

### GENERAL FEATURES

- Combine the characteristics of lead acid battery and super capacitor
- Long life cycle service design, excellent PSoC and cyclic performance
- High power, rapid charging and discharging
- Unique grid and lead pasting design
- Extreme temperature tolerance

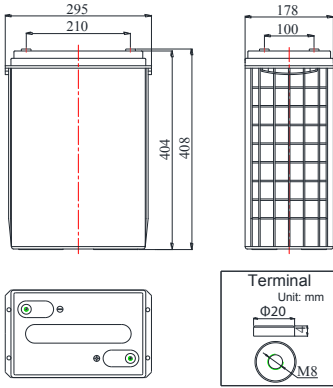
### APPLICATIONS

- Floor Cleaning Machines
- Aerial Work Platforms
- Marine & Boating
- Recreational Vehicles
- Golf Carts and Utility Vehicles
- Solar & Renewable Energy
- Electric Vehicle



### DIMENSIONS & WEIGHT

|                  |         |
|------------------|---------|
| Length(mm)       | 295±1   |
| Width(mm)        | 178±1   |
| Height(mm)       | 404±1   |
| Total Height(mm) | 408±1   |
| Weight(kg)       | 56.7±3% |



### COMPLIED STANDARDS

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

### TECHNICAL SPECIFICATIONS

|  |                             |  |
|--|-----------------------------|--|
| Nominal Voltage                                    |                             | 6V(3 cells per unit)   |
| Design Floating Life @25°C                         |                             | 20 Years   |
| Nominal Capacity @25°C (20 hour rate@19.42A,5.10V) |                             | 400.0Ah  |
| Capacity @25°C                                     | 10 hour rate (35.27A,5.40V) | 352.7Ah  |
|  | 5 hour rate (65.40A,5.25V)  | 327.0Ah  |
|  | 1 hour rate (228.6A,4.80V)  | 228.6Ah  |
| Internal Resistance                                | Full Charged Battery@25°C   | ≤2.2mΩ   |
| Ambient Temperature                                | Discharge                   | -30°C~60°C   |
|  | Charge                      | -30°C~60°C   |
|  | Storage                     | -30°C~60°C   |
| Max. Discharge Current@25°C                        |                             | 2500A(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 95.0A<br>Voltage 6.80-6.90V |
|  | Cycle Use                   | Initial Charging Current Less than 95.0A<br>Voltage 7.20-7.35V |

