

### GENERAL FEATURES

- Longer cycle life: special paste formula, over dimensioned negative plate, optimized manufacturing process, additives for deep discharge.
- Special high quality separators boost up the battery internal performance.
- Using oxygen recombination technology, maintenance-free.
- Using patented GEL electrolyte, particularly designed for solar energy system.
- Wide operation temperature range: -40°C - +60°C
- Designed to have a lifespan of 12 years for float charging at 25°C
- High strength ABS battery container. (Flame-retardant ABS container is optional)



### APPLICATIONS

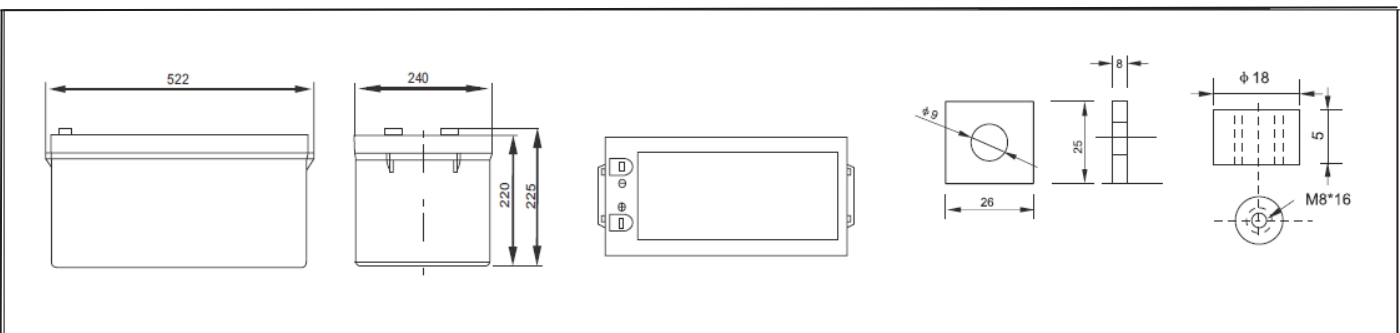
- Electric tools
- Vehicle in place of walking
- Lawn mowers
- Golf trolleys and golf cart
- Power system of special network or local area network
- Electric toys
- Railway and marine systems
- Fire alarms
- Solar and wind power system
- Electric wheelchairs
- Medical equipment



### SPECIFICATIONS

Model	Nominal Voltage	12V		
	Rated Capacity (10 Hr rate)	200Ah		
Dimensions	Length	Width	Height	Total Height
	522mm	240mm	220mm	244mm
Weight	Approx. 61.2 kgs(134.95lbs) (+/- 3%)			
Capacity @25°C (77°F)	10 Hour (20A,10.8V)	5 Hour (34A,10.8V)	3 Hour (50A,10.8V)	1 Hour (110A,10.5V)
	200Ah	170Ah	150Ah	110Ah
Internal Resistance	Fully charged at 25°C, approx. 2.5mΩ			
Max. Discharge current	2000A (5 Sec.)			
Capacity Affected by Temp. (20Hr)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	112%	100%	80%	68%
Self Discharge Rate @25°C (77°F)	After 3 months Storage	After 6 months Storage	After 12 months Storage	
	91%	82%	64%	
Charge Method	Cycle Use		Float Charging	
	14.1-14.4V (Initial current less than 60A) @25°C (77°F)		13.5-13.8V@25°C (77°F)	

### DIMENSIONS & TERMINALS

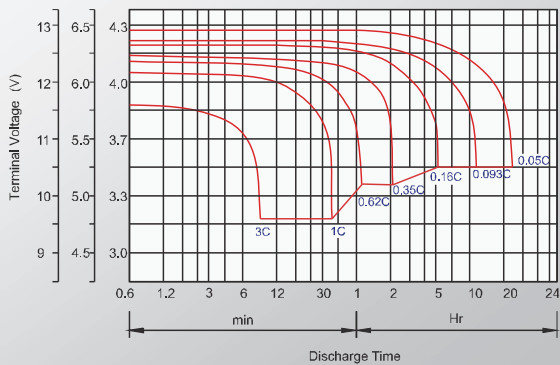


## PERFORMANCE CHARACTERISTICS

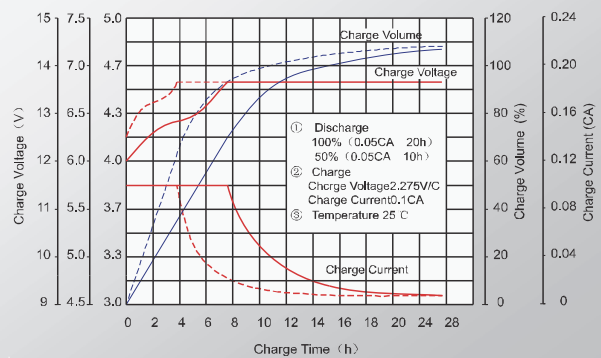
### Constant Current (Amp.) and Constant Power (Watt) Discharge Table @25°C (77°F)

