

GENERAL SERIES BATTERY

GFM500/2Volt 500Ah

2V series is a general purpose battery with 20 years design life in float service. With heavy duty grids, thicker plates, special additives and updated AGM valve regulated technology, the series battery provides consistent performance and long service life. The new grid design effectively reduces the internal resistance, which provides higher specific energy density and excellent high rate discharge characteristics.

APPLICATION

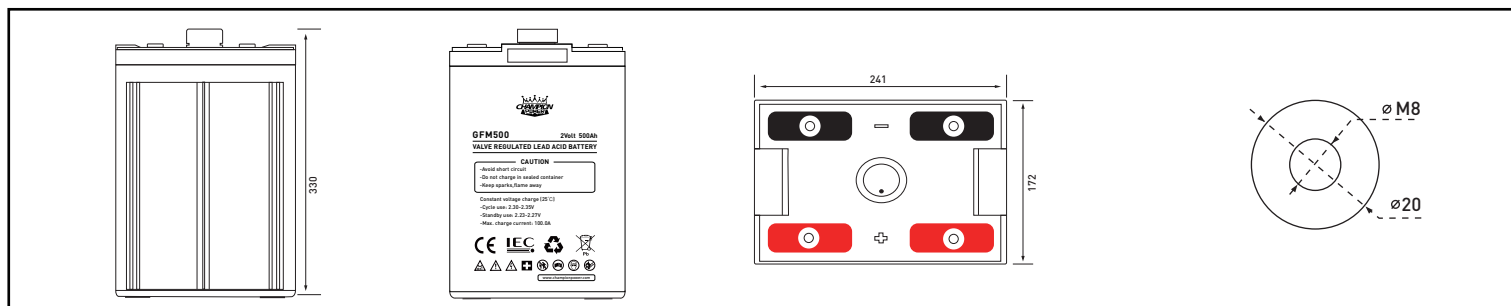
- ☆ Emergency Power System
- ☆ Communication equipment
- ☆ Telecommunication systems
- ☆ Uninterruptible power supplies
- ☆ Electric toy car and wheelchairs, etc
- ☆ Power tools
- ☆ Alarm system
- ☆ Marine equipment
- ☆ Medical equipment
- ☆ Fire and Security System

SPECIFICATION

Battery Model	Nominal Voltage	2V		
	Rated capacity (10Hour rate)	500Ah		
Dimension	Length	Width	Height	Total Height
	241mm	172mm	330mm	364mm
Approx Weight	28.50Kg			
Internal Resistance	Full charged at 25°C(77°F): Approx 0.70mΩ			
Max.discharge current	2500A(5s)			
Floating design life @ 25°C (77°F)	20 years			
Capacity @ 25°C (77°F)	C ₂₀ (26.75A/1.85V)	C ₂₄ (22.92A/1.85V)	C ₄₈ (12.50A/1.85V)	C ₇₂ (8.68A/1.85V)
	535Ah	550Ah	600Ah	625Ah
Capacity affected by Temp(10 HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C(5°F)
	102%	100%	85%	65%
Self Discharge @ 25°C (77°F)	After 3 months storage	After 6 months storage	After 12 months storage	
	91%	82%	64%	
Charge method @ 25°C (77°F)	Cycle Use	2.30-2.35V (Max. charge current: 100.0A)		
	Float Use	2.23-2.27V		

OUTER DIMENSION (mm)

TERMINAL TYPE (mm)

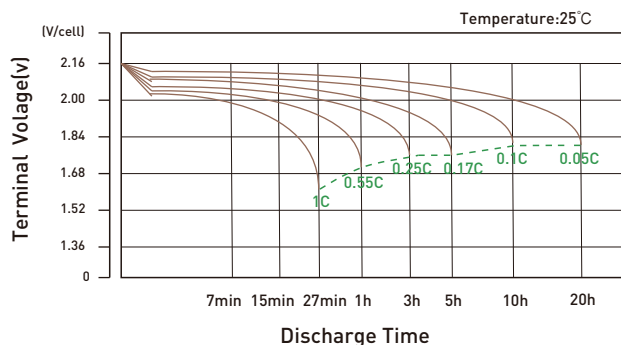


CONSTANT CURRENT(AMP) AND CONSTANT POWER(WATT) DISCHARGE TABLE AT 25°C (77°F)

