

6-GFM(G)-250Ah Gel 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		General Features
Component	Material	Maintenance free
Positive plate	Lead dioxide	Convenient for installation
Negative plate	Lead	Safety and no leakage
Container	ABS	Excellent recharge and discharge performance
Cover	ABS	Low self-discharge rate, charge each standby 6 months, temperature 25°C
Safety valve	Rubber	Adapt to high or low temperature
Terminal	Copper	Good deep discharge performance
Electrolyte	Gelled acid	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	10~12 Years

3.Rated Capacity at 25°C (77° F)

10 hr rate (0.1C, 10.8V)	250Ah
3 hr rate (0.25C, 10.8V)	181Ah
1 hr rate (0.55C, 10.5V)	137.6Ah

4.Capacity affected by Temperature (10hour 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	-20~60°C
Charge Temperature	0~60°C
Storage Temperature	-20~60°C

7.Inner Resistance&Max. Discharge Current

A fully charged battery at 25°C (77° F)	2.5mΩ
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)

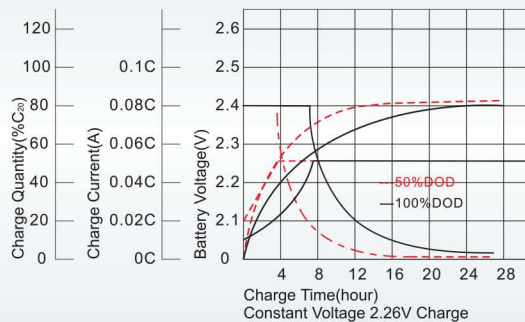
F.V/Time	20min	30min	45min	1h	2h	3h	5h	6h	8h	10h	20h
1.80V/cell	266.21	203.85	153.43	128.57	79.95	60.30	42.31	36.54	29.12	25.00	13.74
1.75V/cell	299.18	224.18	165.93	137.64	84.75	63.74	43.96	37.77	30.08	25.55	14.01
1.70V/cell	322.25	240.11	176.24	145.60	89.84	66.35	45.33	39.15	30.91	26.10	14.15
1.65V/cell	335.44	249.45	182.42	151.10	92.17	68.54	46.29	39.70	31.46	26.51	14.29
1.60V/cell	363.46	267.03	196.02	160.44	95.88	71.29	47.66	40.66	32.01	26.92	14.56

Constant-current discharge parameter Unit: W (25°C)

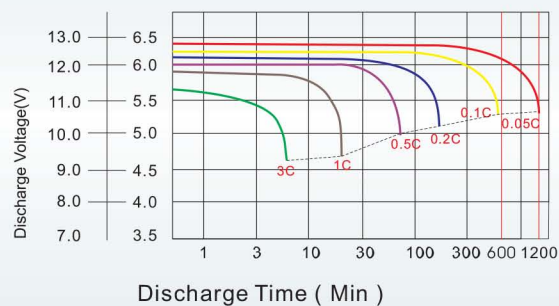
F.V/Time	20min	30min	45min	1h	2h	3h	5h	6h	8h	10h	20h
1.80V/cell	502.88	389.15	295.47	249.04	155.63	117.86	83.24	71.98	57.69	49.86	27.34
1.75V/cell	558.93	424.04	317.03	265.25	164.29	124.18	86.13	74.31	59.48	50.82	27.88
1.70V/cell	595.47	450.27	334.20	278.98	173.35	128.98	88.60	76.79	61.13	51.92	28.16
1.65V/cell	612.91	462.91	343.68	287.91	176.92	132.42	90.25	77.88	61.95	52.47	28.43
1.60V/cell	656.73	490.80	366.48	303.98	183.24	137.09	92.72	79.40	62.91	53.43	28.85

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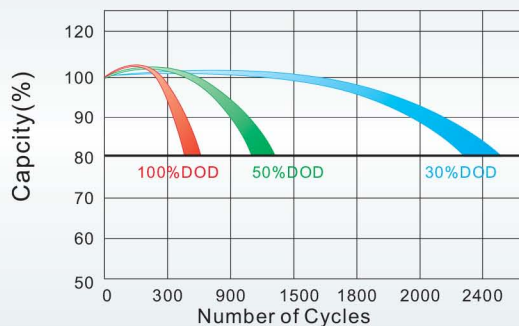
Charge Characteristics for Float Use @ 25°C/77°F



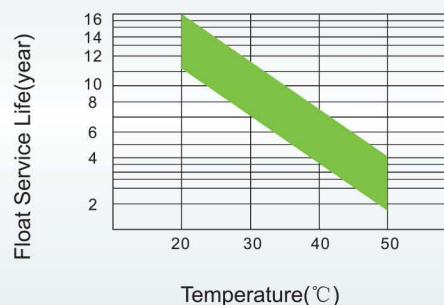
Discharge Characteristics at Various Rates @ 25°C/77°F



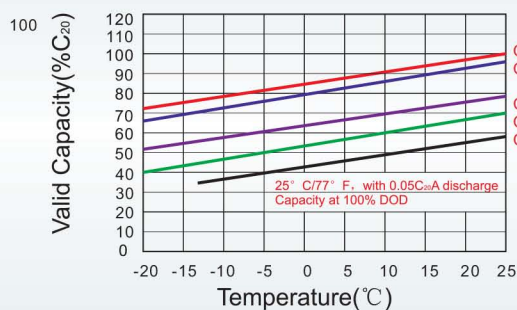
Cycle Life in Relation to Depth of Discharge



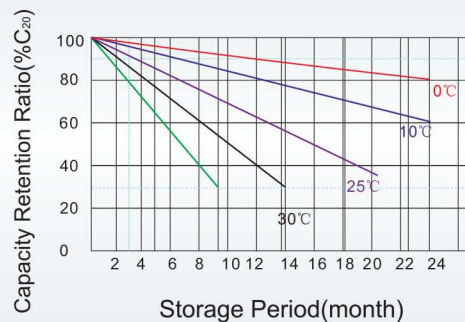
Float Service Life



Temperature and Valid Capacity



Self Discharge Characteristics



Capacity and Open Circuit Voltage



Relationship between Charging Voltage and Temperature

