6-GFM-100G(12V100Ah)

Introduction

GFM-G series gel battery,adopts high-current lead paste formula,high corrosion-resistant alloy material,nano-silica gel electrolyte,and special exhaust structure and sealing technology,which,on the one hand,has strong high-rate discharge capability,safe and reliable use,low self-discharge rate and over-discharge recovery capability.On the other hand,the materials and special technology also enhance high and low temperature resistance,and bring flexible and convenient installation as well as simple maintenance.

Battery Features

- 12 years floating design life
- Excellent consistency
- High reliability
- Low self -discharge
- Good recovery from deep discharge

Electrical Specification

Design floating Life @ 20°C (68°F) …… ..…… 12 years

Nominal Capacity @ 25°C /77°F

20 hour rate 5.25 A to 1.80Vpc … .. …….. 105 Ah

10 hour rate 10.0 A to 1.80Vpc …… …… 100 Ah

5 hour rate 17.5 A to 1.75Vpc …….. ……. 87.5Ah

1 hour rate 65.0A to 1.60Vpc ……..…… 65.0Ah

Internal Resistance

(Fully charged battery @ 25°C /77°F) ……. 4.8 mΩ

Max. Discharge Current @ 25°C /77°F ……900A (5S)

Charge Methods: Constant voltage charge @ 25°C /77°F

Cycle Use …… 14.4 ~ 15.0V

Max. Current …….....25A

Standby Use …… ..... ……..... 13.5V - 13.8V

Operating Temperature Range

Discharge …….…... …… .. …… .. -20 ~ 55°C

Charge …… .. 0 ~ 40°C

Storage …….... …… .. …… .. -20 ~ 55°C

Recommended Operating Temp …….…..... 20 ~ 25°C

Self-Discharge

The capacity declines by 3% per month@ 20°C (68°F). The batteries can be stored up to 6 months @ 25°C (77°F) and then a freshening charge is required. The interval under higher temperature would be shorter.

Typical Applications

UPS

Telecom

Electric system

Photovoltaic energy storage

Certificates

System Certified Company

ISO 14001:2015

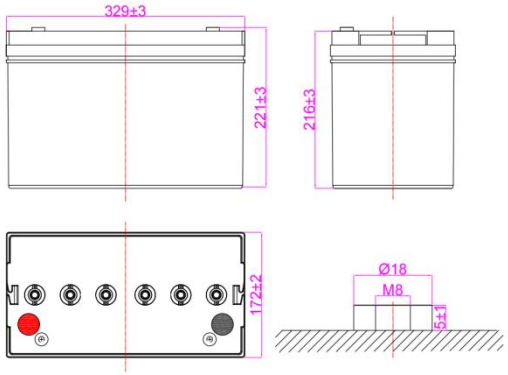
ISO 45001:2018

IATF 16949:2016

Battery Picture



Dimensions



Dimension and Weight

Dimension				Weight	Terminal
Length	Width	Height	Total Height	(± 3%)	
329 mm	172 mm	216 mm	221 mm	29kg	M8
13.0inch	6.77 inch	8.50 inch	8.70 inch	63.9lbs	

Constant Current Discharge* (Amperes @25℃ /77°F)

V/cell	15min	30min	1hr	5hr	10hr	20hr	100hr
1.60V	188	122	72.8	17.9	10.6	5.7	1.39
1.65V	179	119	71.3	17.4	10.5	5.6	1.37
1.70V	174	115	70.0	17.0	10.3	5.5	1.35
1.75V	165	110	67.2	15.2	10.2	5.5	1.34
1.80V	155	103	63.7	14.5	10.0	5.4	1.32

Constant Power Discharge* (Watts/PC @25℃ /77°F)

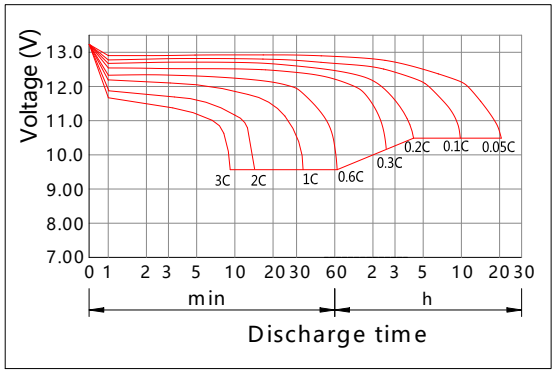
V/cell	15min	30min	1hr	5hr	10hr	20hr	100hr
1.60V	2064	1268	830	219	127	66.7	16.8
1.65V	1961	1222	813	215	125	66.0	16.6
1.70V	1904	1148	798	210	123	65.2	16.3
1.75V	1816	1072	766	206	122	63.4	16.1
1.80V	1703	970	726	201	119	63.0	15.9

*The mentioned data are derived from of sample test result, for reference only.

