



## JDG Series AGM- GEL battery

JDG12-85(B)

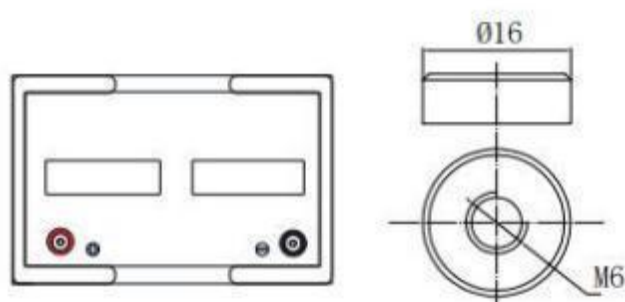
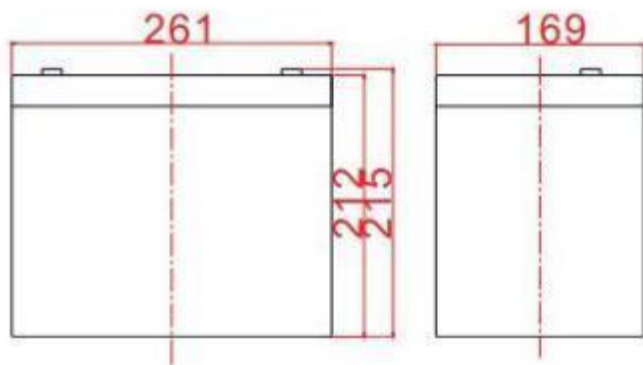
### General Features

- Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
- Relatively rich electrolyte, high temperature and low temperature performance is superior
- Long cycle life, excellent deep cycle discharge ability
- Excellent charge acceptance ability
- Precision sealing technology
- Long life



Dimension: 261(L) × 169(W) × 212(H) × 215(TH) / (±2mm)

Unit: mm



Terminal Dimensions

### Specification

|                                              |                                           |
|----------------------------------------------|-------------------------------------------|
| Nominal Voltage                              | 12V                                       |
| Nominal Capacity                             | 85Ah@10hour-rate to 1.80V per cell @25°C  |
| Design life                                  | 10 years                                  |
| Terminal                                     | M6                                        |
| Approx. Weight                               | Approx 26.0kg ± 3% (57.32 ± 3% lbs)       |
| Container Material                           | ABS (UL94-HB, UL94-V0 Optional)           |
| short-circuit current                        | 2222A                                     |
| Internal resistance (Full charged at 25°C: ) | 5.4 mΩ                                    |
| Self discharge                               | 3% of capacity declined per month at 25°C |

### Operating Temperature

|            |                         |
|------------|-------------------------|
| Discharge: | -20 ~ 50°C (-4 ~ 122°F) |
| Charge :   | -20 ~ 50°C (-4 ~ 122°F) |
| Storage:   | -20 ~ 50°C (-4 ~ 122°F) |

### Charge Method (25 °C)

|                             |                         |
|-----------------------------|-------------------------|
| Charge current:             | Max. 21.3A; Recom. 8.5A |
| Float charge: 13.5-13.8V    | recom. 13.8V (-18mV/°C) |
| Equalize charge: 13.8-14.1V | recom. 14.1V (-24mV/°C) |
| Cycle charge: 14.4-15.0V    | recom. 14.7V (-30mV/°C) |

### Standards

Executive standard: IEC 60896-21/22, GB/T 19638.1-2014, YD/T 1360-2005

### Applications

- UPS/EPS
- Power systems
- Telecommunications system
- Emergency lighting, Auto control system
- Solar/wind generating storage cyclic
- Other general purpose

### Rated Capacity

|                              |        |
|------------------------------|--------|
| 10Hour Rate (8.50A to 10.8V) | 85.0Ah |
| 3Hour Rate (22.6A to 10.2V)  | 67.8Ah |
| 1Hour Rate (53.8A to 9.6V)   | 53.8Ah |

### Attain Certificate



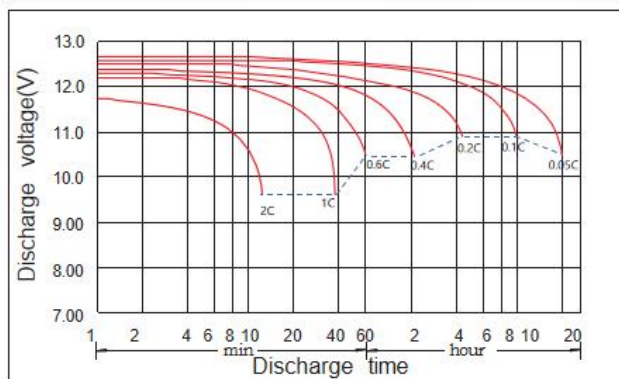
Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.



