

6-GFM-120(12V120Ah)



Introduction

GFM series are made of Lead paste suitable for big current discharging, special alloy of high corrosion resistance. They are disposed of unique designed discharging structure and sealing technology. GFM series are featured with high rate current discharge, high reliability, low self-discharge, flexible installation and easy 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 6.3 A to 1.80Vpc 126 Ah

10 hour rate 12.0 A to 1.80Vpc 120 Ah

5 hour rate 21.0 A to 1.75Vpc 105 Ah

1 hour rate 78.0 A to 1.60Vpc 78.0Ah

Internal Resistance

(Fully charged battery @ 25°C /77°F) 4.2 mΩ

Max. Discharge Current @ 25°C /77°F950A (5S)

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

Cycle Use 14.4 ~ 15.0V

Max. Current30A

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

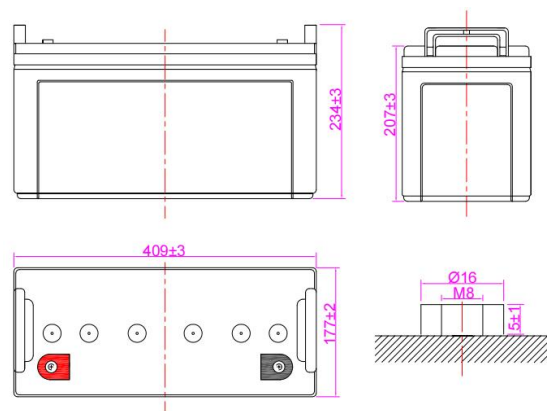
Self-Discharge

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.

Battery Picture



Dimensions



Dimension and Weight

Dimension				Weight	Terminal
Length	Width	Height	Total Height	(± 3%)	
409 mm	177 mm	207 mm	234 mm	34.5kg	F5
16.1inch	6.97 inch	8.15 inch	9.21inch	76.0lbs	

Typical Applications



UPS
Telecom
Electric system

Certificates



ISO 14001:2015
ISO 45001:2018
IATF 16949:2016

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

V/cell	15min	30min	1hr	3hr	5hr	10hr	20hr
1.60V	222	142	78.0	30.6	21.4	12.2	6.41
1.65V	217	139	76.8	30.4	21.3	12.2	6.40
1.70V	209	135	74.9	30.2	21.1	12.2	6.38
1.75V	202	131	73.4	30.0	21.0	12.1	6.34
1.80V	191	126	71.1	29.1	20.4	12.0	6.30

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

V/cell	15min	30min	1hr	3hr	5hr	10hr	20hr
1.60V	2438	1589	889	360	253	146	77.0
1.65V	2379	1557	876	358	252	146	76.8
1.70V	2291	1509	854	355	250	145	76.6
1.75V	2213	1473	837	353	248	144	76.1
1.80V	2096	1419	811	342	241	143	75.6

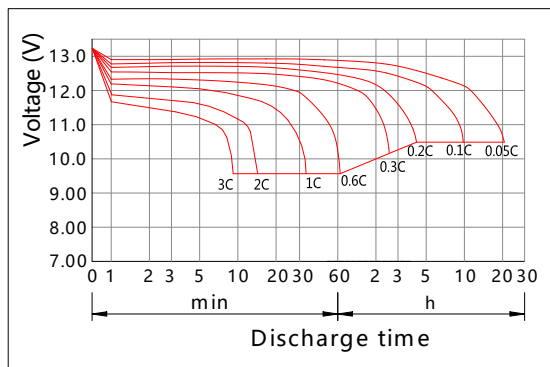
*The mentioned data are derived from of sample test result, for reference only.

