

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

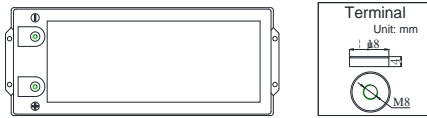
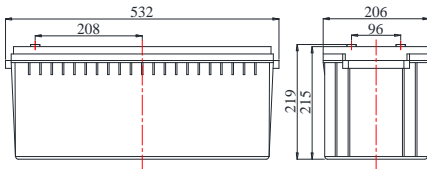
APPLICATIONS

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



DIMENSIONS & WEIGHT

| | |
|------------------|---------|
| Length(mm) | 532±1 |
| Width(mm) | 206±1 |
| Height(mm) | 215±1 |
| Total Height(mm) | 219±1 |
| Weight(kg) | 56.2±3% |



TECHNICAL SPECIFICATIONS



| | | |
|--|-----------------------------|--|
| Nominal Voltage | | 12V(6 cells per unit) |
| Design Floating Life @25°C | | 15 Years |
| Nominal Capacity @25°C(20 hour rate@9.00A,10.50V) | | 180Ah |
| Capacity @25°C | 10 hour rate (16.38A,10.8V) | 163.8Ah |
| | 5 hour rate (28.60A,10.5V) | 143.0Ah |
| | 1 hour rate (100.1A,9.6V) | 100.1Ah |
| Internal Resistance | Full Charged Battery@25°C | ≤3.8mΩ |
| Ambient Temperature | Discharge | -30°C~60°C |
| | Charge | -30°C~60°C |
| | Storage | -30°C~60°C |
| Max.Discharge Current@25°C | | 1800A(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 32.4A Voltage 13.6-13.8V |
| | Cycle Use | Initial Charging Current Less than 32.4A Voltage 14.4-14.9V |

