

6-GFM-33(12V33Ah)



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 1.73 A to 1.80Vpc34.6Ah

10 hour rate 3.30 A to 1.80Vpc 33.0Ah

5 hour rate 5.78 A to 1.75Vpc 28.9Ah

1 hour rate 21.5 A to 1.60Vpc 21.5Ah

Internal Resistance

(Fully charged battery @ 25°C /77°F)10.5 mΩ

Max. Discharge Current @ 25°C /77°F330A (5S)

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

Cycle Use 14.4 ~ 15.0V

Max. Current8.3A

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

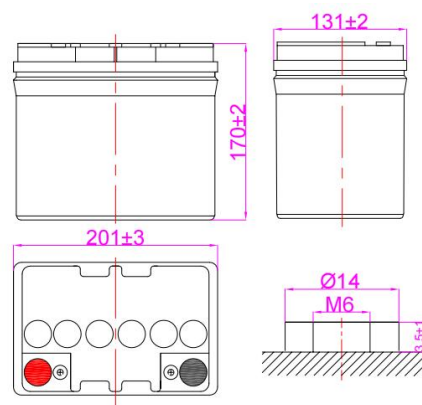
Self-Discharge

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%)	
201 mm	131mm	170 mm	170 mm	10kg	F4
7.91inch	5.16 inch	6.69 inch	6.69 inch	35.3lbs	

Typical Applications



UPS
Telecom
Electric system

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

V/cell	15min	30min	1hr	3hr	5hr	10hr	20hr
1.60V	61.1	38.9	21.5	8.42	5.89	3.36	1.76
1.65V	59.6	38.2	21.1	8.37	5.86	3.35	1.76
1.70V	57.4	37.0	20.6	8.31	5.82	3.34	1.76
1.75V	55.4	36.1	20.2	8.25	5.78	3.32	1.74
1.80V	52.5	34.8	19.6	8.00	5.60	3.30	1.73

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

V/cell	15min	30min	1hr	3hr	5hr	10hr	20hr
1.60V	670	437	245	99.0	69.6	40.1	21.2
1.65V	654	428	241	98.4	69.2	40.0	21.1
1.70V	630	415	235	97.7	68.7	39.9	21.1
1.75V	609	405	230	97.0	68.3	39.7	20.9
1.80V	576	390	223	94.1	66.2	39.4	20.8

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

Certificates



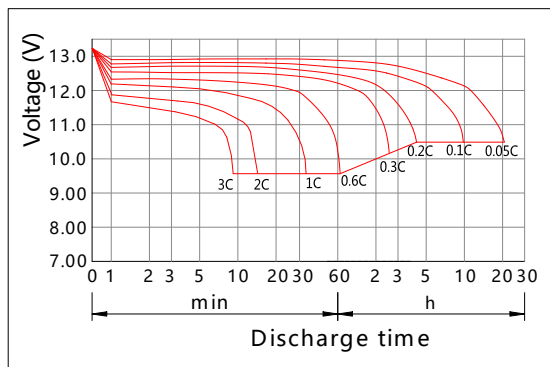
ISO 14001:2015
ISO 45001:2018
IATF 16949:2016

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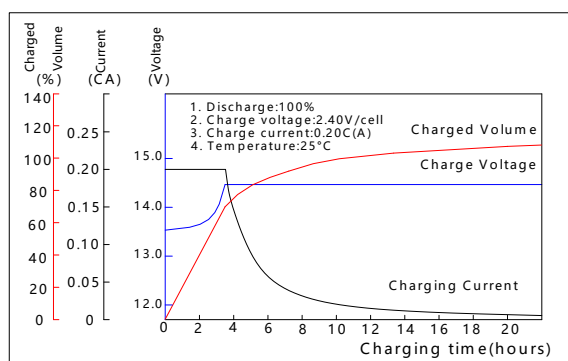


Graphs

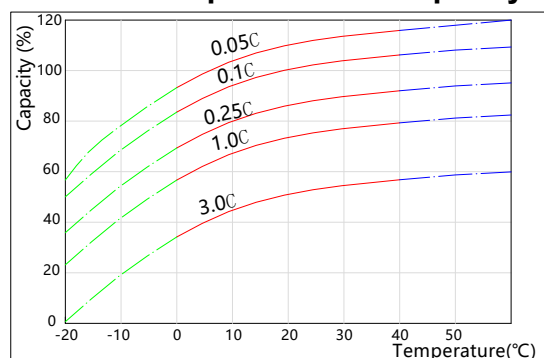
Discharge Characteristics(25°C)



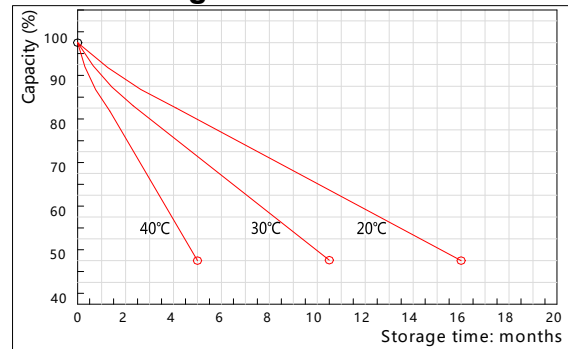
Charging Characteristics(25°C)



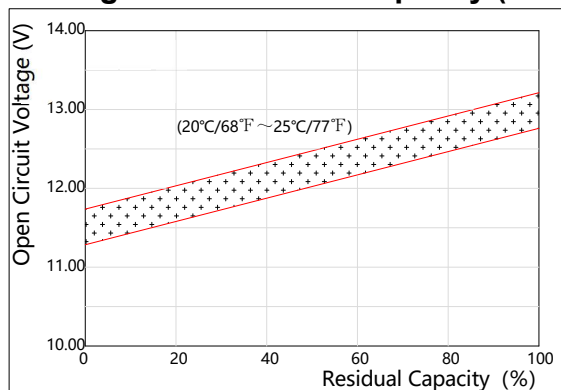
Effect of Temperature on Capacity



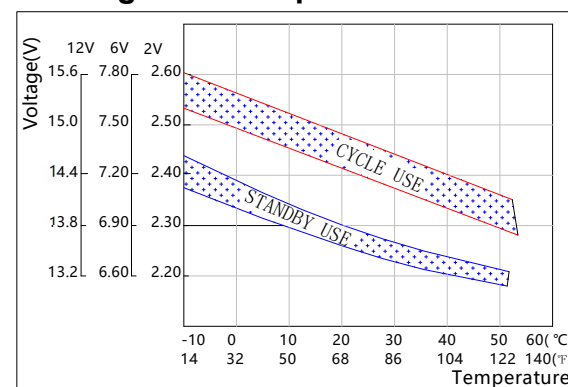
Self-discharge Characteristics



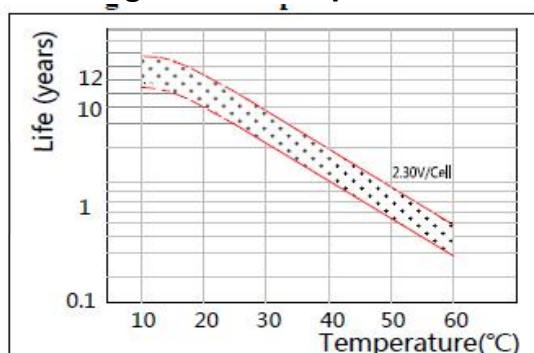
The Relationship between Open Circuit Voltage and Residual Capacity (25°C)



The Relationship between Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)

