



# Gel Batteries

Datasheet, Version 621



## Features:

- Available in 100AH and 250AH
- Deep cycle gel battery
- Maintenance-free
- USA gel technology

Model	GB100	GB250	
Technology	Rated Voltage	12V	12V
	Capacity (10hr,1.80V/Cell)	100Ah	250Ah
	Max Discharge Current	30I10A (3min)	30I10A (3min)
	Max Charge Current	≤0.25C 10	≤0.25C 10
	Self-Discharge (25°C)	<3%/month	<3%/month
	Recommended Usage Temperature	15°C-25°C	15°C-25°C
	Using Temperature	Discharge: -45°C to 50°C Charge: -20°C to 45°C Storage: -30°C to 40°C	Discharge: -45°C to 50°C Charge: -20°C to 45°C Storage: -30°C to 40°C
	Charge Voltage (25°C)	Float Charge: 13.5V-13.8V Average Charge: 14.4V-14.7V	Float Charge: 13.5V-13.8V Average Charge: 14.4V-14.7V
	Charge Mode (25°C)	Float Charge: 2.275±0.025V/Cell Temperature Compensation Coefficient: ±3 mV/Cell °C Cycle Charge: 2.45±0.05V/Cell Temperature Compensation Coefficient: ±5 mV/Cell °C	Float Charge: 2.275±0.025V/Cell Temperature Compensation Coefficient: ±3 mV/Cell °C Cycle Charge: 2.45±0.05V/Cell Temperature Compensation Coefficient: ±5 mV/Cell °C
	Cycle Life	100% DOD: 572times 50% DOD: 1422 times 30% DOD: 2218times	100% DOD: 572times 50% DOD: 1422 times 30% DOD: 2218times
	Capacity Affected by Temperature	105% @ 40°C 85% @ 0°C 60% @ -20°C	105% @ 40°C 85% @ 0°C 60% @ -20°C
	Physical Characteristics	Cover Material	ABS
Dimensions (mm)			
Weight (kg)		24	57
Certifications	ISO9001 ISO14001 CE CGC TLC High and New Technology Products Certification Standards: GB/T 19638.2-2005 YD/T799-2002 JISC8704-2:1999		

## Discharge Time at Terminal Voltage

### GB100

Constant current discharge coefficient (25°C, A)									
Terminal Voltage (v/Cell)	1H	3H	5H	10H	20H	50H	100H	120H	240H
1.7	34.52	15.69	10.49	6.76	3.49	1.47	0.80	0.71	0.37
1.75	33.83	15.53	10.30	6.67	3.41	1.41	0.75	0.66	0.35
1.8	33.15	15.38	10.14	6.50	3.33	1.37	0.72	0.62	0.33
1.85	31.82	15.30	9.95	6.23	3.17	1.31	0.67	0.58	0.30
1.9	30.55	15.16	9.80	6.10	3.11	1.27	0.65	0.55	0.28
1.95	29.21	14.86	9.59	5.76	2.90	1.18	0.61	0.52	0.27

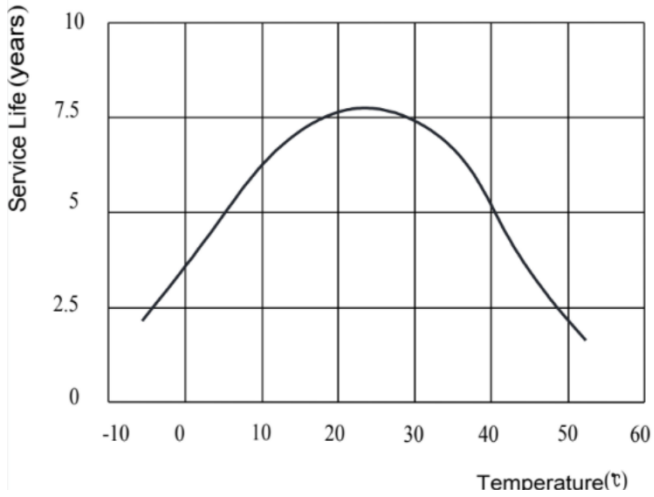
### GB 250

Constant current discharge coefficient (25°C, A)									
Terminal Voltage (v/Cell)	1H	3H	5H	10H	20H	50H	100H	120H	240H
1.7	106.20	48.28	32.27	20.81	10.75	4.52	2.45	2.17	1.15
1.75	104.08	47.79	31.69	20.52	10.50	4.35	2.29	2.03	1.07
1.8	102.00	47.33	31.20	20.00	10.25	4.20	2.20	1.89	1.01
1.85	97.92	47.07	30.60	19.17	9.75	4.03	2.05	1.77	0.92
1.9	94.01	46.65	30.15	18.77	9.58	3.91	1.99	1.69	0.87
1.95	89.88	45.72	29.52	17.73	8.92	3.63	1.88	1.61	0.83