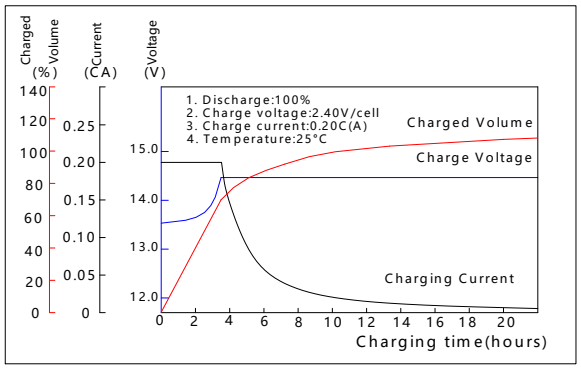
6-GFM-100G(12V100Ah)

Graphs

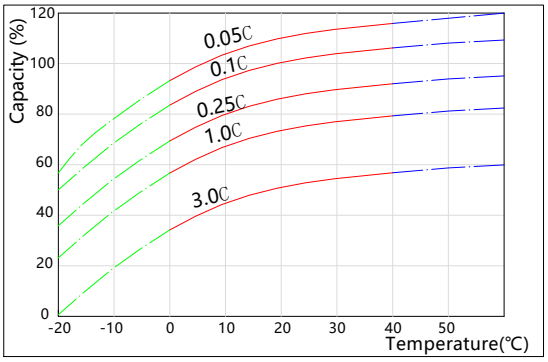
Discharge Characteristics(25℃)



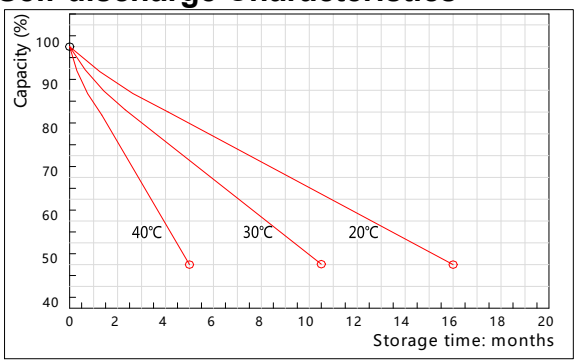
Charging Characteristics(25℃)



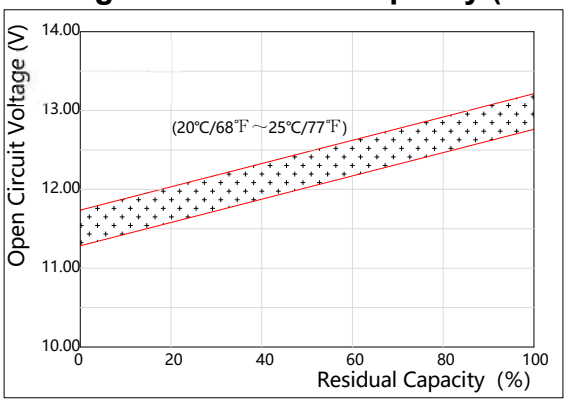
Effect of Temperature on Capacity



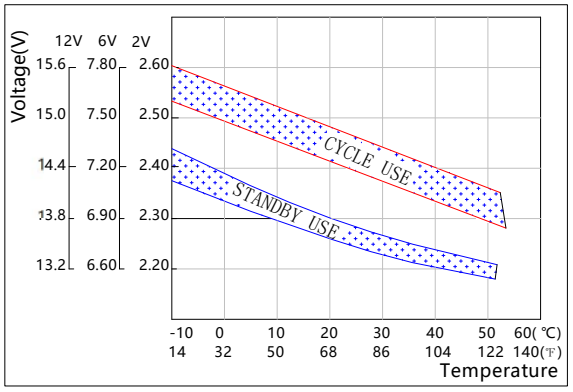
Self-discharge Characteristics



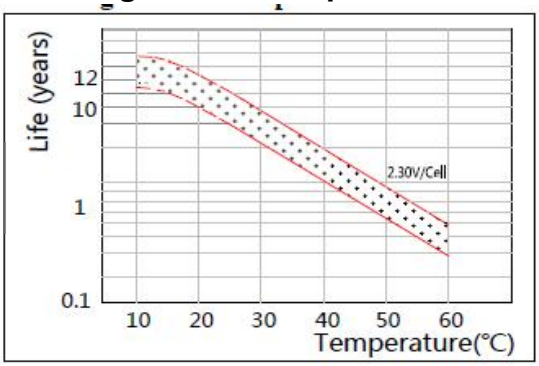
The Relationship between Open Circuit Voltage and Residual Capacity (25℃)



The Relationship between Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25℃)

