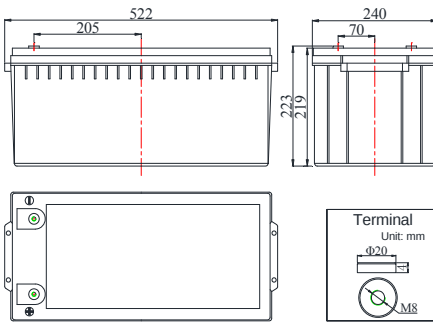


## GENERAL FEATURES

- 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

## DIMENSIONS & WEIGHT

|                  |         |
|------------------|---------|
| Length(mm)       | 522±1   |
| Width(mm)        | 240±1   |
| Height(mm)       | 219±1   |
| Total Height(mm) | 223±1   |
| Weight(kg)       | 65.2±3% |



## COMPLIED STANDARDS

|                 |              |
|-----------------|--------------|
| IEC 60896-21/22 | JIS C8704    |
| YD/T799         | BS6290 part4 |
| GB/T 19638      | UL 1989      |

## APPLICATIONS

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



## TECHNICAL SPECIFICATIONS



|                                                       |                             |                                                                |
|-------------------------------------------------------|-----------------------------|----------------------------------------------------------------|
| Nominal Voltage                                       |                             | 12V(6 cells per unit)                                          |
| Design Floating Life @25°C                            |                             | 15 Years                                                       |
| Nominal Capacity @25°C(20 hour rate@11.00A,10.50V )   |                             | 220Ah                                                          |
| Capacity @25°C                                        | 10 hour rate (20.02A,10.8V) | 200.2Ah                                                        |
|                                                       | 5 hour rate (35.00A,10.5V)  | 175.0Ah                                                        |
|                                                       | 1 hour rate (122.3A,9.6V)   | 122.3Ah                                                        |
| Internal Resistance                                   | Full Charged Battery@25°C   | ≤3.4mΩ                                                         |
| Ambient Temperature                                   | Discharge                   | -30°C~60°C                                                     |
|                                                       | Charge                      | -30°C~60°C                                                     |
|                                                       | Storage                     | -30°C~60°C                                                     |
| Max.Discharge Current@25°C                            |                             | 2200A(5s)                                                      |
| Capacity affected by Temperature<br>(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 39.6A<br>Voltage 13.6-13.8V |
|                                                       | Cycle Use                   | Initial Charging Current Less than 39.6A<br>Voltage 14.4-14.9V |