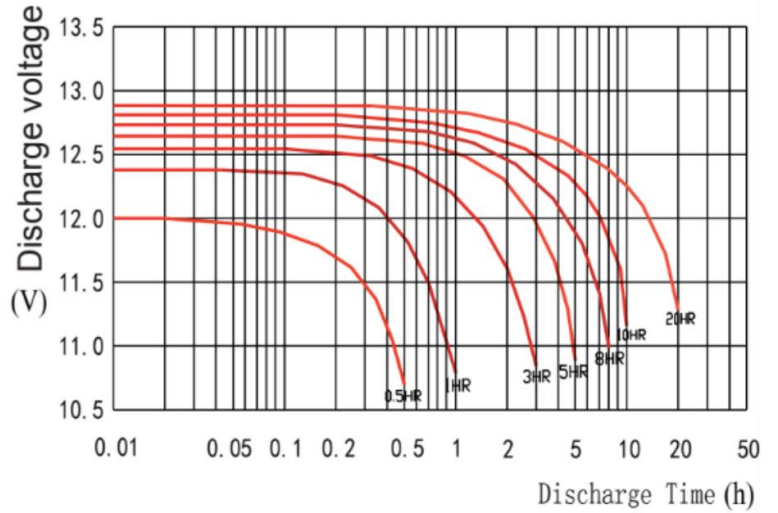
# Performance Characteristics

## 100AH

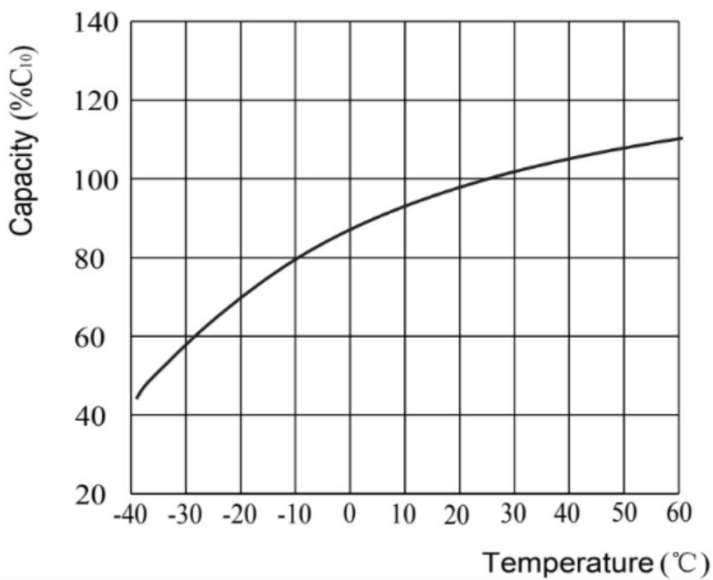
Temperature and Service Life



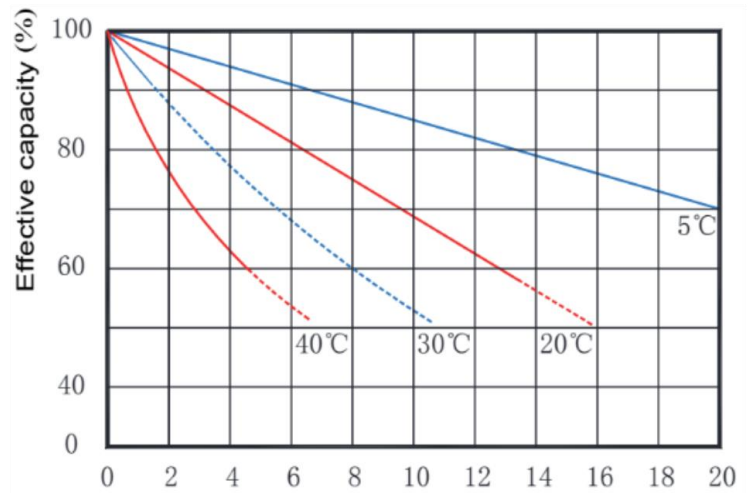
Discharge characteristics at Various Rates (25°C/77°F)



