GFM Series

Valve-Regulated Lead-Acid Battery GFM-1200





Dimensions:

Attain Certificate:

ISO9001

ISO14001

GB/T 28001

UL

CE

Main Applications

- Backup power for telecom and signal system
- Military feld, railway system, power system
- UPS & emergency lighting system
- Fire alarm and security system

Benefits

- Design life is more than 10 years
- High energy density, low internal resistance and low discharge rate
- Excellent charging acceptability and high sealed reaction effciency up to 99.99%.

Technical Features

- Adopt high strength ABS plastic, compact structure for battery container and valve, good impact resistance, and shock resistant performance.
- The valve has a safety valve design, which core is in column structure, there is dualfiltering acid mist filters. It has the function of correctly controlling the pressure, flame resistance and acid mist filtering when valve open and close.
- Positive grid is made of special multi alloy, good corrosion resistance, long service life of floating
- New production process for plate, improve the utilization of active material
- High-purity electrolyte and special additives, low self-discharge
- Terminal resistance does not exceed 0.01μΩ

Technical Parameters

Nominal Voltage	2V					
Capacity	1200Ah @ 10hr to 1.80V @ 25°C(77°F)					
Weight	Approx. 68kg					
Dimensions	Length:464mm Width:180mm Height: 363mm Total Height:381mm					
Internal Resistance (full charged)	Approx. 0.28mΩ,25°C					
Short- circuit current	7440A(5s)					
Self Discharge @10°C(50°F)	Less than 3% after 90 days storage					
Operating Temperature Range	Discharge: -40°C~50°C(-40°F~122°F) Charge: -20°C~45°C(-4°F~113°F) Storage: -20°C~40°C(-4°F~104°F)					
Recommended Operating Temperature	15°C~25°C (59°F~77°F)					
Maximum Charging Current	180A					
Charging Voltage @25°C(77°F)	Float: 2.23 V Equalize: 2.35 V					
Terminal	M8					
Container materials	ABS/ABS V0(Optional)					
Capacity Affected by Temperature(C ₁₀)	105 % @ 40°C(104°F) 85 % @ 0°C(32°F) 60 % @ -20°C (-4°F)					
Design life @25C° (77°F)	10 years					

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ullet Constant Current Discharge Characteristics Unit: A (25 $^{\circ}\mathrm{C}$, 77 $^{\circ}\mathrm{F}$)

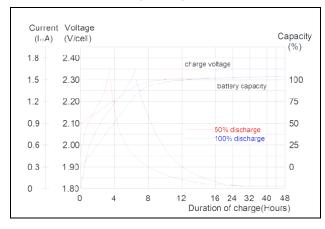
F.V/Time	15min	30min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h
1.90V	774	652	474	426	343	256.0	216.2	177.3	151.7	130.8	106.3
1.85V	961	721	513	483	368	281.8	231.1	192.2	164.5	137.8	115.5
1.80V	1194	794	614	499	389	300.2	239.2	203.7	179.7	142.6	120.2
1.75V	1324	922	660	522	407	307.6	244.9	207.1	182.0	144.9	121.3
1.70V	1378	994	694	545	420	313.2	248.4	209.4	184.3	146.1	121.9
1.65V	1423	1046	715	557	430	316.5	250.6	210.5	185.5	147.3	122.5

Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

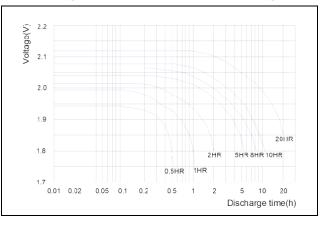
F.V/Time	15min	30min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h
1.90V	1576	1259	928	840	679	514.2	435.9	357.0	308.0	264.1	216.2
1.85V	1915	1373	1008	942	719	560.3	461.1	385.6	330.2	278.5	232.1
1.80V	2341	1475	1184	963	756	589.4	477.2	406.1	359.4	285.4	240.0
1.75V	2550	1692	1244	1002	785	601.8	485.2	412.0	365.2	290.5	242.6
1.70V	2588	1799	1295	1035	806	610.7	490.9	416.5	368.7	292.3	244.7
1.65V	2596	1876	1312	1047	818	615.2	494.3	418.8	369.9	293.0	245.4

Performance Curve

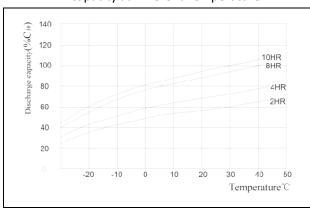
Constant Voltage Charge Characteristics



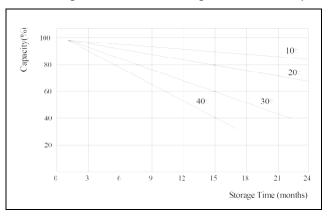
Discharge Performance at Different Discharge Rate



Capacity at Different Temperature



Curve of Storage Time and Self-discharge at Different Temperature



Declaration: This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact JZE for the latest information.