Cell Voltage / Time		5min	15min	30min	45min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	A	650.00	350.00	212.00	153.00	124.00	71.20	55.80	42.80	38.40	25.00	20.90	10.90
	W	1172.00	662.00	412.00	310.00	252.00	145.00	106.00	83.80	70.60	47.20	38.80	20.80
1.70V	A	604.00	332.00	206.00	151.00	122.00	70.20	54.40	42.20	37.61	24.60	20.40	10.80
	W	1122.00	642.00	410.00	308.00	250.00	144.00	104.70	83.40	69.60	46.60	38.20	20.80
1.75V	A	556.00	320.00	204.00	150.00	121.00	68.40	53.80	41.80	37.20	24.20	20.20	10.70
	W	1060.00	638.00	408.00	308.00	246.00	143.00	103.00	83.00	69.60	46.20	38.00	20.80
1.80V	A	498.00	300.00	195.00	144.00	117.00	67.80	53.40	41.60	36.20	24.00	20.00	10.60
	W	972.00	602.00	398.00	300.00	246.00	143.00	103.00	83.00	68.40	46.00	38.00	20.80
1.85V	A	446.00	266.00	177.00	134.00	109.00	64.40	50.20	39.20	34.20	23.00	19.10	10.40
	W	892.00	538.00	366.00	280.00	228.00	136.00	97.80	79.00	65.40	44.20	36.60	17.20

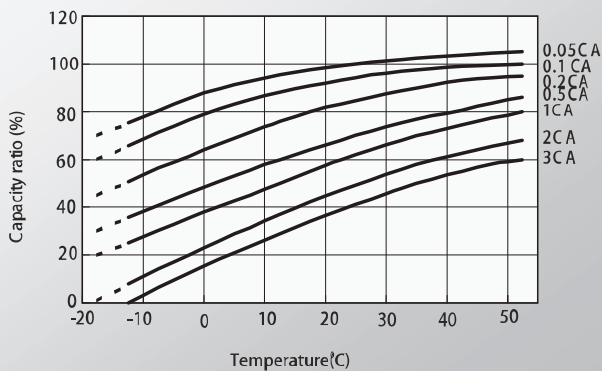
### DISCHARGE CHARACTERISTICS



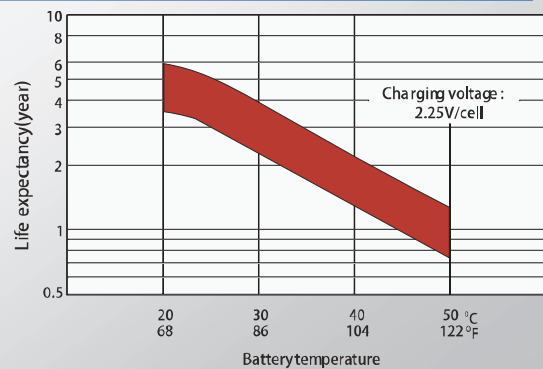
### CHARGING CHARACTERISTICS (STANDBY)



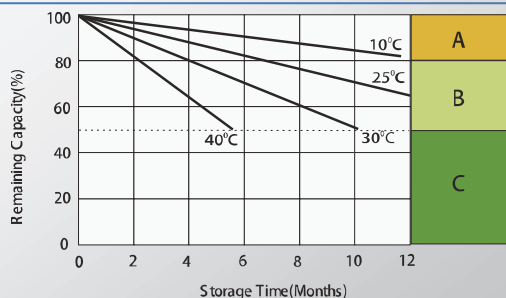
### TEMP. EFFECTS IN RELATION TO BATTERY CAPACITY



### EFFECT OF TEMP. ON LONG TERM FLOAT DESIGNED LIFE



### SELF DISCHARGE CHARACTERISTICS



A. No supplementary charge required. (Carry out supplementary charge before use if 100% capacity is required.)  
 B. Supplementary charge required before use. Optional charging way as below:  
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
 2. Charged for above 20hours at limited current 0.25CA and constant voltage 2.45V/cell.  
 3. Charged for 8-10hours at limited current 0.05CA.  
 C. Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.

### CYCLE LIFE IN RELATION TO THE DEPTH OF DISCHARGE