## BATTERY DISCHARGE TABEL

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

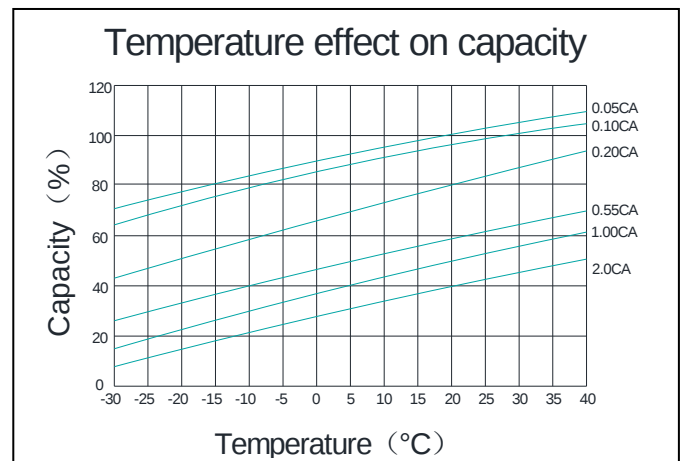
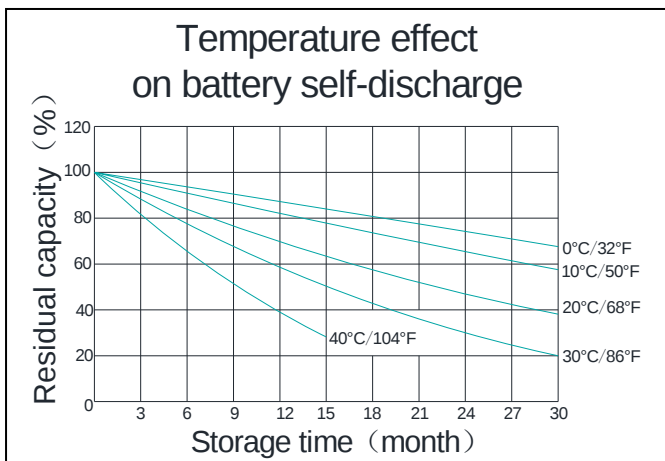
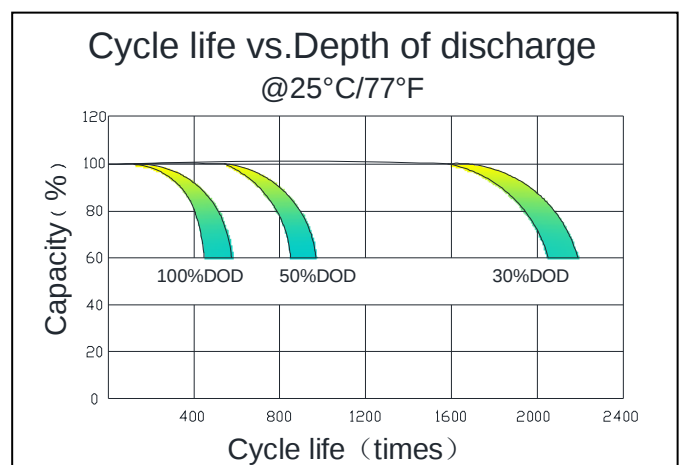
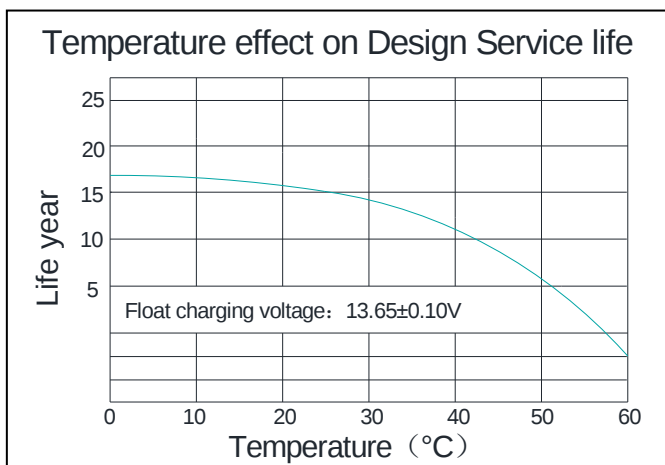
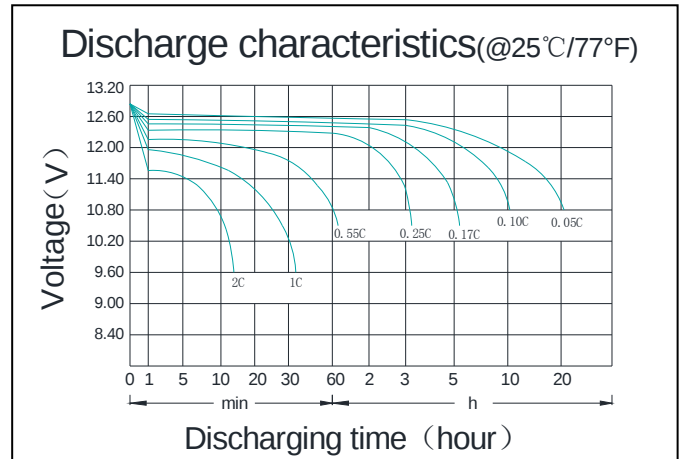
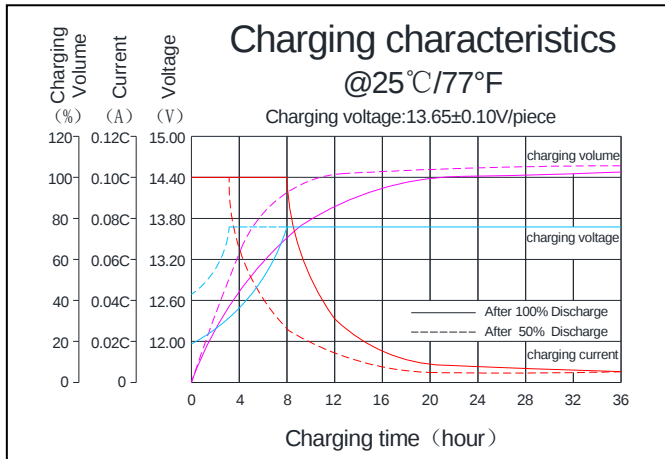
| F.V/Time | 15min | 30min | 45min | 1h    | 2h   | 3h   | 5h   | 8h   | 10h   | 20h   | 100h |
|----------|-------|-------|-------|-------|------|------|------|------|-------|-------|------|
| 1.60V    | 283.1 | 180.8 | 132.9 | 122.3 | 77.7 | 54.6 | 37.0 | 24.4 | 21.78 | 11.66 | 2.64 |
| 1.67V    | 278.1 | 177.5 | 130.5 | 119.9 | 76.1 | 53.5 | 36.3 | 24.0 | 21.34 | 11.44 | 2.60 |
| 1.70V    | 272.8 | 174.2 | 128.0 | 117.7 | 74.8 | 52.6 | 35.6 | 23.5 | 20.90 | 11.22 | 2.53 |
| 1.75V    | 267.7 | 170.9 | 125.6 | 115.5 | 73.3 | 51.5 | 35.0 | 23.1 | 20.68 | 11.00 | 2.49 |
| 1.80V    | 257.4 | 164.3 | 120.8 | 111.1 | 70.4 | 49.5 | 33.7 | 22.2 | 20.02 | 10.89 | 2.44 |

### 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    | 544.9 | 348.0 | 255.9 | 234.7 | 149.2 | 104.7 | 71.3 | 46.9 | 42.0 | 22.7 | 5.08 |
| 1.67V    | 535.0 | 341.7 | 251.0 | 230.6 | 146.5 | 103.0 | 70.0 | 46.2 | 41.1 | 22.3 | 4.97 |
| 1.70V    | 525.1 | 335.3 | 246.4 | 226.2 | 143.9 | 101.0 | 68.6 | 45.3 | 40.5 | 22.1 | 4.88 |
| 1.75V    | 515.2 | 328.9 | 241.8 | 222.0 | 141.0 | 99.0  | 67.3 | 44.4 | 39.6 | 21.8 | 4.80 |
| 1.80V    | 495.4 | 316.4 | 232.5 | 213.4 | 135.7 | 95.3  | 64.9 | 42.7 | 38.1 | 21.1 | 4.71 |

**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 MCAPOWER 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 resistancer | Female Copper Insert M8(torque:1 0~12N.m) | Advanced AGM separator for high pressure cell design | Dilute high purity sulphuric acid with fumed Silica gel | Two layers epoxy resin seal |