

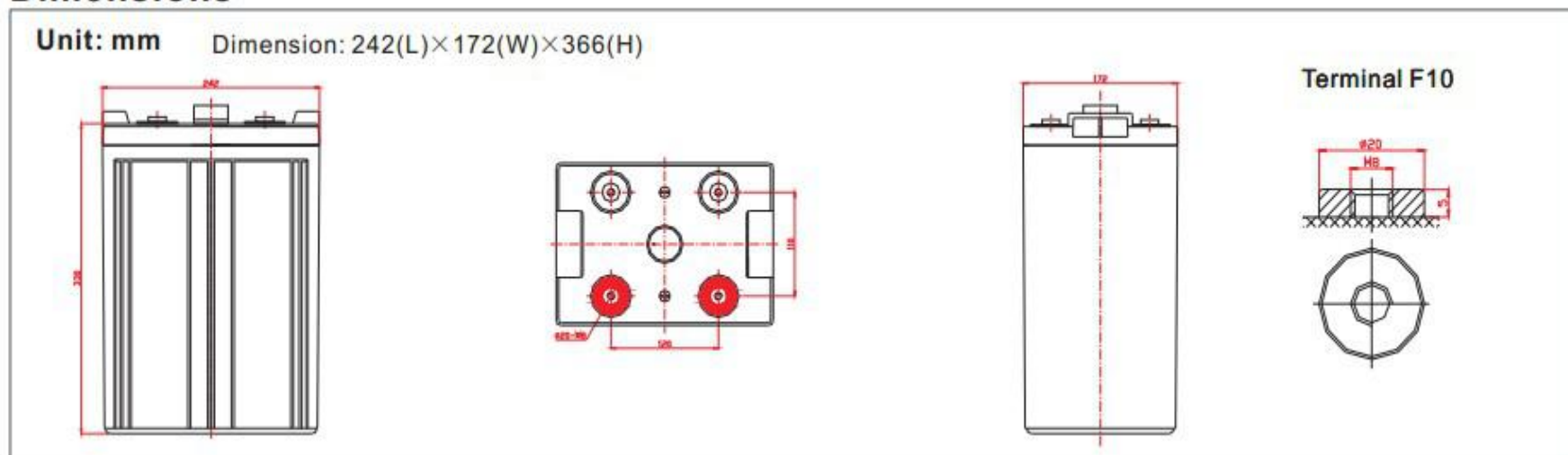
GFM500 is a general purpose battery with 18 years floating design life. With heavy duty grid, thick plates, special additives, GFM series battery maintain very long life time and stable performance.



**Specification**

Cells Per Unit	1
Voltage Per Unit	2
Capacity	500AH@10hr-rate to 1.75V per cell @ 25°C
Weight	Approx.30.5kg (Tolerance ± 3%)
Max. Discharge Current	2500A(5sec)
Internal Resistance	Approx. 0.72mΩ
Internal Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25 ± 5°C
Float Charging Voltage	2.27 to 2.3 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	100A
Equalization and Cycle service	2.43 to 2.47 VDC /unit Average at 25°C
Self Discharge	<b>YAHENG</b> Vale Regulated Lead Acid(VRLA) Can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using .
Terminal	Thread insert & Bolt (F10)
Container Material	A.B.S. UL94-HB, Flammability resistance of UL94-V2 can be avail upon request

**Dimensions**



**Constant Current Discharge Characteristics: A(25°C)**

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	678.9	500.7	322.2	191.5	142.6	113.7	95.76	80.43	64.92	54.26
1.65V	645.5	480.7	308.2	184.5	136.7	109.7	91.77	78.49	62.02	53.33
1.70V	601.9	453.2	302.2	181.5	133.7	108.7	90.77	76.55	61.05	52.36
1.75V	534.4	407.8	278.3	171.6	126.7	102.7	86.78	72.68	59.11	51.39
1.80V	460.0	371.5	262.3	163.6	121.7	101.7	83.79	71.71	58.14	50.42
1.85V	189.0	334.4	242.4	154.6	115.7	93.77	79.80	67.83	55.23	47.01

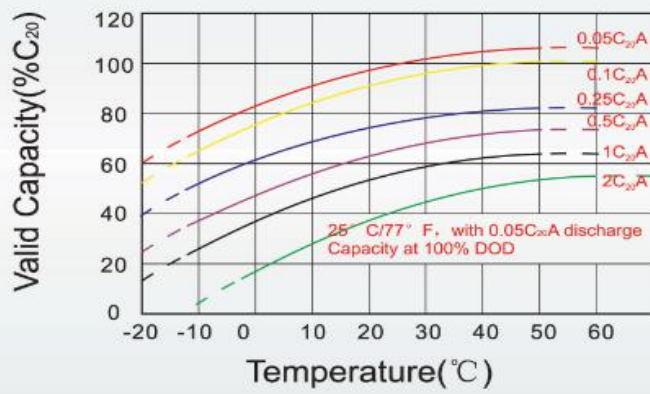
**Constant Power Discharge Characteristics: W(25°C)**