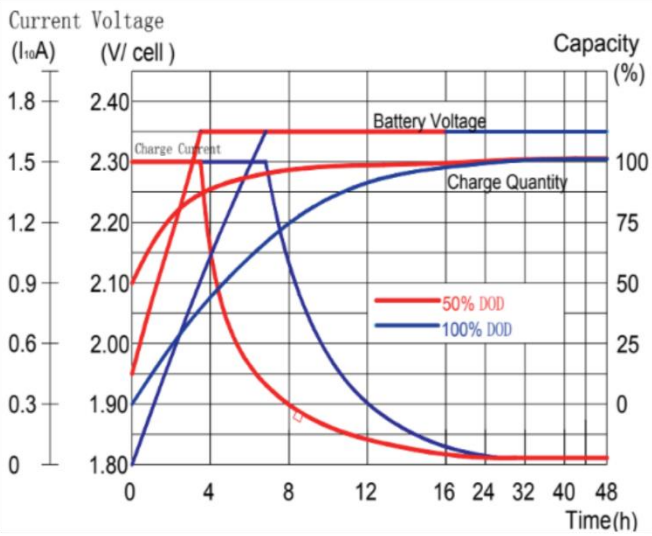
Temperature and Discharge Capacity



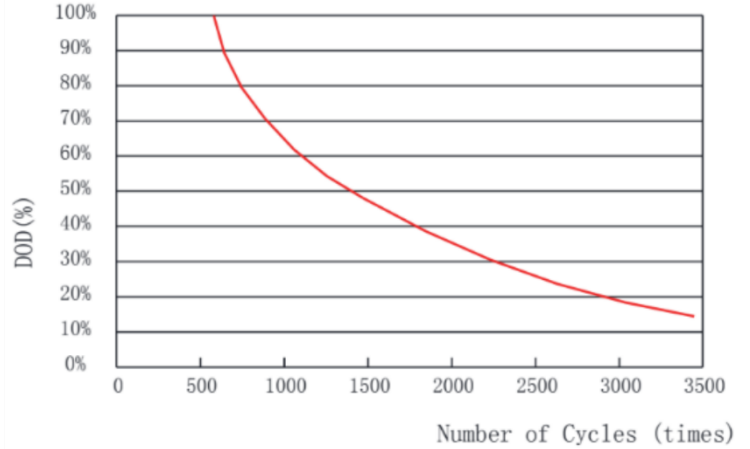
Self Discharge Parameters Characteristics



### Constant-Potential Charge



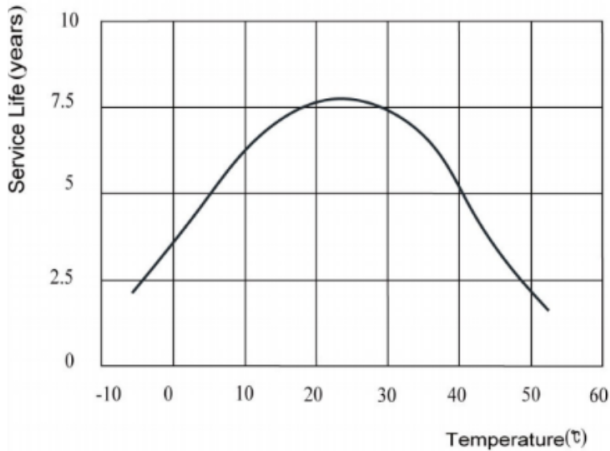
### Cycle Service Life (25 °C /77°F)



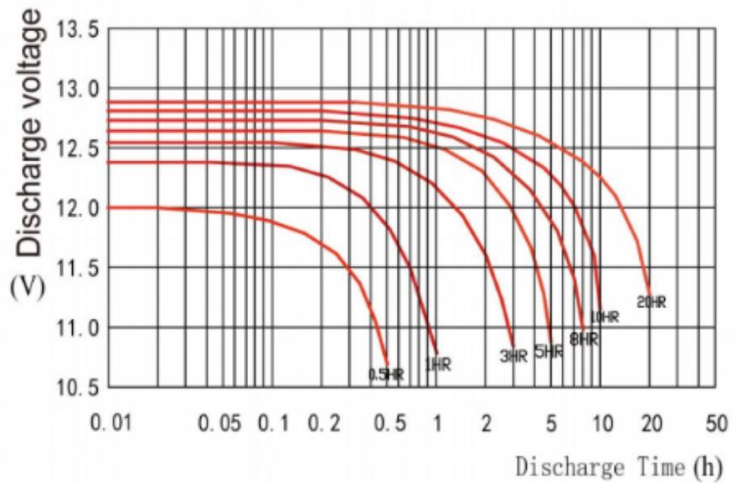
Note: The above data are average values and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice.