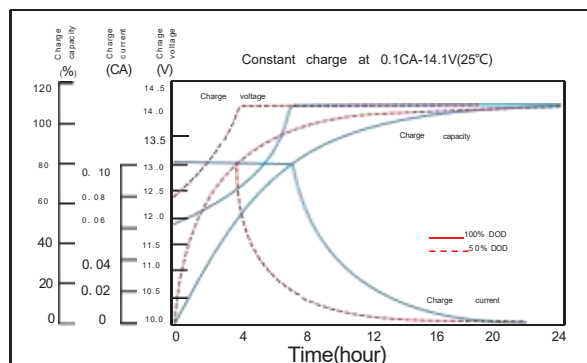
# JDG Series AGM- GEL battery

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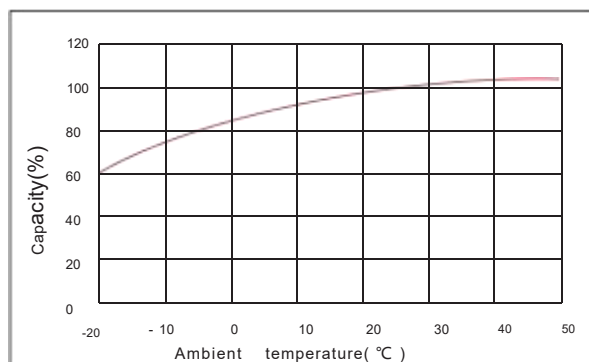
## Discharge characteristic



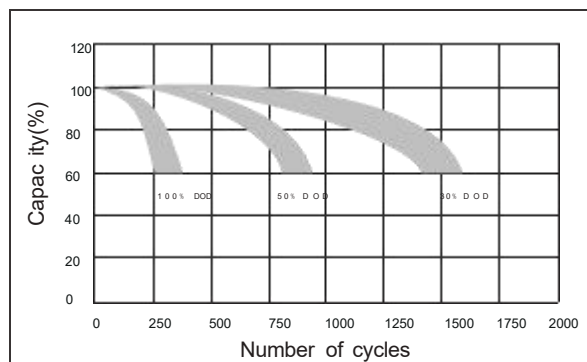
## Charging characteristic



## The effect of temperature on capacity



## The effect of discharge depth on cycle life



## Constant Current Discharge Characteristics Unit:A (25°C,77°F)

| FV/Time | 15min | 30min | 45min | 1h   | 1.5h | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
|---------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 1.60V   | 156.8 | 93.1  | 68.1  | 53.8 | 39.9 | 31.9 | 24.0 | 19.3 | 16.4 | 14.0 | 10.8 | 8.97 | 4.69 |
| 1.65V   | 150.7 | 89.4  | 65.4  | 51.7 | 38.7 | 31.2 | 23.2 | 18.7 | 16.0 | 13.8 | 10.7 | 8.86 | 4.62 |
| 1.70V   | 141.1 | 85.4  | 62.5  | 49.5 | 37.2 | 29.8 | 22.6 | 18.3 | 15.6 | 13.5 | 10.5 | 8.72 | 4.57 |
| 1.75V   | 131.3 | 80.8  | 59.8  | 47.9 | 35.7 | 28.8 | 21.9 | 17.8 | 15.2 | 13.1 | 10.3 | 8.61 | 4.55 |
| 1.80V   | 123.7 | 78.6  | 57.6  | 45.9 | 34.0 | 27.9 | 21.7 | 17.3 | 14.8 | 12.8 | 10.2 | 8.50 | 4.50 |
| 1.85V   | 102.6 | 66.5  | 50.3  | 40.3 | 30.7 | 24.7 | 19.1 | 15.7 | 13.5 | 11.6 | 9.55 | 7.84 | 4.32 |

## Constant Power Discharge Characteristics Unit: W/cell (25°C,77°F)

| FV/Time | 15min | 30min | 45min | 1h   | 1.5h | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h  |
|---------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 1.60V   | 275.5 | 169.1 | 124.0 | 98.4 | 73.9 | 58.6 | 45.2 | 36.2 | 30.9 | 26.8 | 21.0 | 17.6 | 9.24 |
| 1.65V   | 267.3 | 164.0 | 120.0 | 95.6 | 72.1 | 57.6 | 44.6 | 35.3 | 30.2 | 26.6 | 20.9 | 17.4 | 9.10 |
| 1.70V   | 254.1 | 158.3 | 118.6 | 93.1 | 71.0 | 55.8 | 42.7 | 34.5 | 29.5 | 26.0 | 20.6 | 17.2 | 9.00 |
| 1.75V   | 239.9 | 152.9 | 113.7 | 91.1 | 69.1 | 54.3 | 42.4 | 33.7 | 28.9 | 25.4 | 20.3 | 17.0 | 8.97 |
| 1.80V   | 226.9 | 147.6 | 109.4 | 87.4 | 65.5 | 53.4 | 41.3 | 33.4 | 28.2 | 25.0 | 20.0 | 16.8 | 8.92 |
| 1.85V   | 189.1 | 128.4 | 97.2  | 78.1 | 60.8 | 48.9 | 37.1 | 30.7 | 26.4 | 22.9 | 18.9 | 15.8 | 8.39 |