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	1188	912.4	589.9	354.8	265.8	213.7	181.0	155.2	123.5	104.8
1.65V	1157	907.5	587.9	349.7	260.6	210.5	178.9	153.2	122.5	103.8
1.70V	1093	858.9	577.2	344.6	256.6	209.7	177.3	149.6	120.6	102.2
1.75V	974	774.0	531.7	326.2	247.4	199.2	169.9	142.3	116.8	100.5
1.80V	842.9	706.2	501.4	311.5	237.2	198.3	164.4	140.6	114.9	96.95
1.85V	718.8	636.7	463.4	294.9	226.0	183.6	156.9	133.2	109.2	93.35

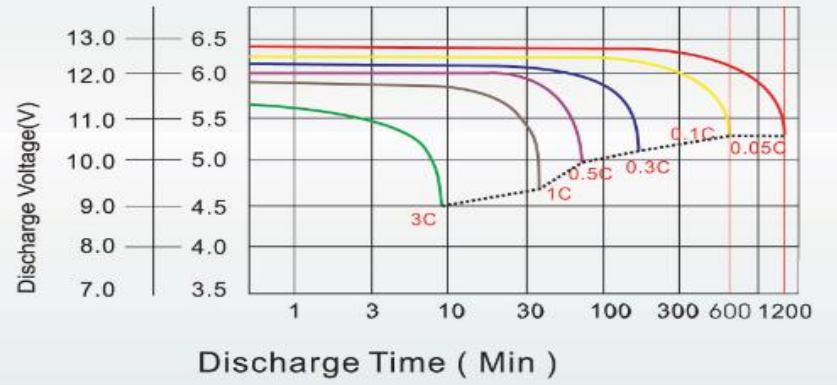
All mentioned values are average values.



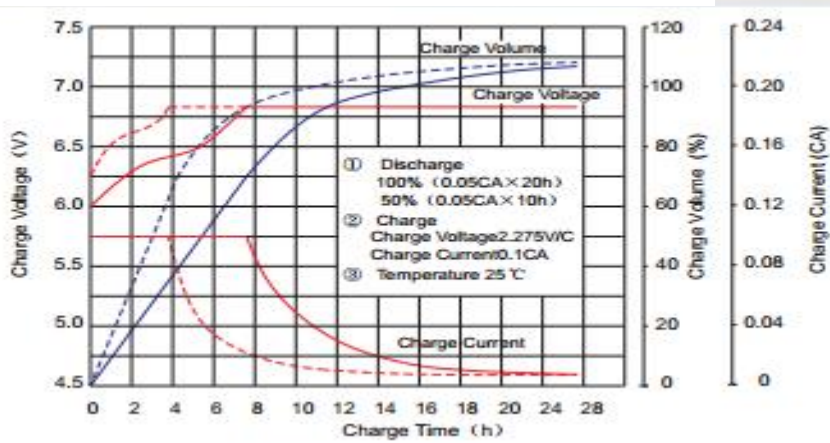
Temperature and Valid Capacity



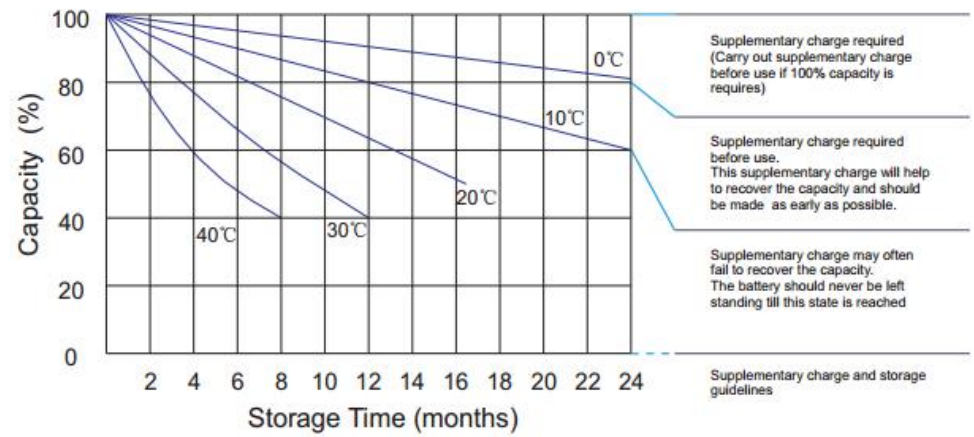
Discharge Characteristics at Various Rates @25°C/77°F



Charge characteristic curve for standby use



Storage characteristic



**Discharge Current VS. Discharge Voltage**

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	$A \leq 0.2C$	$0.2C \leq A \leq 1.0C$	$\geq 1.0C$

**Charge the batteries at least once every six months, if they are stored at 25°C**

Charging Method:

Constant Voltage	$-0.2C \times 2h + 2.4 - 2.45V/cell \times 24h$ , Max. Current 0.3CA
Constant Current	$-0.2C \times 2h + 0.1CA \times 12h$
Fast	$-0.2C \times 2h + 0.3CA \times 4.0h$

**Maintenance & Cautions**

**Float Service**

- ※ Every month, recommend inspection every battery voltage
  - ※ Every three months, recommend equalization charge for one time.
- Equalization charge method:
- Discharge: 100% rate capacity discharge.
- Charge: Max. Current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h
- ※ Effect of temperature on float charge voltage: -3mV/Cell.
  - ※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.

**Contact us:**

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