



6-GFM-250Ah 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	-----	520mm
Width	-----	269mm
Height	-----	220mm
Total Height	-----	225mm
Reference Weight	-----	70kg

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)	-----	250Ah
3 hours rate (0.25C, 10.8V)	-----	191.7Ah
1 hours rate (0.55C, 10.5V)	-----	138.1Ah

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	-----	62.5A
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

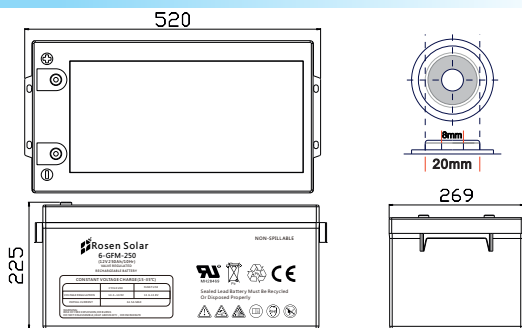
7. Inner Resistance & Max. Discharge Current

A fully charge battery at 25°C(77°F)	-----	2mΩ
Max. Discharge Current	-----	3750A(5S)
Short Circuit Current	-----	12500A

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)

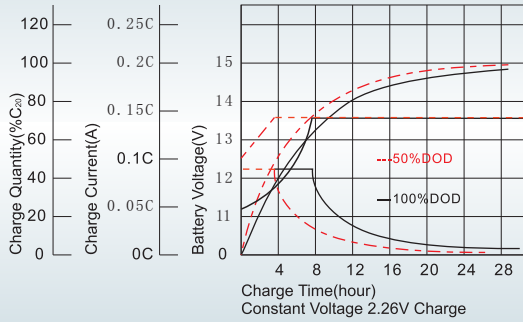
F.V/Time	5min	10min	15min	20min	30min	45min	1h	3h	5h	10h	20h
1.80V/Cell	574.4	429.7	345.6	282.8	224.4	167.5	131.9	63.9	41.9	25.0	13.0
1.75V/Cell	647.5	472.2	377.5	304.2	233.1	173.6	138.1	65.0	43.1	25.3	13.1
1.70V/Cell	713.1	514.7	403.1	319.7	242.5	180.6	142.5	66.9	44.2	25.5	13.4
1.65V/Cell	786.4	555.6	428.6	339.7	255.8	185.3	147.2	69.7	45.3	26.0	13.6
1.60V/Cell	867.2	603.1	458.3	361.9	270.0	193.1	152.5	71.9	46.9	26.3	13.6

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

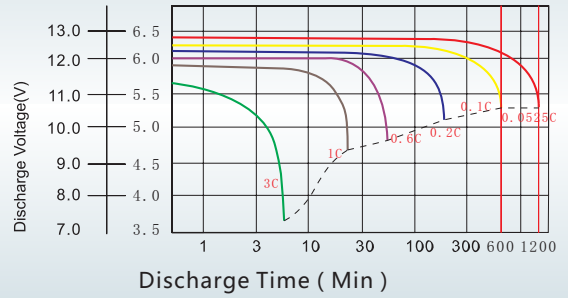
F.V/Time	5min	10min	15min	20min	30min	45min	1h	3h	5h	10h	20h
1.80V/Cell	1038.9	784.7	636.4	525.3	421.1	319.2	253.3	123.9	81.9	49.4	25.7
1.75V/Cell	1146.4	848.3	686.4	559.7	433.6	328.1	263.9	125.6	83.9	49.7	25.9
1.70V/Cell	1227.5	903.6	722.8	583.9	448.9	340.0	271.1	128.9	85.8	50.3	26.4
1.65V/Cell	1334.4	966.4	762.5	615.6	469.7	345.3	278.3	133.6	87.8	51.1	26.7
1.60V/Cell	1437.8	1025.3	801.9	648.6	492.2	358.1	286.7	137.2	90.3	51.7	26.8

6-GFM-250Ah Valve-regulated Lead Acid Battery Specification

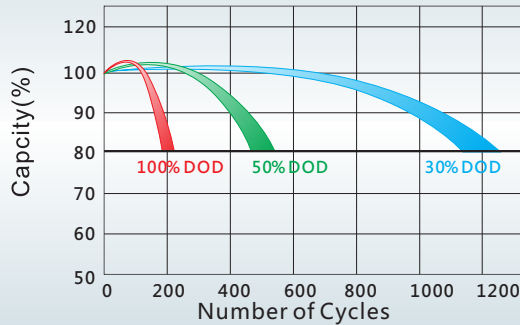
Charge Characteristics for Float Use @25°C/77°F



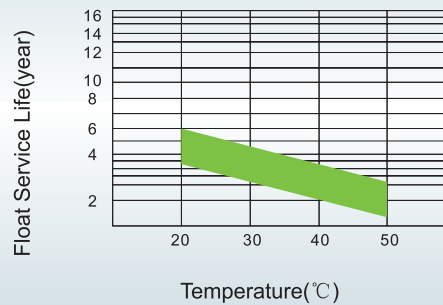
Discharge Characteristics at Various Rates @25°C/77°F



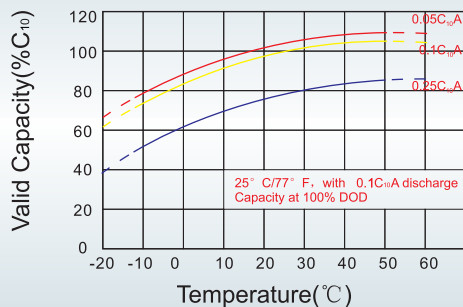
Cycle Life in Relation to Depth of Discharge



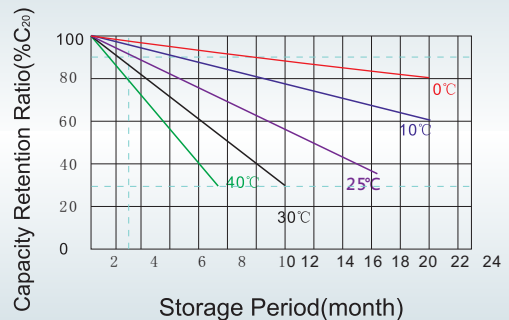
Float Service Life



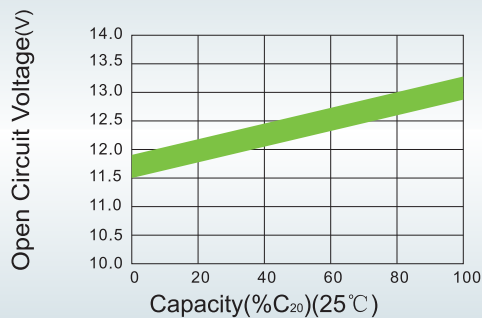
Temperature and Valid Capacity



Self Discharge Characteristics



Capacity and Open Circuit Voltage



Relationship between Charging Voltage and Temperature

