



# JDG Series AGM-GEL battery

JDG12-55

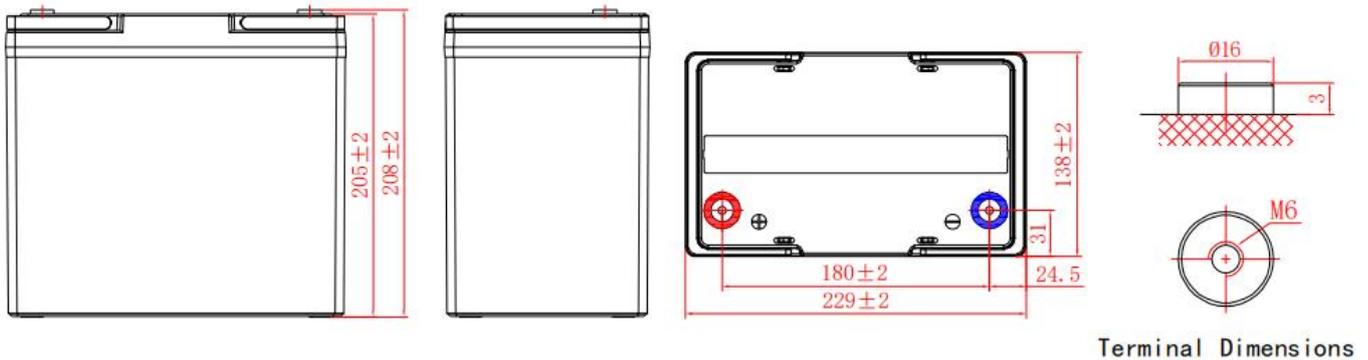
## General Features

- ▶ 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: 229(L) × 138(W) × 205(H) × 208(TH)

Unit: mm



Specification	
Nominal Voltage	12V
Nominal Capacity	55Ah
Design life	10 years
Terminal	M6
Approx. Weight	Approx 16.5kg (36.4lbs)
Container Material	ABS
short-circuit current	1212A
Internal resistance(Full charged at 25°C: )	9.9 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. 13.8A;Recom.5.5A
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 YD/T 799-2010

## Applications

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

## Rated Capacity

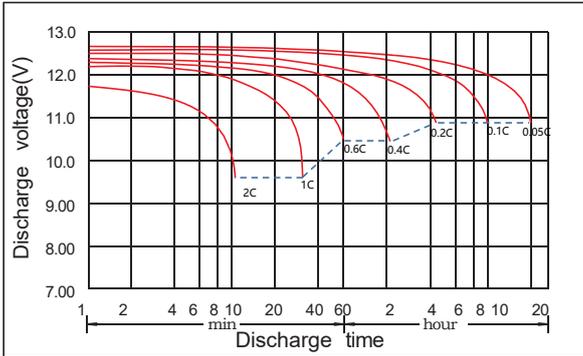
10Hour Rate (5.50A to 10.8V)	55.0Ah
3Hour Rate (15.0A to 10.2V)	45.0Ah
1Hour Rate (37.0A to 9.6V)	37.0Ah

## Attain Certificate

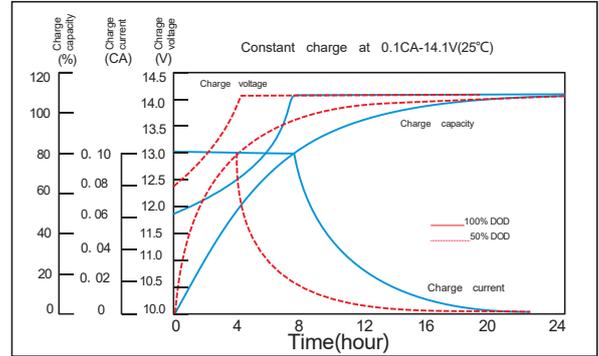


Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

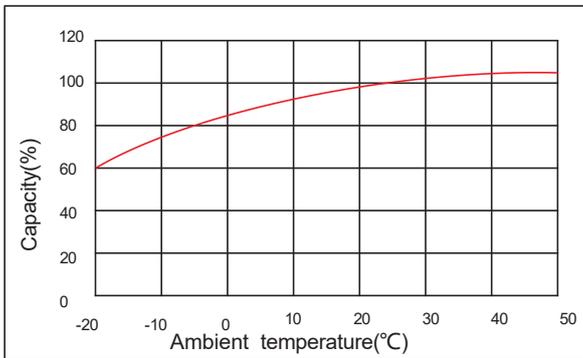
### Discharge characteristic



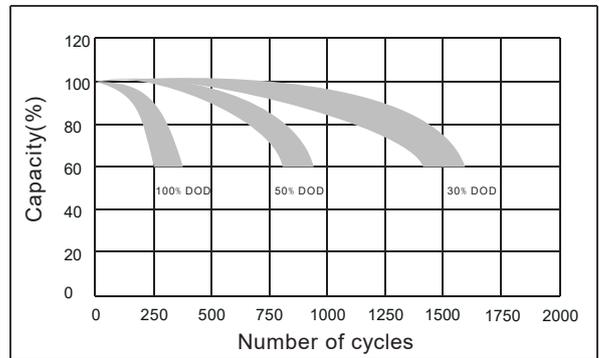
### Charging characteristic



### 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	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	194	129	104	63.3	45.4	37.0	23.3	21.2	15.4	11.2	10.3	8.25	6.79	5.72	3.00
1.65V	188	128	101	62.3	45.1	36.8	23.1	21.1	15.3	11.1	10.2	8.17	6.74	5.67	2.99
1.70V	180	127	98.8	61.2	44.8	36.5	22.8	21.0	15.0	10.9	10.1	8.09	6.68	5.61	2.97
1.75V	166	125	95.6	60.6	44.2	36.0	22.6	20.6	14.9	10.8	10.0	8.02	6.63	5.56	2.96
1.80V	149	122	89.1	58.0	43.1	35.1	22.4	20.3	14.8	10.7	9.76	7.93	6.58	5.50	2.94
1.85V	133	113	79.4	52.9	39.9	32.5	21.7	19.2	13.9	10.4	9.27	7.70	6.30	5.34	2.89

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

FV/Time	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	325	218	183	115	84.0	70.0	46.4	40.2	29.3	22.0	19.6	16.1	13.2	11.0	5.94
1.65V	313	217	180	114	83.4	69.5	46.0	40.0	28.9	21.8	19.5	16.0	13.1	10.9	5.91
1.70V	311	215	178	114	82.7	68.9	45.6	39.9	28.8	21.6	19.4	15.8	13.0	10.8	5.89
1.75V	290	213	177	113	82.1	68.4	45.2	39.7	28.6	21.4	19.2	15.7	12.9	10.7	5.86
1.80V	266	212	167	110	81.5	67.9	44.7	39.6	28.5	21.2	19.0	15.5	12.8	10.6	5.83
1.85V	238	197	150	101	75.6	63.0	43.9	37.8	27.1	20.8	18.2	15.3	12.4	10.4	5.78