



6-GFM-100Ah 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	-----	330mm
Width	-----	173mm
Height	-----	217mm
Total Height	-----	222mm
Reference Weight	-----	28.3kg

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)	-----	100Ah
3 hours rate (0.25C, 10.8V)	-----	76.8Ah
1 hours rate (0.55C, 10.5V)	-----	55.2Ah

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	-----	25A
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

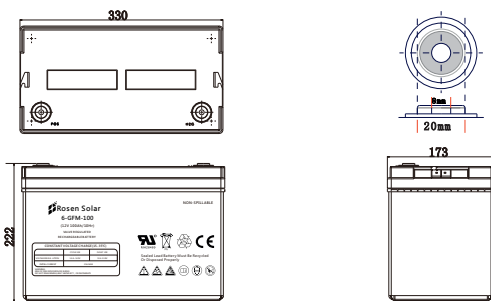
7. Inner Resistance & Max. Discharge Current

A fully charge battery at 25°C(77°F)	-----	4.5mΩ
Max. Discharge Current	-----	1500A(5S)
Short Circuit Current	-----	5000A

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	229.8	171.9	138.2	113.1	89.8	67.0	52.8	25.6	16.8	10.0	5.20
1.75V/Cell	259.0	188.9	151.0	121.7	93.2	69.4	55.2	26.0	17.2	10.1	5.26
1.70V/Cell	285.2	205.9	161.2	127.9	97.0	72.2	57.0	26.8	17.7	10.2	5.36
1.65V/Cell	314.6	222.2	171.4	135.9	102.3	74.1	58.9	27.9	18.1	10.4	5.42
1.60V/Cell	346.9	241.2	183.3	144.8	108.0	77.2	61.0	28.8	18.8	10.5	5.46

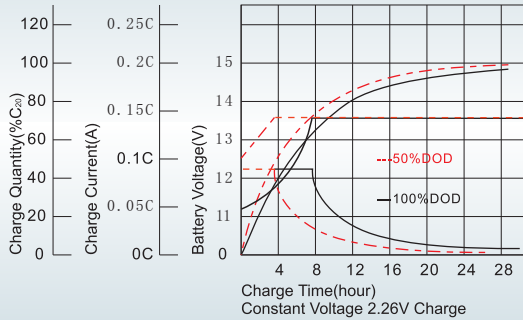
Constant-Power Discharge Parameter Unit: W(25°C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	3h	5h	10h	20h
1.80V/Cell	415.6	313.9	254.6	210.1	168.4	127.7	101.3	49.6	32.8	19.8	10.29
1.75V/Cell	458.6	339.3	274.6	223.9	173.4	131.2	105.6	50.2	33.6	19.9	10.37
1.70V/Cell	491.0	361.4	289.1	233.6	179.6	136.0	108.4	51.6	34.3	20.1	10.57
1.65V/Cell	533.8	386.6	305.0	246.2	187.9	138.1	111.3	53.4	35.1	20.4	10.69
1.60V/Cell	575.1	410.1	320.8	259.4	196.9	143.2	114.7	54.9	36.1	20.7	10.73

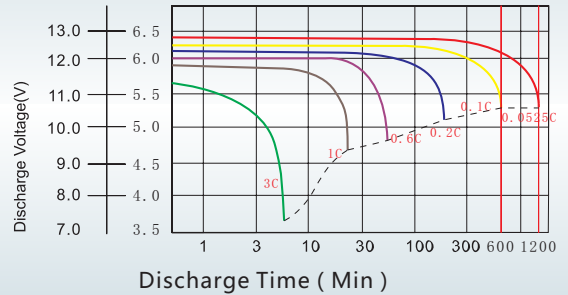


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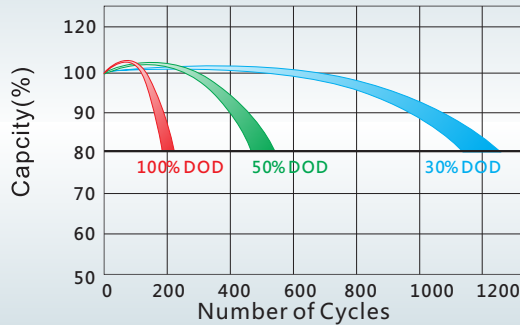
Charge Characteristics for Float Use @25°C/77°F



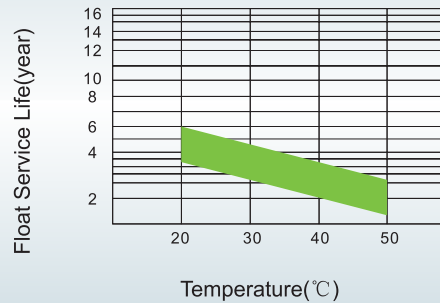
Discharge Characteristics at Various Rates @25°C/77°F



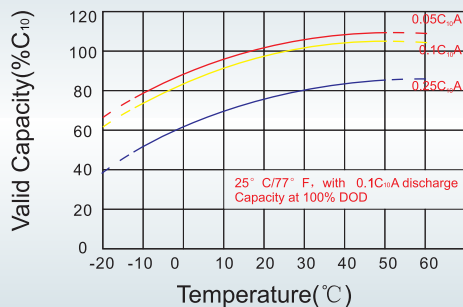
Cycle Life in Relation to Depth of Discharge



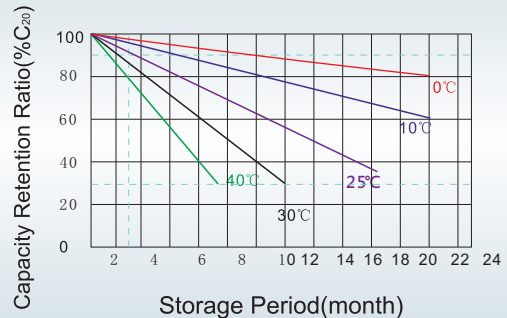
Float Service Life



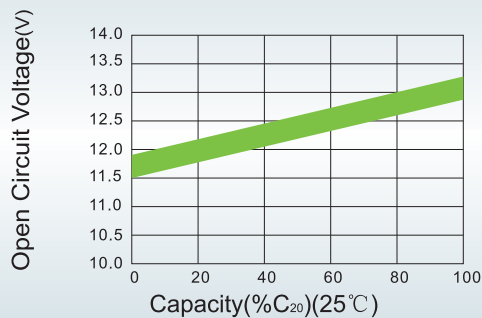
Temperature and Valid Capacity



Self Discharge Characteristics



Capacity and Open Circuit Voltage



Relationship between Charging Voltage and Temperature