### BATTERY DISCHARGE TABLE

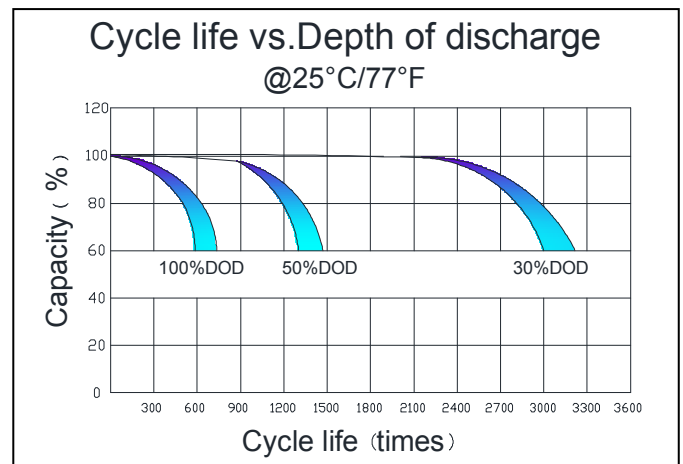
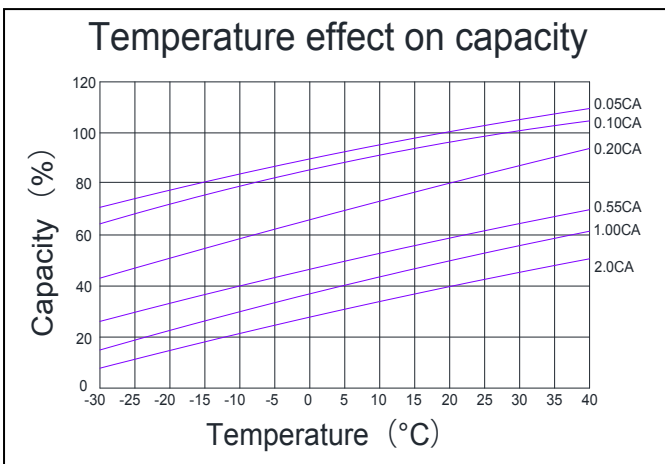
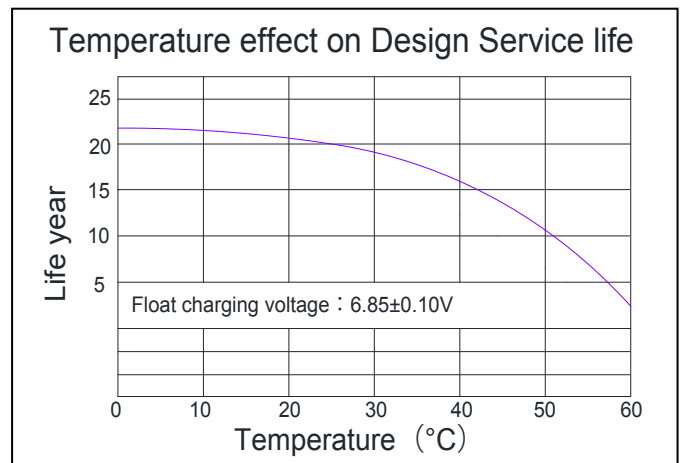
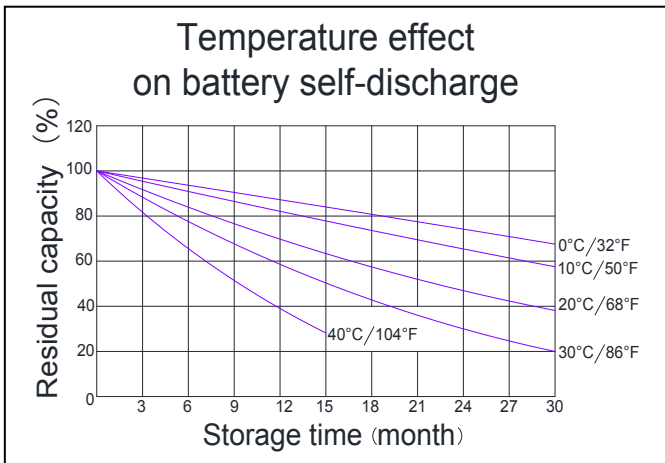
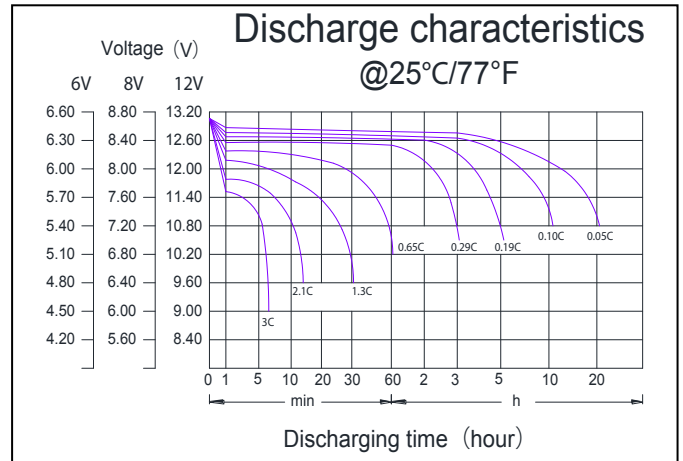
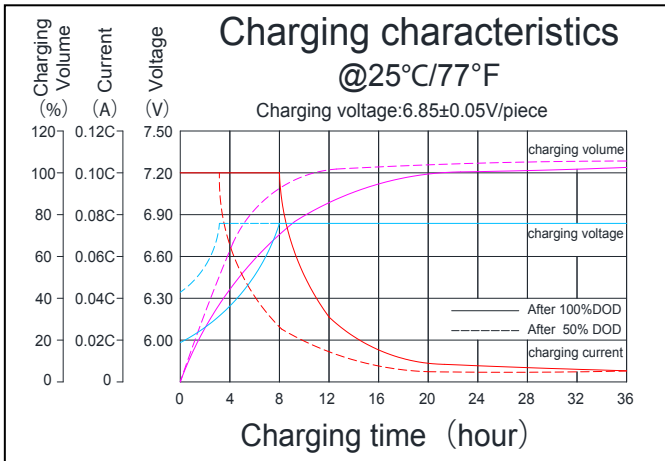
#### Discharge Constant Current per Cell (Amperes at 25°C)

