Heat-tolerant battery

GFMH series

Product model	Rated voltage(V)	Rated capacity (Ah/10Hr)	Dimension（mm,±3%）			
			length	width	height	total height
GFMH-200	2	200	171	106	330	342
GFMH-300	2	300	171	151	330	342
GFMH-400	2	400	196	171	330	342
GFMH-500	2	500	241	171	330	342
GFMH-600	2	600	285	171	330	342
GFMH-800	2	800	383	171	330	342
GFMH-1000	2	1000	471	171	330	342
GFMH-1500	2	1500	355	337	330	342
GFMH-2000	2	2000	476	337	330	342
GFMH-3000	2	3000	696	340	330	342

Application field

Communication base station or solar(wind)power station in tropical, subtropical regions (the operating temperature above 35 ℃ throughout the year), remote areas, frequent power outages and other harsh environment areas. Solar(wind) household system, energy storage for off-grid or wind-solar complementary and grid connected power station; Standby power supply for power station, nuclear power plant; petrochemical industry and marine; Standby power supply for signal and communication systems of telecommunication, internet, railway, and airport; Ocean signal and beacon communication board, switching stations and etc..

Executive standards

YD/T 2657-2013 <High temperature valve-regulated lead acid batteries for telecommunications >

Structure features

(1) Plate: the grid alloy adopts non-Cadmium rare earth alloy with independent intellectual property rights, which helps feature as good corrosion resistance, high temperature resistance performance, and long cycle life. The adoption of formula of anti-impact active substance and mixed technology of multiple additives, effectively improve PAM/NAM dynamics, thermodynamics and electrochemical properties in a round .

(2) Separator: The composite separator of high thermal capacity, stable performance, strong adsorptive force that can effectively adsorp electrolyte , prevent the battery from losing water to the large extent and prolongs the service life of the battery effectively.

(3) Electrolyte: Equipped with electrolyte technology of independent intellectual property rights, It is of high safety, and less risk of water loss.

Huafu Energy Storage

(4) Cover: the battery cover adopts high temperature resistant materials and enhanced design, with characteristics of corrosion- resistance, high temperature- resistance, impact- resistance, high strength, beautiful appearance, free of potential leakage and deformation risk.

(5) Safety vent valve: The special selection of materials based on the environment in high temperature area, can open or close the valve effectively, which avoid the battery shell deformation and electrolyte dry problem.

Integrated performance

① High temperature -tolerant: The max tolerant temperature attains to 80℃, the normal temperature range is between -35 to 65 ℃.

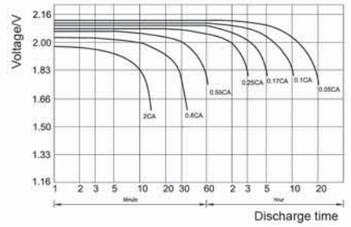
② Harsh environment- tolerant: Suitable for remote areas, frequent power outages, and harsh environment areas.

③ High safety: By adopting the enhanced design of key components and advanced electrolyte, the batteries are of high safety with good pressure and impact resistance, and the water-loss decreases effectively.

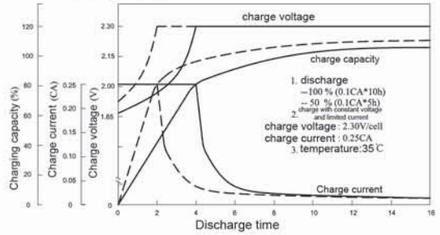
④ Long cycle-life:The designed life at the temperature of 25 and 35℃attain to 20 and 10 years, respectively.

⑤ Green and environmental-friendly: Cd, Cr(VI), Hg and other material which are environment-polluted and hard to recycle, are excluded in the battery formula, and no leakage occurs for gel electrolyte. All of this make the batteries environment-friendly and safe.

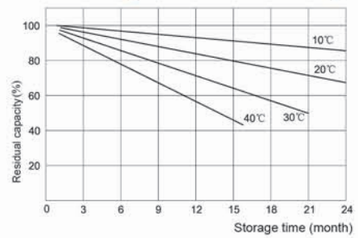
Discharge curve



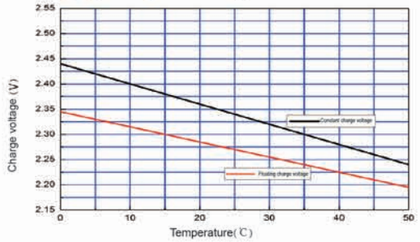
Charging curve



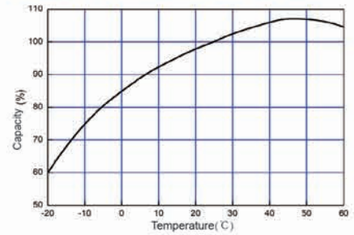
Self- discharge rate under room temperature



Charging voltage vs Temperature



Capacity VS. Ambient temperature



Floating charge cycle-life VS. Temperature (2V)