

GFM series battery utilizes AGM and GEL mixed technology, composed of strong grids, high purity lead and fumed silica Gel electrolyte with good cycle life and wide temperature range performance. The unique plate design and patented structure design provides the excellent frequent cyclic discharge performance.

SPECIFICATION

Nominal Voltage					2V (1 cells)
Nominal Capacity					
20-HR. to 10.8V	10-HR to 10.8V	5-HR to 10.8V	3-HR to 10.8V	1-HR to 10.5V	
210Ah	200Ah	171Ah	153Ah	111Ah	
Approximate Net Weight					12.9 kg (28.43 lbs)
Internal Resistance (approx.)					<0.73 milliohms
Max. Charging Current					50A
Charging voltage					Equalize: 2.35V @25°C(77°F) Standby: 2.25V @25°C(77°F)
Terminal					M8-Φ20
Operating Temp. Range					-50°C to 65°C(-58°F~149°F)
Advice Operating Temp.					15°C~25°C(59°F~77°F)
Self Discharge					
1 month					97%
3 month					91%
6 month					83%

AEG GFM series self discharge will be < 3% / month at 25°C. The storage period can be up to 6months at 25 °C. Then a freshening charge is required

Case and cover	A.B.S. UL94-V0 Optional.
Design Life time	15 years

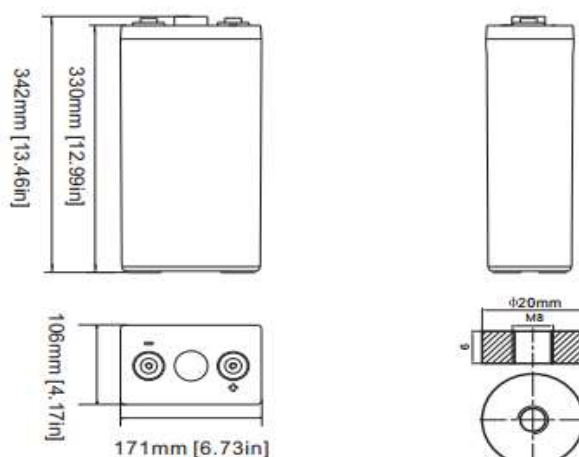


FEATURE

- Specifically designed for Solar and energy storage applications
- Use multiple rare-earth alloy of independent intellectual property right and special lead paste formulations
- Usage of imported low -resistant raw materials and advanced process
- Patented nanometer level gel electrolyte
- Low self-discharge rate, better deep discharge tolerance, strong recover capability of capacity
- Wide temperature range
- Valve regulated, maintenance free non-spillable



DIMENSIONS (mm/in)



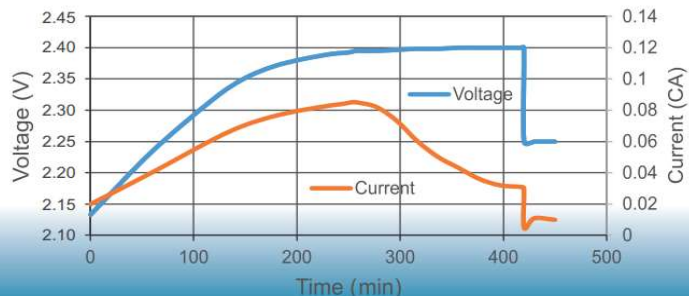
CONSTANT CURRENT DISCHARGE (UNIT: A)

30min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	F.V Time	30min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr
139.6	110.2	96.4	61.6	47.1	37.7	31.8	138.3	22.5	18.8	1.85V	269.6	214.0	187.7	120.8	91.8	74.4	62.8	54.5	44.5	37.2
157.5	123.3	106.9	67.1	50.9	40.6	34.2	29.7	24.2	20.0	1.80V	302.3	237.3	206.5	130.7	99.2	79.6	67.3	58.3	47.6	39.7
164.7	128.2	110.8	69.1	52.2	41.8	35.1	30.5	24.6	20.5	1.75V	312.6	245.1	212.6	133.9	101.4	81.4	68.7	59.4	48.4	40.1
175.8	133.1	114.8	71.4	54.2	42.7	36.0	31.1	25.1	20.8	1.70V	331.5	252.6	218.4	137.3	103.8	83.1	70.0	60.4	49.2	40.8
190.1	143.1	123.0	75.6	56.4	44.8	37.5	32.1	25.8	21.3	1.65V	351.9	267.3	211.0	143.9	108.5	86.5	72.6	62.8	50.5	41.9

