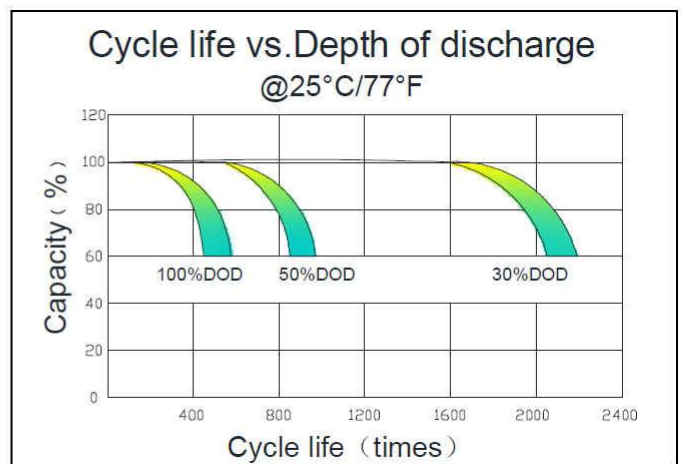
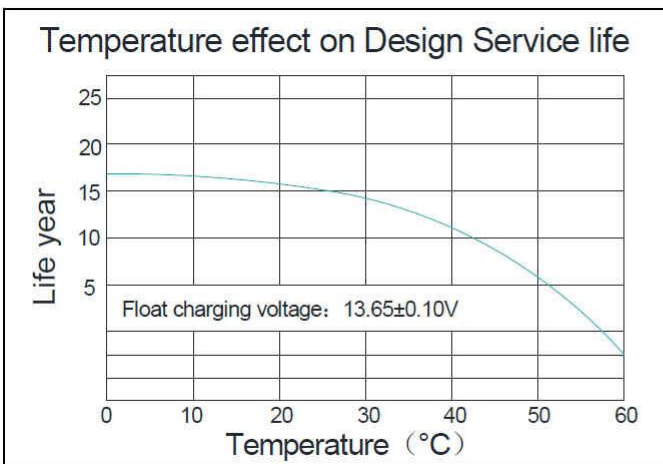
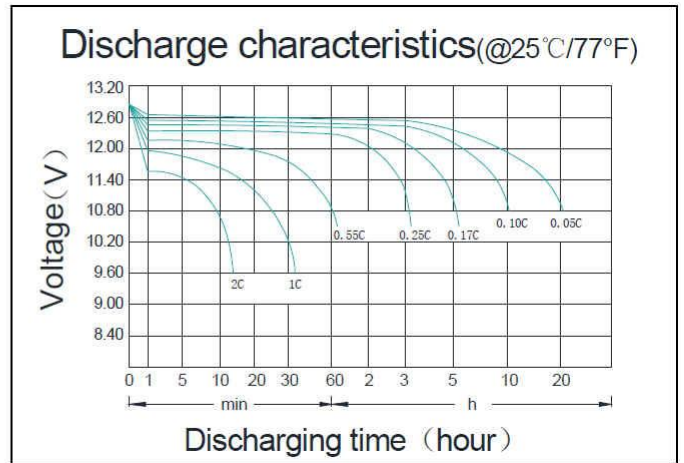
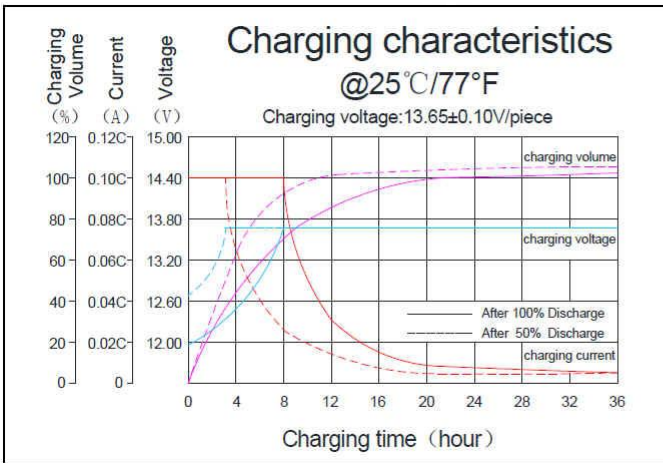
| F.V/Time | 15min | 30min | 45min | 1h   | 2h   | 3h   | 5h   | 8h  | 10h  | 20h  | 100h |
|----------|-------|-------|-------|------|------|------|------|-----|------|------|------|
| 1.60V    | 109.4 | 69.9  | 51.3  | 47.3 | 30.0 | 21.1 | 14.3 | 9.4 | 8.42 | 4.51 | 1.02 |
| 1.67V    | 107.4 | 68.6  | 50.4  | 46.3 | 29.4 | 20.7 | 14.0 | 9.3 | 8.25 | 4.42 | 1.00 |
| 1.70V    | 105.4 | 67.3  | 49.5  | 45.5 | 28.9 | 20.3 | 13.8 | 9.1 | 8.08 | 4.34 | 0.98 |
| 1.75V    | 103.4 | 66.0  | 48.5  | 44.6 | 28.3 | 19.9 | 13.5 | 8.9 | 7.99 | 4.25 | 0.96 |
| 1.80V    | 99.5  | 63.5  | 46.7  | 42.9 | 27.2 | 19.1 | 13.0 | 8.6 | 7.74 | 4.21 | 0.94 |

### Discharge Constant Power per Cell (Watts at 25°C)

| F.V/Time | 15min | 30min | 45min | 1h   | 2h   | 3h   | 5h   | 8h   | 10h  | 20h | 100h |
|----------|-------|-------|-------|------|------|------|------|------|------|-----|------|
| 1.60V    | 210.5 | 134.5 | 98.9  | 90.7 | 57.6 | 40.5 | 27.5 | 18.1 | 16.2 | 8.8 | 1.96 |
| 1.67V    | 206.7 | 132.0 | 97.0  | 89.1 | 56.6 | 39.8 | 27.0 | 17.9 | 15.9 | 8.6 | 1.92 |
| 1.70V    | 202.9 | 129.5 | 95.2  | 87.4 | 55.6 | 39.0 | 26.5 | 17.5 | 15.6 | 8.5 | 1.89 |
| 1.75V    | 199.1 | 127.1 | 93.4  | 85.8 | 54.5 | 38.3 | 26.0 | 17.2 | 15.3 | 8.4 | 1.85 |
| 1.80V    | 191.4 | 122.2 | 89.8  | 82.5 | 52.4 | 36.8 | 25.1 | 16.5 | 14.7 | 8.2 | 1.82 |

**Note** The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Contact **MCA** for the latest information.

## PERFORMANCE CHARACTERISTICS



## BATTERY CONSTRUCTION

| Component | Positive plate                               | Negative plate  | Container & Cover      | Safety valve                       | Terminal                               | Separator  | Electrolyte   | Pillar seal                 |
|-----------|--|---|------------------------|------------------------------------|--|--|---|-----------------------------|
| Features  | Thick high Sn low Ca grid with special paste | Balanced Pb-Ca grid for improved recombination efficiency | ABS (UL94-V0 optional) | Flame Si-Rubbeand aging resistance | Female Copper Insert M6(torque:4~6N.m) | Advanced AGM separator for high pressure cell design | Diluted high purity sulfuric acid with fumed Silica gel | Two layers epoxy resin seal |

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