

6-GFM-230Ah Valve-regulated Lead Acid Battery Specification

We are an ISO9001 certified organization. And the products are approved by CE&UL. The nominal voltage of this series is 12V. And the capacity ranges from 33Ah to 250Ah. Their typical applications include: Emergency lighting systems, Electricity power supply systems, Communication systems, UPS systems, Starting systems, Solar systems etc.

Battery Construction

Component	-----	Material
Positive Plate	-----	Lead Dioxide
Negative Plate	-----	Lead
Container	-----	ABS
Cover	-----	ABS
Safety Valve	-----	Rubber
Terminal	-----	Copper
Separator	-----	AGM glass
Electrolyte	-----	Sulfuric Acid

General Features

Maintenance free
Convenient for installation
Safety and no leakage
Excellent recharge and discharge performance
Low self-discharge rate, charge each standby 6 months, temperature 25°C
Adapt to high or low temperature
Good deep discharge performance
Longer cycle life
UL approval

Performance Characteristics

1. Dimension and Weight

Length	-----	521mm
Width	-----	269mm
Height	-----	203mm
Total Height	-----	206mm
Reference Weight	-----	63.5kg

2. Functional Parameter

Rated Voltage	-----	12V
Numbers of cells	-----	6 Cells
Designed Life	-----	3~5 Years

3. Rated Capacity at 25°C(77°F)

10 hours rate (0.1C, 10.8V)	-----	230Ah
3 hours rate (0.25C, 10.8V)	-----	176.4Ah
1 hours rate (0.55C, 10.5V)	-----	127Ah

4. Capacity Affected by Temperature(10 hours rate)

40 °C (104°F)	-----	103%
25 °C (77 °F)	-----	100%
0 °C (32 °F)	-----	85%
-15°C (5 °F)	-----	65%

5. Charge Method: Constant-Voltage Charging at 25°C(77°F)

Cyclic Use	-----	14.4~14.9V
Maximum Charging Current	-----	57.5A
Temperature Compensation	-----	-30mV/°C
Float Use	-----	13.6~13.8V
Temperature Compensation	-----	-20mV/°C

6. Environment Temperature Requirements

Discharge Temperature	-----	-15~50°C
Charge Temperature	-----	0~40°C
Storage Temperature	-----	-15~40°C

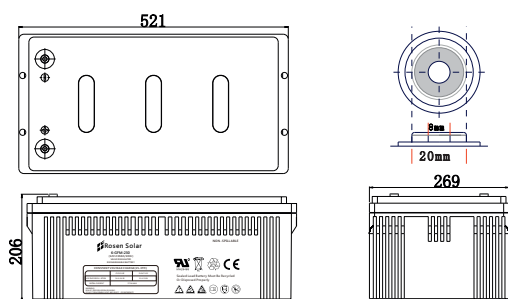
7. Inner Resistance & Max. Discharge Current

A fully charge battery at 25°C(77°F)	-----	2.5mΩ
Max. Discharge Current	-----	3450A(5S)
Short Circuit Current	-----	11500A

8. Self-discharge

3% of the capacity per month at 25°C(77°F)		
Capacity after 3 month storage	-----	91%
Capacity after 6 month storage	-----	82%
Capacity after 12 month storage	-----	64%

Dimensions(mm)



3D Model Review



Constant-Current Discharge Parameter Unit: A(25°C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	3h	5h	10h	20h
1.80V/Cell	528.5	395.3	317.9	260.2	206.5	154.1	121.4	58.8	38.6	23.0	12.0
1.75V/Cell	595.7	434.4	347.3	279.8	214.4	159.7	127.0	59.8	39.6	23.2	12.1
1.70V/Cell	656.0	473.5	370.8	294.1	223.1	166.1	131.1	61.6	40.6	23.5	12.3
1.65V/Cell	723.5	511.1	394.3	312.5	235.4	170.5	135.4	64.1	41.7	23.9	12.5
1.60V/Cell	797.8	554.8	421.7	333.0	248.4	177.6	140.3	66.2	43.2	24.2	12.5

Constant-Power Discharge Parameter Unit: W(25°C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	3h	5h	10h	20h
1.80V/Cell	955.8	721.9	585.5	483.3	387.4	293.6	233.1	114.0	75.4	45.5	23.7
1.75V/Cell	1054.7	780.5	631.5	514.9	398.9	301.8	242.8	115.5	77.2	45.7	23.8
1.70V/Cell	1129.3	831.3	665.0	537.2	413.0	312.8	249.4	118.6	79.0	46.3	24.3
1.65V/Cell	1227.7	889.1	701.5	566.3	432.1	317.7	256.1	122.9	80.8	47.0	24.6
1.60V/Cell	1322.8	943.3	737.8	596.7	452.8	329.4	263.7	126.2	83.1	47.5	24.7