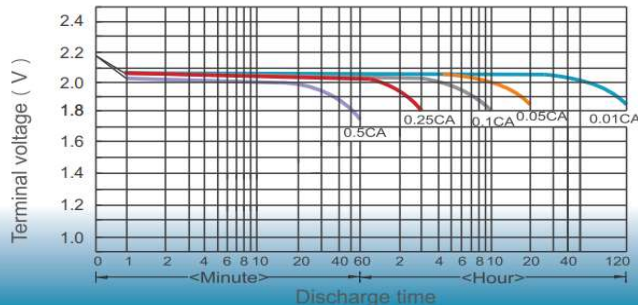


CONSTANT POWER DISCHARGE (UNIT: W/CELL)

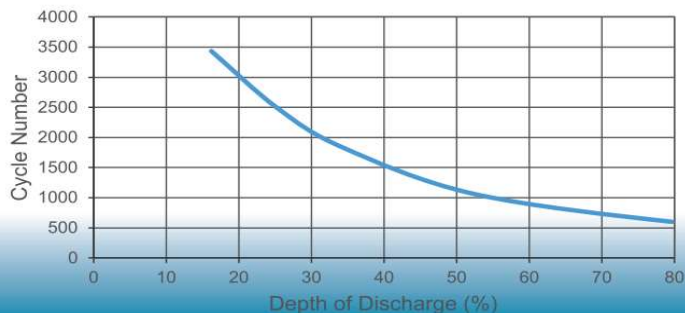
Charge Curve (solar panel)



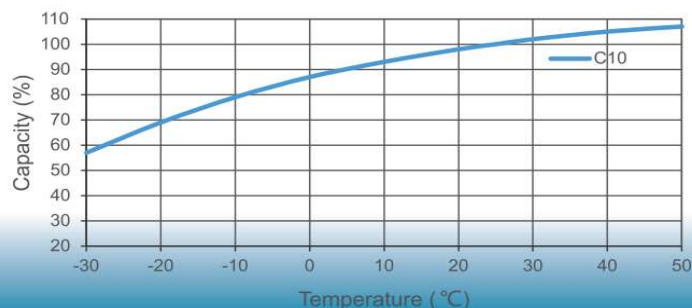
Discharge Curve (25 °C)



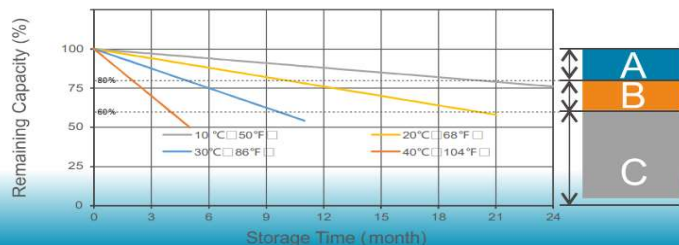
Cycle Life Vs Depth of Discharge



Temperature Vs Battery Capacity

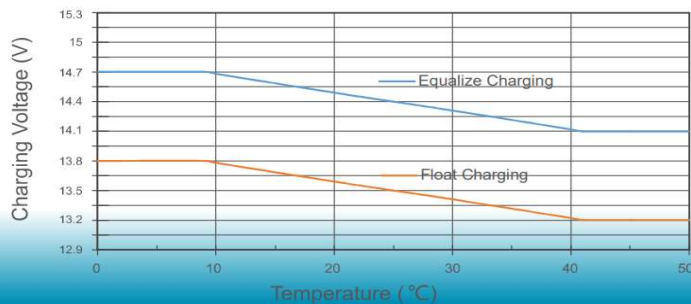


Self Discharge Characteristics



- A** Charging is not necessary unless 100% of capacity is required.
- B** Charging before use is necessary to help recover full capacity.
- C** Charging may fail to restore full capacity. Do not let batteries reach this state.

Charging Voltage Vs Temperature



Equalize Charging: Apply constant voltage charge 14.4V at 25° C (77°F). Initial charging current should be set at less than 0.25C Amps. Switch to float charge to avoid overcharging.

Float Charging: Apply constant voltage charge of 13.5V at 25° C (77°F).

Temperature Compensation: Charging Voltage for both Cyclic and Standby applications should be regulated in relation to ambient temperature. As temperature rises charging voltage should be reduced to prevent overcharge and increased as temperature falls to avoid undercharge. 3 mV/cell/°C.



APPLICATION

A whole range of CYCLIC applications including but not limited to:

- Solar / wind system
- Medical equip
- Lighting system
- Inverter
- RV
- Power Station