| F.V/Time | 5min   | 10min | 15min | 20min | 25min | 30min | 35min | 40min | 45min | 60min | 90min | 2h    | 3h    | 4h   | 5h   | 6h   | 7h   | 8h   | 10h   | 12h   | 20h   |
|----------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|
| 1.60V    | 1033.3 | 658.9 | 559.7 | 455.8 | 401.8 | 357.9 | 315.9 | 287.2 | 262.7 | 228.6 | 184.6 | 145.1 | 102.0 | 83.5 | 69.1 | 58.0 | 51.0 | 45.6 | 38.72 | 32.56 | 20.14 |
| 1.65V    | 1014.6 | 646.7 | 549.7 | 448.4 | 394.9 | 351.4 | 310.0 | 281.8 | 257.9 | 224.1 | 180.9 | 142.3 | 99.9  | 81.8 | 67.8 | 56.7 | 50.2 | 44.8 | 37.98 | 31.98 | 19.76 |
| 1.67V    | 1004.6 | 640.6 | 543.6 | 441.2 | 391.5 | 348.3 | 308.3 | 280.5 | 256.6 | 222.0 | 179.7 | 141.0 | 99.1  | 81.0 | 67.0 | 56.3 | 49.8 | 44.4 | 37.60 | 31.74 | 19.57 |
| 1.70V    | 984.1  | 628.8 | 533.2 | 433.3 | 384.1 | 341.4 | 303.2 | 275.6 | 252.2 | 217.5 | 176.0 | 139.8 | 98.3  | 80.2 | 66.6 | 55.9 | 49.3 | 44.0 | 36.82 | 31.20 | 19.42 |
| 1.75V    | 976.8  | 622.3 | 529.3 | 427.9 | 378.1 | 338.3 | 299.2 | 272.0 | 248.8 | 215.0 | 174.3 | 136.9 | 96.2  | 78.9 | 65.4 | 55.1 | 48.5 | 43.2 | 36.43 | 30.70 | 19.00 |
| 1.80V    | 945.9  | 602.3 | 511.0 | 418.3 | 366.9 | 327.5 | 290.4 | 264.0 | 241.4 | 208.5 | 169.0 | 131.6 | 92.5  | 75.2 | 62.9 | 53.0 | 46.5 | 41.5 | 35.27 | 29.69 | 18.43 |
| 1.85V    | 889.3  | 568.0 | 481.0 | 392.6 | 344.4 | 307.9 | 272.8 | 248.0 | 227.0 | 196.5 | 158.7 | 124.6 | 87.2  | 71.1 | 59.2 | 50.2 | 44.0 | 39.1 | 33.11 | 27.91 | 16.75 |

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

| F.V/Time | 5min   | 10min  | 15min  | 20min | 25min | 30min | 35min | 40min | 45min | 60min | 90min | 2h    | 3h    | 4h    | 5h    | 6h    | 7h   | 8h   | 10h  | 12h  | 20h   |
|----------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|
| 1.60V    | 1936.1 | 1242.0 | 1055.5 | 863.7 | 764.5 | 683.6 | 603.6 | 550.3 | 503.6 | 438.7 | 353.6 | 278.6 | 195.7 | 159.9 | 132.4 | 111.0 | 97.9 | 87.6 | 74.0 | 62.8 | 39.14 |
| 1.65V    | 1908.3 | 1223.3 | 1042.4 | 853.2 | 754.1 | 674.1 | 592.8 | 539.2 | 496.2 | 430.9 | 347.4 | 273.8 | 192.4 | 157.5 | 130.8 | 109.0 | 96.6 | 86.3 | 72.9 | 61.6 | 38.76 |
| 1.67V    | 1894.8 | 1213.3 | 1032.9 | 844.6 | 748.0 | 668.0 | 589.7 | 537.5 | 493.2 | 426.4 | 345.0 | 271.4 | 190.8 | 155.8 | 129.1 | 108.5 | 95.8 | 85.5 | 72.5 | 61.2 | 38.57 |
| 1.70V    | 1877.4 | 1195.9 | 1016.3 | 828.9 | 734.5 | 654.9 | 581.4 | 528.8 | 485.8 | 418.6 | 338.0 | 268.9 | 188.7 | 154.2 | 128.3 | 107.7 | 95.0 | 84.7 | 70.9 | 60.1 | 38.38 |
| 1.75V    | 1867.4 | 1185.9 | 1009.8 | 818.0 | 724.1 | 648.9 | 574.1 | 522.7 | 477.9 | 414.0 | 334.7 | 263.6 | 185.0 | 151.7 | 125.8 | 106.1 | 93.3 | 83.1 | 70.2 | 59.3 | 37.62 |
| 1.80V    | 1812.6 | 1152.9 | 979.4  | 803.2 | 705.0 | 628.8 | 557.5 | 508.4 | 464.0 | 401.3 | 324.4 | 253.7 | 178.0 | 144.7 | 121.3 | 102.0 | 89.2 | 79.8 | 67.8 | 57.4 | 36.48 |
| 1.85V    | 1709.1 | 1095.0 | 928.5  | 760.2 | 668.0 | 596.7 | 528.8 | 481.0 | 441.0 | 381.6 | 308.0 | 242.2 | 169.4 | 138.2 | 115.1 | 97.4  | 85.5 | 75.9 | 64.3 | 54.3 | 33.17 |

PERFORMANCE CHARACTERISTICS



BATTERY CONSTRUCTION

| Component | Positive plate                                       | Negative plate  | Container & Cover      | Safety valve                       | Terminal                                   | Separator   | Electrolyte                                  | Pillar seal   |
|-----------|--|---|------------------------|------------------------------------|--|---|--|---|
| Features  | Rare earth alloy grid with good corrosion resistance | Unique anode formula, high purity material, low self-discharge rate | ABS (UL94-V0 optional) | Flame resistance, aging resistance | Female Copper Insert M8 (torque: 10~12N.m) | AGM separator with organic fiber, longer service life | Gradual change gel electrolyte (with patent) | Anti-corrosion elastic O ring, two layers epoxy seal technology |