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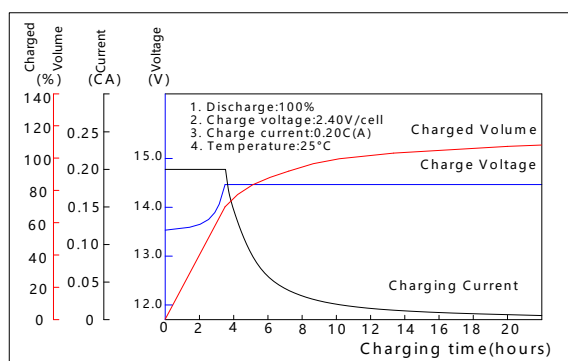


Graphs

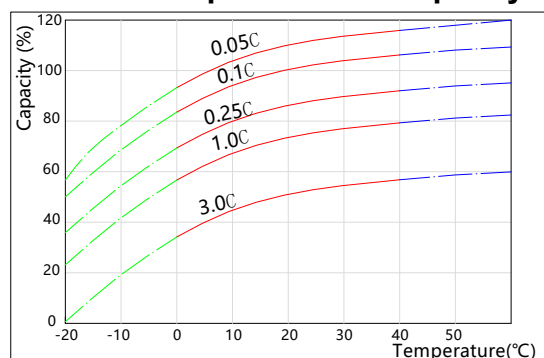
Discharge Characteristics(25°C)



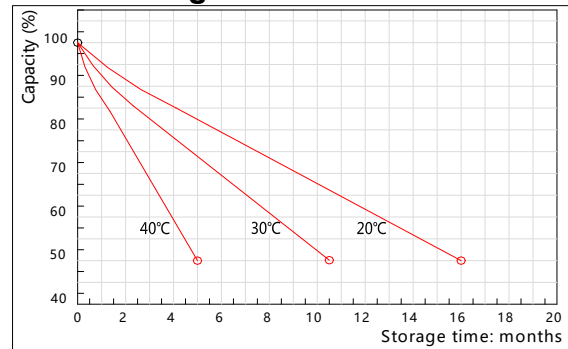
Charging Characteristics(25°C)



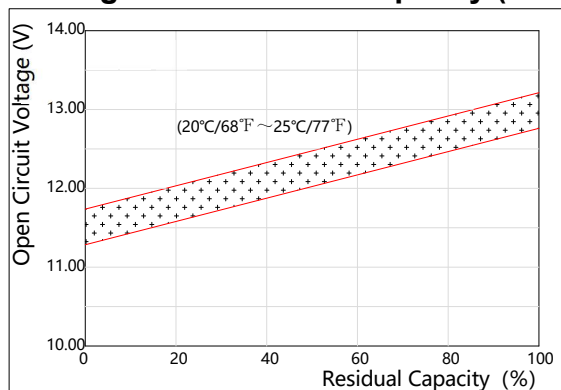
Effect of Temperature on Capacity



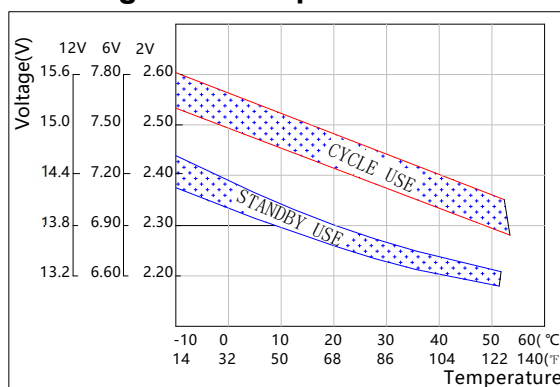
Self-discharge Characteristics



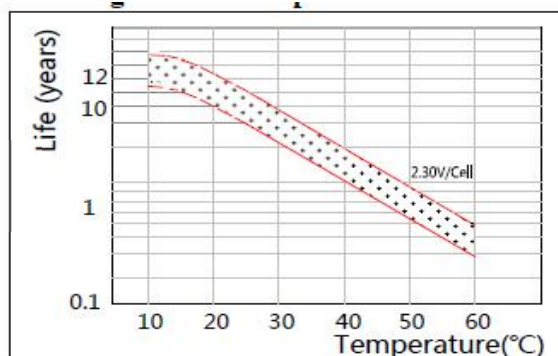
The Relationship between Open Circuit Voltage and Residual Capacity (25°C)



The Relationship between Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)

