



GFM(HJC) Series

High-Temperature Cycling Long-Life LA Battery

Brief Introduction

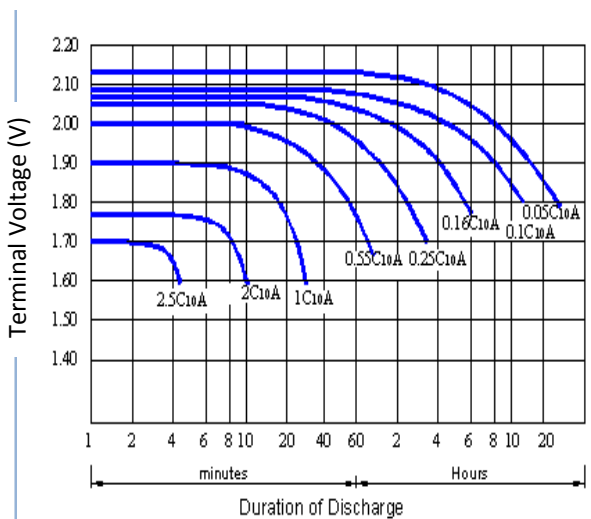
GFM(HJC) series high-temperature cycling long-life LA battery is a new generation of high-tech product, which is developed independently by COSLIGHT. The product can be widely used at class III or IV power supply areas for communication system. It applies to high temperature regions (environment temperature $\leq 47^{\circ}\text{C}$), with the performance advantages of ultra-long cycle life, which can reach to above 2000 cycles @ 25°C and 50% DOD.

Technical Features

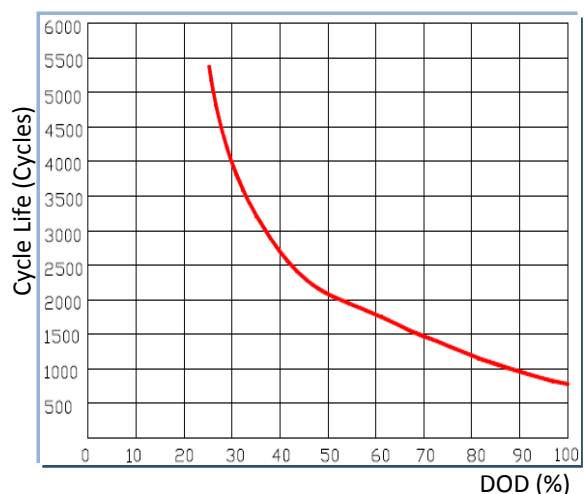
- The product adopts lead-calcium alloy material with adding corrosion-resistant X additives, and incorporates advanced technology & optimal design, which improves decay-resistant performance and high-temperature corrosion-resistance performance of grids greatly.
- The battery adopts new-type positive active material additives and technology, which improves the cycle performance of positive active material greatly.
- New-type GEL electrolyte can restrain layering of electrolyte, and improve the battery life.
- The battery adopts high elastic superfine fiberglass separator to realize closed assembly, and make a great improvement for cycle life of the battery.

Performance Chart

Discharge characteristic curve



25°C cycle curve



Cycle life at different temperature

	30%DOD	50%DOD	80%DOD	100%DOD
25℃	4000	2100	1200	800
35℃	3600	1850	960	720
45℃	2600	1365	780	520

Specifications

Model	Rated Voltage (V)	Rated Capacity (Ah)		Dimensions (mm)				Weight (kg)	Terminal
		C ₁₀	C ₁	L	W	H	Total H		
GFM-200HJC	2	200	110	92	178	362	370	14.3	M8
GFM-300HJC	2	300	165	134	178	362	370	21.7	M8
GFM-400HJC	2	400	220	164	179	362	370	26.5	M8
GFM-500HJC	2	500	275	205	179	362	371	34.4	M8
GFM-600HJC	2	600	330	234	180	363	371	38.3	M8
GFM-800HJC	2	800	440	318	179	369	382	52	M8
GFM-1000HJC	2	1000	550	417	179	369	379	71	M8

Warranty Conditions

Ambient temperature	Power grid	Warranty period (The discharge time is less than once in every 24 hours , and the discharge capacity of each time ≤ 50% of rated capacity))
Temp. I	Class III	4 years
	Class IV	4 years
Temp. II	Class III	3.5 years
	Class IV	3.5 years
Temp. III	Class III	3 years
	Class IV	3 years

Temperature definition

- Temp. I: Ambient temperature < 30℃ or environment with air condition indoor or in cabinet.
- Temp. II: Ambient temperature < 40℃, and the accumulated using time (≥ 35℃) in a year is no more than 300 hours, and environment without air condition indoor or in cabinet.
- Temp. III: Ambient temperature < 47℃, and the accumulated using time (≥ 40℃) in a year is no more than 300 hours, and environment without air condition indoor or in cabinet.

Power grid definition

- Class III power grid:
Max. period of daily off grid failure for AC input of communication facility ≤ 18 hours
- Class IV power grid:
No grid power (solar energy, wind energy or DG + battery supplying solution), but the daily battery charging period ≥ 6 hours