## 250AH

### Temperature and Service Life

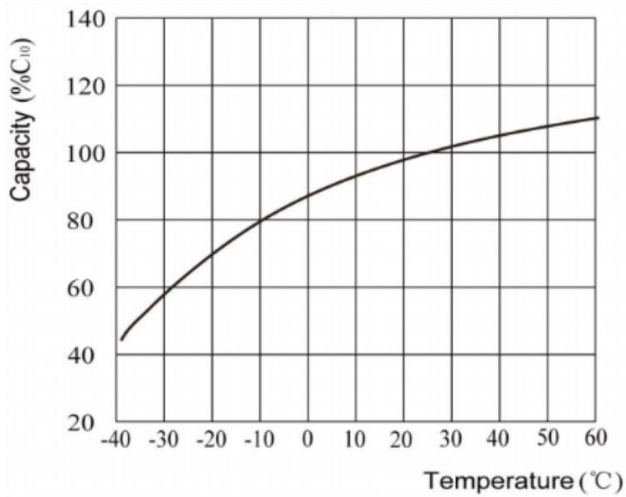


### Discharge characteristics at Various Rates (25°C/77°F)

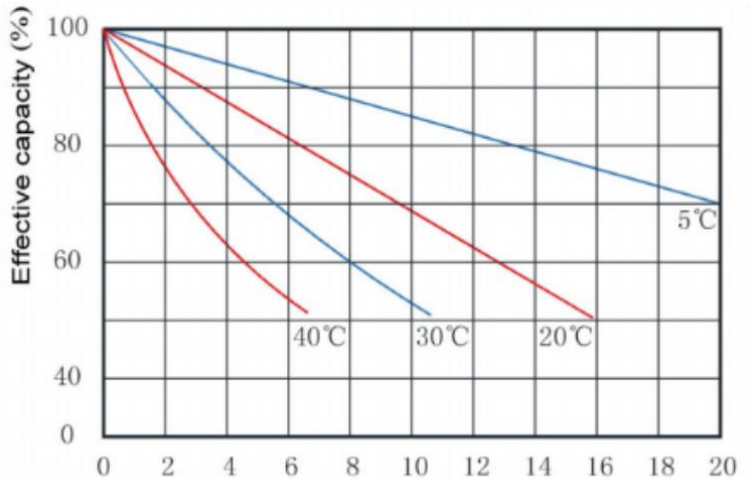




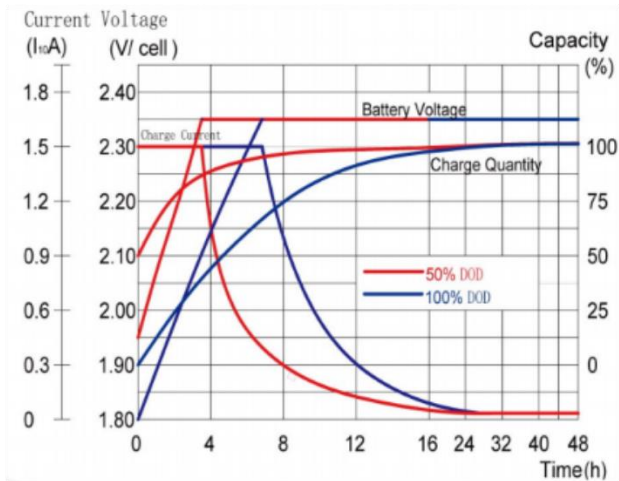
### Temperature and Discharge Capacity



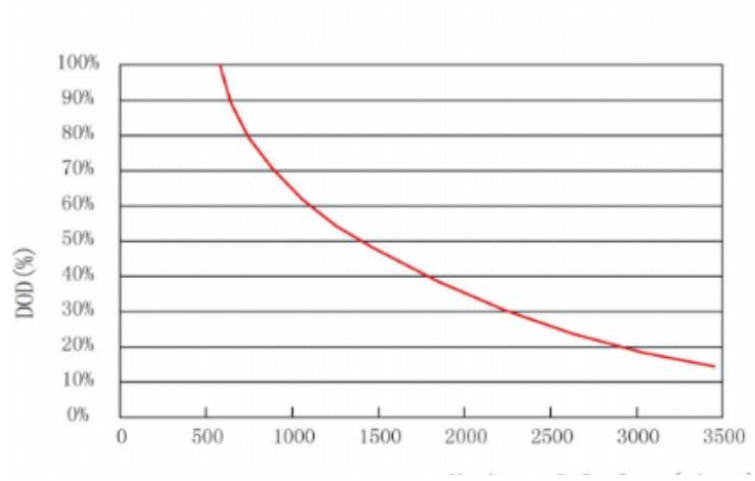
### Self Discharge Parameters Characteristics



### Constant-Potential Charge



### Cycle Service Life (25 °C / 77°F)



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.

