

6-GFM(G)-100Ah 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

Component	Material
Positive plate	Lead dioxide
Negative plate	Lead
Container	ABS
Cover	ABS
Safety valve	Rubber
Terminal	Copper
Electrolyte	Gelled 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	30kg

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

2.Functional Parameter

Rated Voltage	12V
Numbers of cells	6 Cells
Designed Life	10~12 Years

6.Environment Temperature Requirements

Discharge Temperature	-20~60°C
Charge Temperature	0~50°C
Storage Temperature	-20~60°C

3.Rated Capacity at 25°C (77° F)

10 hr rate (0.1C, 10.8V)	100Ah
3 hr rate (0.25C, 10.8V)	74.6Ah
1 hr rate (0.55C, 10.5V)	56.8Ah

7.Inner Resistance&Max. Discharge Current

A fully charged battery at 25°C (77° F)	5mΩ
Max. Discharge Current	1500A (5s)
Short Circuit Current	5000A

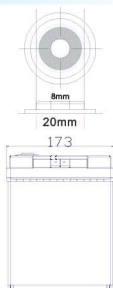
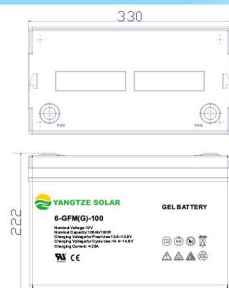
4.Capacity affected by Temperature (10hour rate)

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

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)

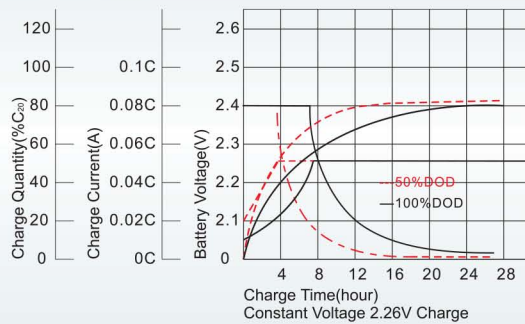
F.V/Time	20min	30min	45min	1h	2h	3h	5h	6h	8h	10h	20h
1.80V/cell	109.49	83.84	63.16	52.88	32.88	24.86	17.40	14.58	11.64	10.00	5.42
1.75V/cell	123.05	92.20	68.25	56.61	34.92	26.21	18.08	15.03	11.98	10.17	5.54
1.70V/cell	132.54	98.76	72.43	59.89	36.95	27.34	18.64	15.59	12.32	10.43	5.60
1.65V/cell	137.97	102.60	75.03	62.15	37.97	28.14	18.98	15.82	12.54	10.55	5.66
1.60V/cell	149.49	109.83	80.56	65.99	39.44	29.27	19.66	16.27	12.77	10.77	5.74

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

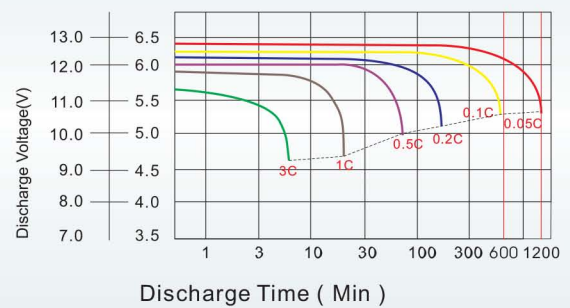
F.V/Time	20min	30min	45min	1h	2h	3h	5h	6h	8h	10h	20h
1.80V/cell	206.78	160.00	121.47	102.49	63.95	48.47	34.24	28.70	23.05	19.89	10.81
1.75V/cell	229.83	174.46	130.40	109.04	67.57	51.07	35.48	29.72	23.73	20.23	11.02
1.70V/cell	244.97	185.20	137.51	114.80	71.30	52.99	36.50	30.62	24.41	20.68	11.14
1.65V/cell	252.09	190.40	141.36	118.42	72.77	54.46	37.06	31.07	24.75	20.90	11.24
1.60V/cell	270.17	201.92	150.73	125.08	75.37	56.38	38.19	31.75	25.08	21.36	11.41

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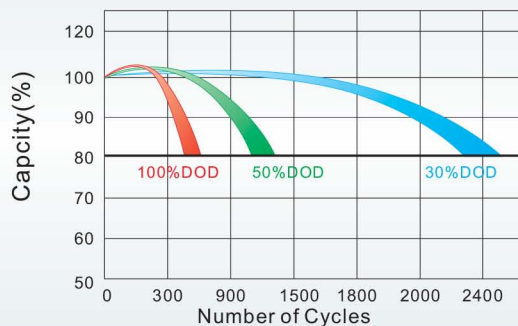
Charge Characteristics for Float Use @ 25°C/77°F



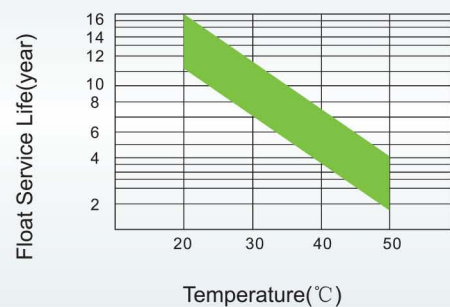
Discharge Characteristics at Various Rates @ 25°C/77°F



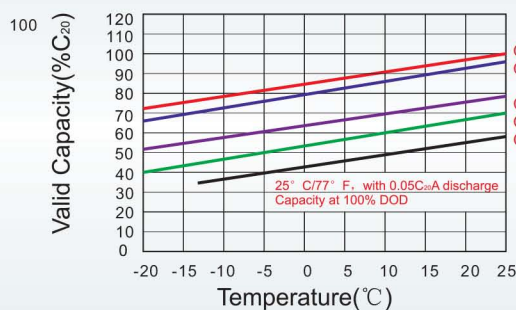
Cycle Life in Relation to Depth of Discharge



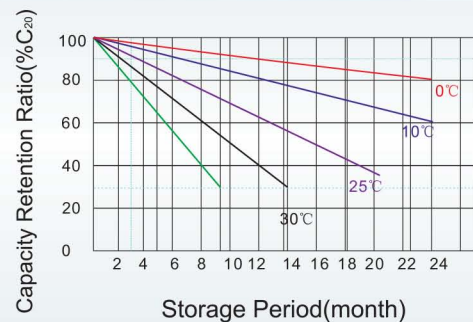
Float Service Life



Temperature and Valid Capacity



Self Discharge Characteristics



Capacity and Open Circuit Voltage



Relationship between Charging Voltage and Temperature