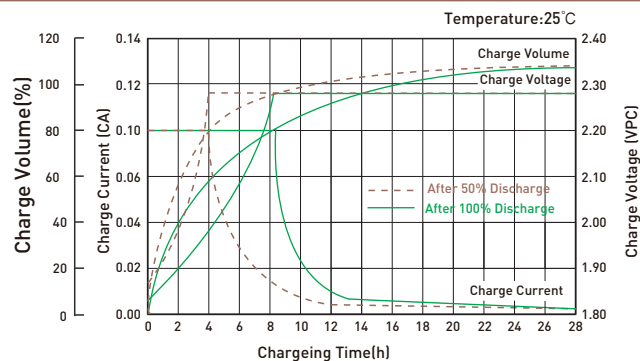
F.V / TIME		5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h
1.60V	A	1550.00	1175.00	875.00	575.00	300.00	175.00	130.00	103.33	87.71	57.92	55.00
	W	2738.33	2079.75	1560.42	1035.00	545.00	317.92	238.33	189.44	160.80	107.15	101.75
1.70V	A	1350.00	1104.17	804.17	545.83	310.00	167.92	127.50	100.00	86.04	57.00	52.50
	W	2452.50	2042.71	1494.41	1023.44	581.25	316.24	240.13	189.17	162.76	107.83	99.31
1.75V	A	1530.21	1055.00	750.00	529.17	300.00	164.58	125.00	95.00	85.00	56.25	51.50
	W	2805.38	1978.13	1412.50	1005.41	570.00	314.08	238.54	182.08	162.92	107.81	98.71
1.80V	A	1393.33	1008.33	700.00	505.00	290.00	160.42	122.50	93.33	81.25	54.79	50.00
	W	2554.44	1915.83	1335.83	972.13	558.25	308.80	236.83	181.22	157.76	106.39	97.08
1.85V	A	1205.00	950.00	650.00	470.00	275.00	156.25	117.50	91.67	77.71	53.33	48.75
	W	2269.42	1828.75	1256.67	916.50	536.25	304.69	230.10	180.28	152.83	104.89	95.88

GFM500/2Volt 500Ah

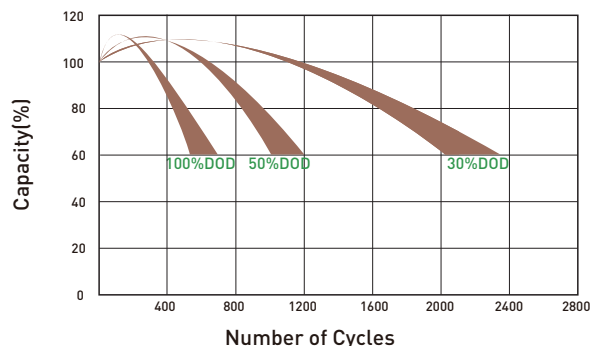
Discharge characteristic Curve



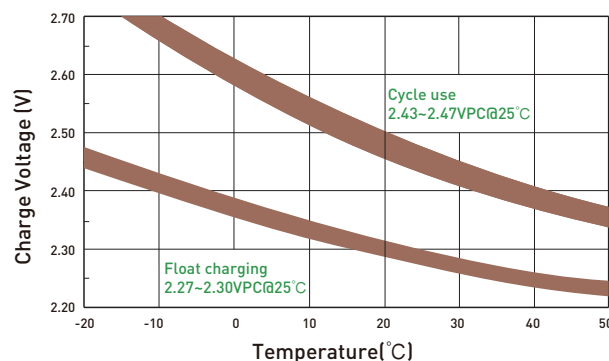
Charge Characteristic Curve For Standby Use



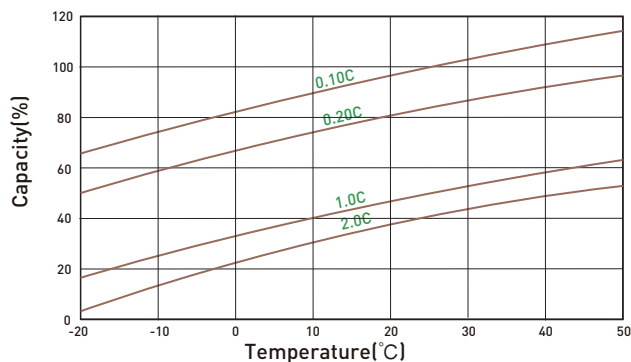
Cycle service life in relation to depth of discharge



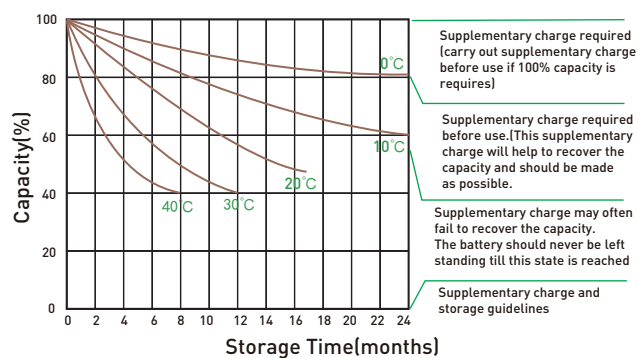
Relationship Between Charging Voltage And Temperature



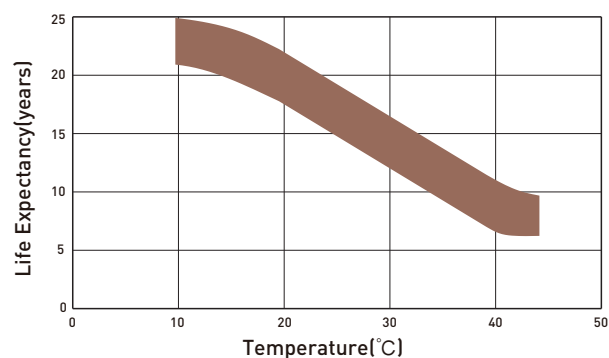
Temperature Effects On Capacity



Storage Characteristics



Effect Of emperature On Long Term Life



Charge Characteristic Curve For Standby Use