COMPLIED STANDARDS

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

BATTERY DISCHARGE TABLE

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

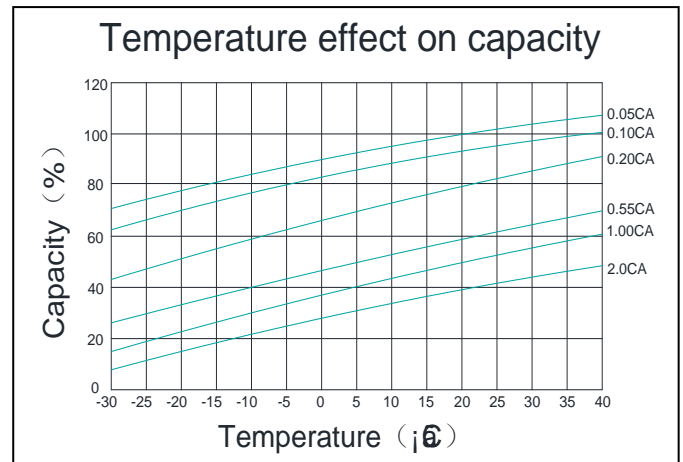
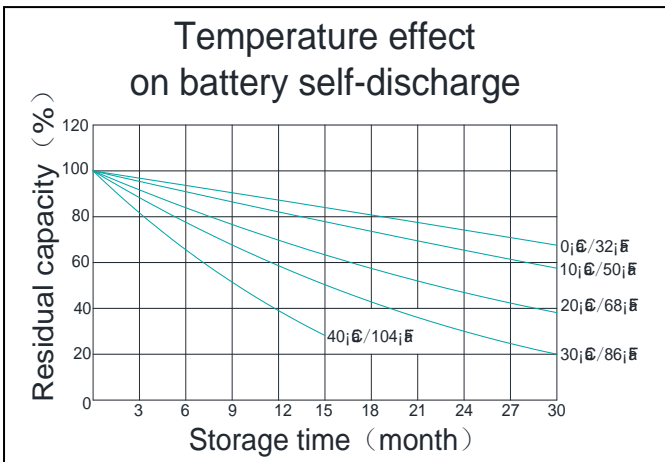
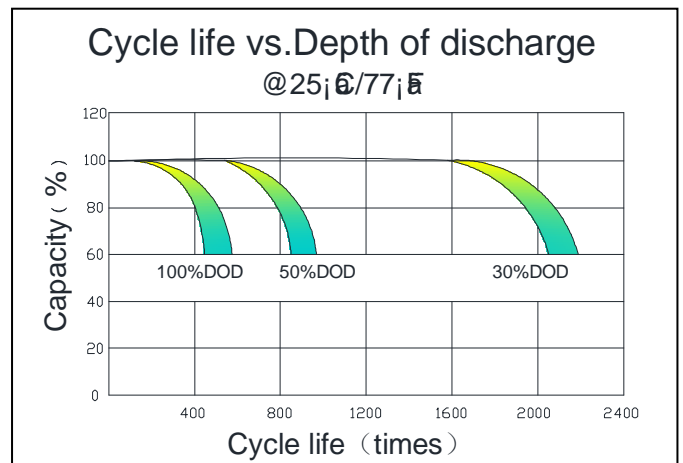
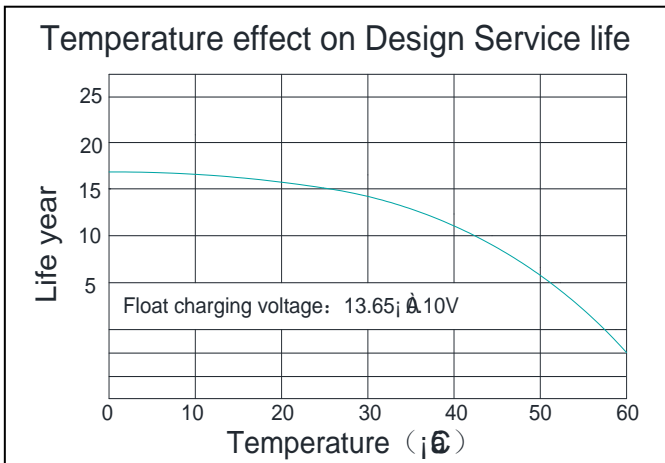
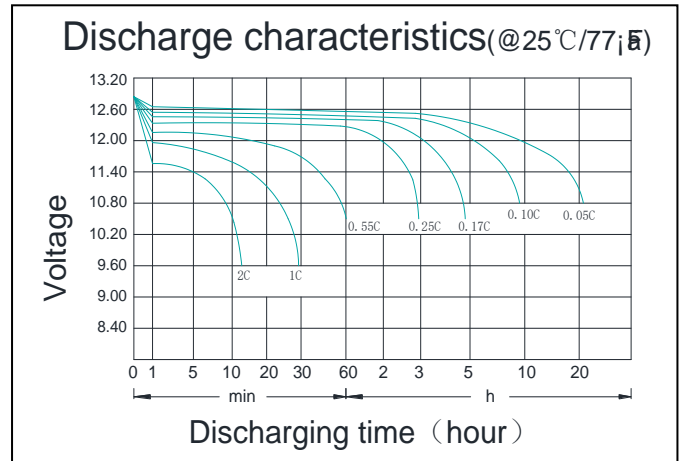
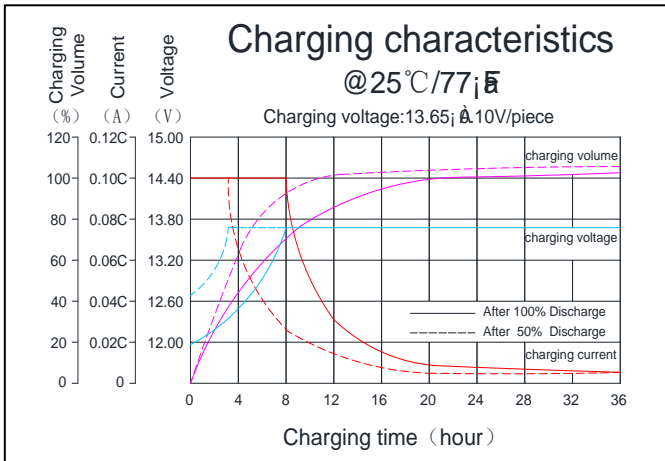
| F.V/Time | 15min | 30min | 45min | 1h | 2h | 3h | 5h | 8h | 10h | 20h | 100h |
|----------|-------|-------|-------|-------|------|------|------|------|-------|------|------|
| 1.60V | 231.7 | 148.0 | 108.7 | 100.1 | 63.5 | 44.6 | 30.2 | 20.0 | 17.82 | 9.54 | 2.16 |
| 1.67V | 227.5 | 145.3 | 106.7 | 98.1 | 62.3 | 43.7 | 29.7 | 19.6 | 17.46 | 9.36 | 2.12 |
| 1.70V | 223.2 | 142.6 | 104.8 | 96.3 | 61.2 | 43.0 | 29.2 | 19.3 | 17.10 | 9.18 | 2.07 |
| 1.75V | 219.1 | 139.9 | 102.8 | 94.5 | 59.9 | 42.1 | 28.6 | 18.9 | 16.92 | 9.00 | 2.03 |
| 1.80V | 210.6 | 134.5 | 98.8 | 90.9 | 57.6 | 40.5 | 27.5 | 18.2 | 16.38 | 8.91 | 2.00 |

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 | 445.9 | 284.8 | 209.3 | 192.1 | 122.0 | 85.7 | 58.3 | 38.3 | 34.4 | 18.6 | 4.16 |
| 1.67V | 437.8 | 279.5 | 205.4 | 188.6 | 119.9 | 84.2 | 57.2 | 37.8 | 33.7 | 18.2 | 4.07 |
| 1.70V | 429.7 | 274.3 | 201.6 | 185.0 | 117.7 | 82.6 | 56.2 | 37.1 | 33.1 | 18.1 | 4.00 |
| 1.75V | 421.6 | 269.1 | 197.8 | 181.6 | 115.4 | 81.0 | 55.1 | 36.4 | 32.4 | 17.8 | 3.92 |
| 1.80V | 405.4 | 258.8 | 190.3 | 174.6 | 111.1 | 77.9 | 53.1 | 34.9 | 31.1 | 17.3 | 3.85 |

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-Rubber and aging resister | Female Copper Insert M8 (torque: 7~9N.m) | Advanced AGM separator for high pressure cell design | Dilute high purity sulphuric acid with fumed Silica gel | Two layers epoxy resin seal |