

Valve-regulated Lead Acid Batteries GFM series are widely utilized as standby power supply for communication and signal systems such as telecommunication, mobile station, railway and vessels etc., for the energy storage system of solar and wind power generation, and for the backup power supply of UPS and emergency illumination. Their designed life for standby usage is 15 years

Normal Voltage	2V
Capacity	400 Ah @ 10hr to 1.80V per cell @ 25°C (77°F)
Weight	Approx. 25 kg (55 lbs)
Internal Resistance (full charged)	Approx. 0.51mΩ @ 25°C (77°F)
Maximum Discharge Current	2480A (5sec)
Self Discharge @ 25°C (77°F)	No more than 3 % after 30 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 Limited	40A
Charging Voltage @ 25°C (77°F)	Float: 2.23 V, Temps coefficient -3 mV/°C Cycle: 2.30 V
Contain Materials	ABS
Terminal	M8 and HPb59-1
Capacity Affected by Temperature	105 % @ 40°C 85 % @ 0°C 60 % @ -20°C

**Attain certificate:**

ISO9001(03006Q10084R1M)  
ISO14001(03004E1009R0M)  
ISO18001(03004E1009R0M)  
Underwriters Laboratories  
Inc.(MH28466)  
Russia telecom

**Conforms to the standard:**

GB/T 19638.2-2005  
YD/T799-2002  
JISC8704-2:1999  
IEC60896-2,2004

**Constant Current Discharge Characteristics Unit: A (25°C, 77°F)**

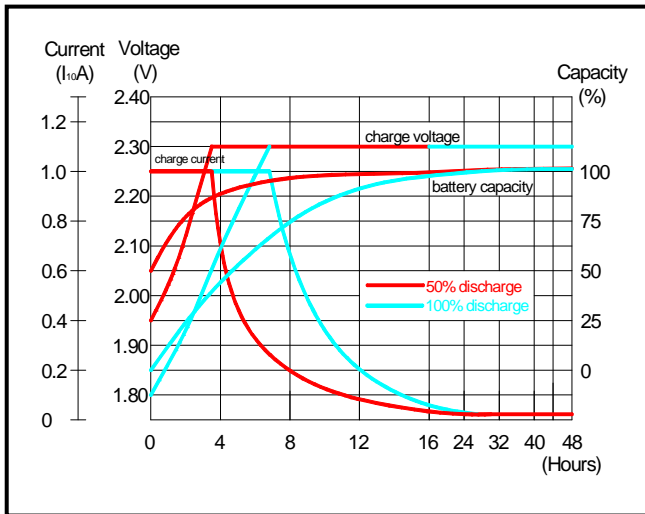
F.V/Time	15min	30min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h
1.90V	284	253	186	155	119	91	75	61.8	52.2	44.3	36.8
1.85V	353	280	223	176	127	101	81	67.2	56.2	47.0	39.9
1.80V	438	308	237	181	135	107	84	71.1	61.4	48.3	41.4
1.75V	485	357	252	190	141	110	86	72.4	62.6	49.3	42.0
1.70V	505	385	263	198	146	112	87	73.4	63.4	49.7	42.4
1.65V	522	407	270	202	149	113	88	73.8	63.8	49.9	42.6

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

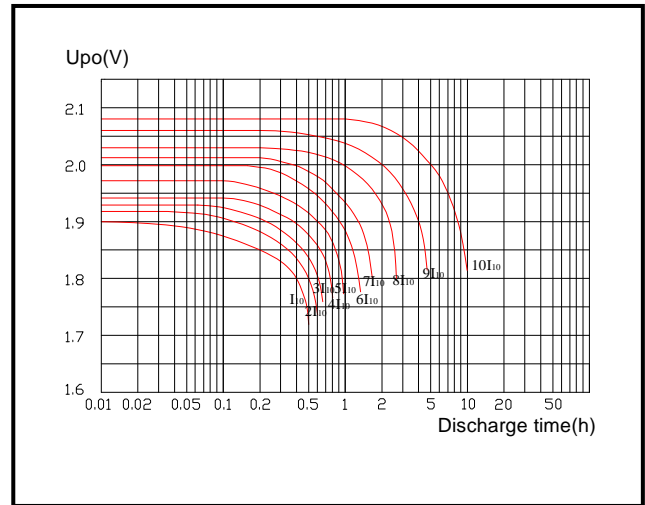
F.V/Time	15min	30min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h
1.90V	546	489	366	305	235	183.2	152.2	124.9	105.6	89.7	74.9
1.85V	664	533	430	342	249	199.6	161.4	134.8	113.0	94.5	80.4
1.80V	812	573	452	350	262	209.9	166.6	141.9	123.1	96.9	83.1
1.75V	884	657	475	363	272	214.5	169.4	144.1	125.1	98.6	84.0
1.70V	898	698	488	376	279	217.7	171.7	145.7	126.3	99.2	84.7
1.65V	900	728	495	380	283	219.0	172.8	146.4	126.9	99.5	85.0

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 CHINASHOTO for the latest information.

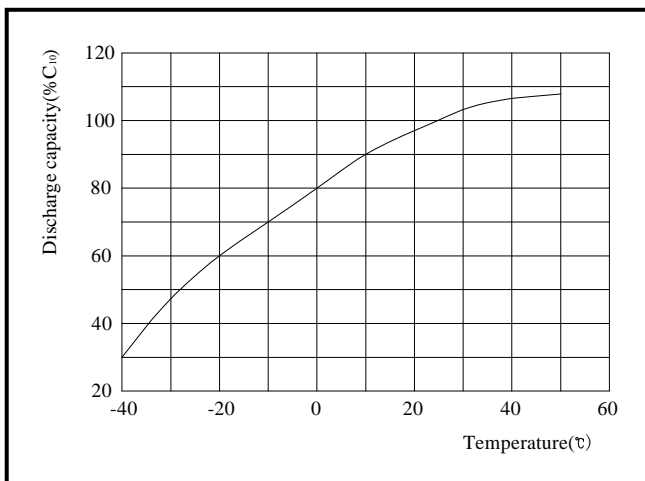
Constant Voltage Charge Characteristics



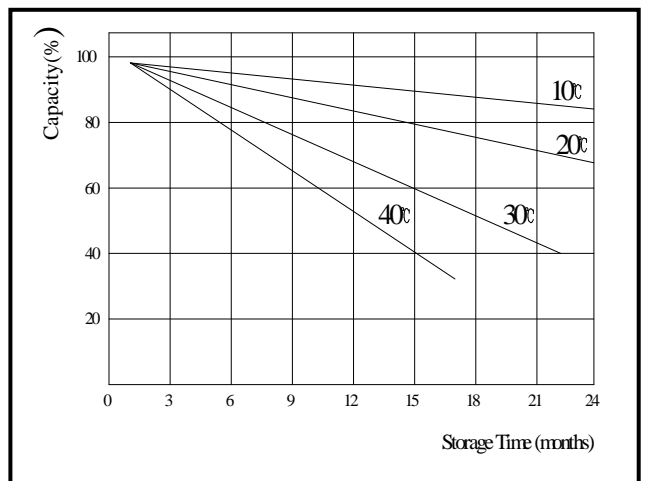
Discharge Performance at Different Discharge Rate



Capacity at Different Temperature



Curve of Storage Time and Self-discharge at Different Temperature



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