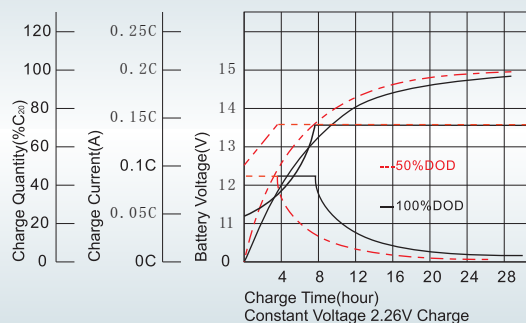


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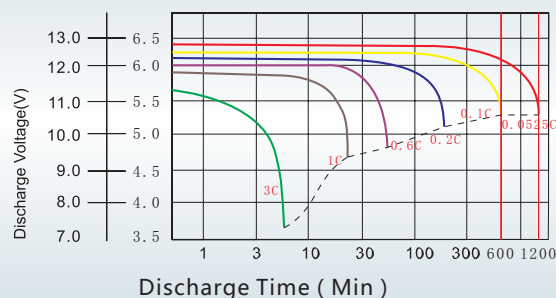
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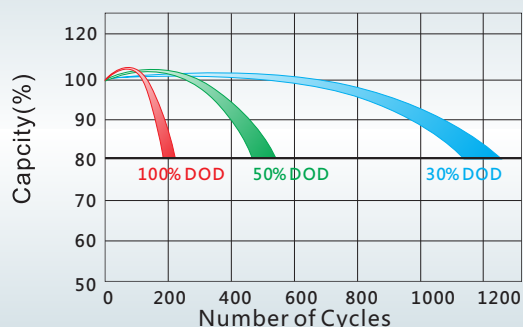
Charge Characteristics for Float Use @25°C/77°F



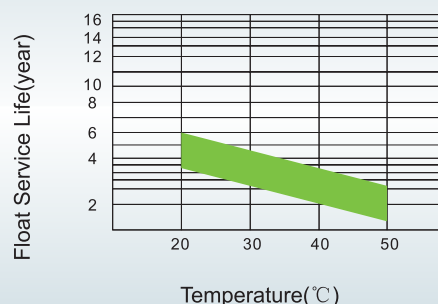
Discharge Characteristics at Various Rates @25°C/77°F



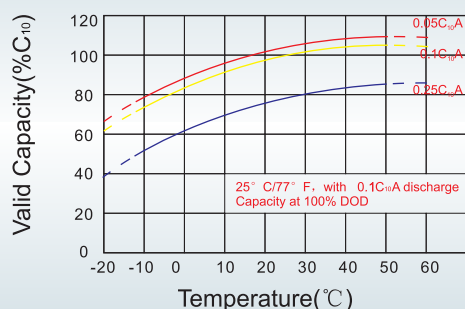
Cycle Life in Relation to Depth of Discharge



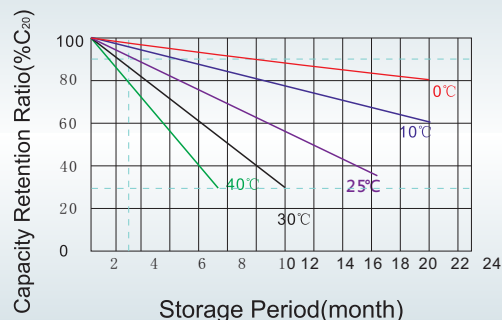
Float Service Life



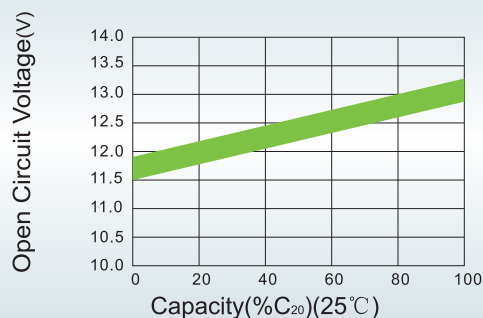
Temperature and Valid Capacity



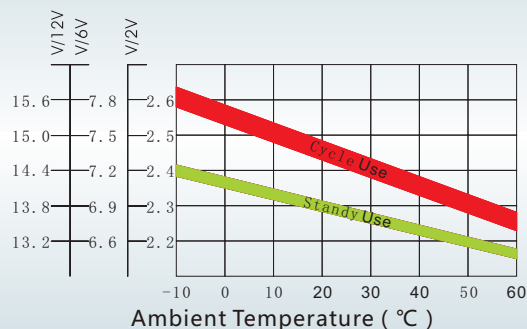
Self Discharge Characteristics



Capacity and Open Circuit Voltage



Relationship between Charging Voltage and Temperature



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CN02/0326

Rosen Solar Energy Co., Ltd.

Add: Build B, Jiaqiao International, Shushan District Hefei, Anhui China

Tel: +86 181 56448850

Fax: +86 551 63365891

Email: info@rosensolar.com

Website: www.rosensolar.com