

Solar and UPS Battery

Solar and UPS Battery is manufactured with special separators and silica gel immobilizing the electrolyte inside the battery. The proven silica gel technology can improve battery cycle life and performance at wider temperature range. The deep discharge cycle life is increased 50% compared with the GP series battery.

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



General Features

- * Heavy Duty Grid
- * Mechanized assembly
- * Non-spillable construction
- * High Reliability and Stability
- * Sealed and Maintenance-free
- * Long Life and low self-discharge design

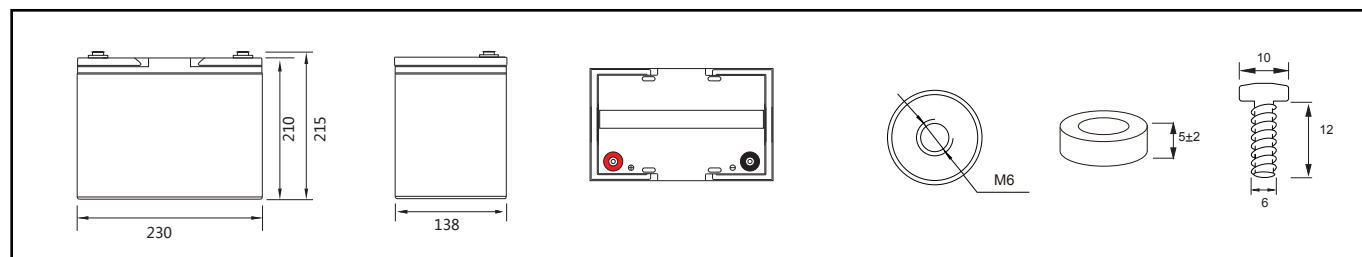
Construction

- * Positive Lead dioxide
- * Electrolyte Sulfuric acid
- * Separator Fiber glass
- * Container ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper

Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		55Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	230mm (9.05 inches)	138mm (5.43 inches)	210mm (8.26 inches)	215mm (8.46 inches)
Approx Weight	15.3kg(33.73lbs) ± 3%			
Capacity @ 25°C (77°F)	10 hour rate(5.5A,10.5V)	5 hour rate(9.78A,10.5V)	3 hour rate(14.22A,10.8V)	1 hour rate(33A,9.6V)
	55Ah	48.9Ah	42.66Ah	33Ah
Max.discharge current	550A (5 Sec.)			
Internal Resistance	Full charged at 25°C (77°F) : Approx 7.2mΩ			
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		Float Use	
	14.40-14.70V (Initial charging current less than 16.5A)		13.50-13.80V	

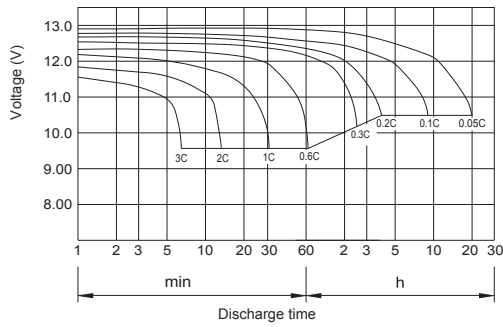
Outer dimension (mm)



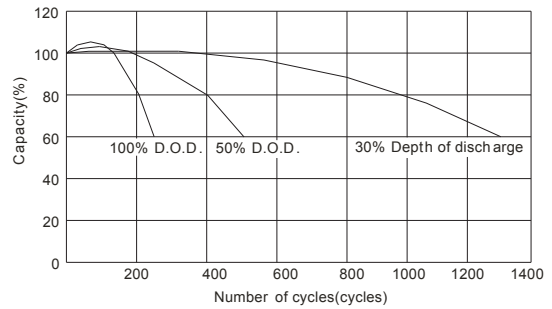
Terminal Type (mm)

Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)										
F.V/time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	96.500	57.600	33.000	24.152	20.360	14.503	9.897	7.008	5.707	3.176
	186.245	114.739	65.835	48.225	40.736	29.018	19.803	14.022	11.419	6.354
1.67V	91.487	56.369	32.761	23.913	20.258	14.427	9.843	6.949	5.618	3.017
	176.708	112.344	65.362	47.759	40.567	28.918	19.730	13.933	11.265	6.049
1.70V	89.231	55.877	32.522	23.889	20.208	14.390	9.840	6.879	5.547	2.937
	172.484	111.366	64.964	47.730	40.483	28.853	19.730	13.800	11.128	5.891
1.75V	85.471	54.892	32.043	23.578	20.081	14.300	9.788	6.860	5.500	2.890
	165.387	109.484	64.167	47.157	40.222	28.686	19.635	13.772	11.041	5.802
1.80V	81.962	53.662	31.804	23.411	19.954	14.224	9.761	6.801	5.411	2.795
	158.843	107.077	63.768	46.939	39.976	28.547	19.590	13.663	10.871	5.615
1.85V	77.701	52.185	31.326	23.148	19.777	14.097	9.707	6.712	5.323	2.699
	150.741	104.205	62.903	46.527	39.638	28.321	19.500	13.499	10.704	5.429

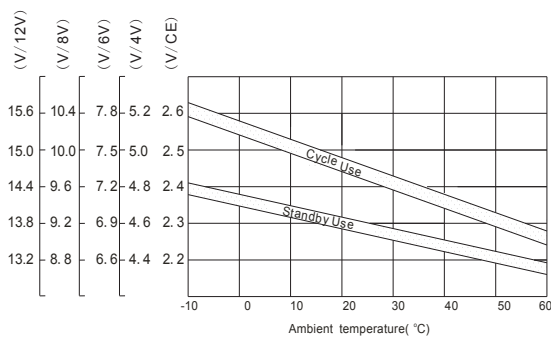
Discharge characteristic Curve



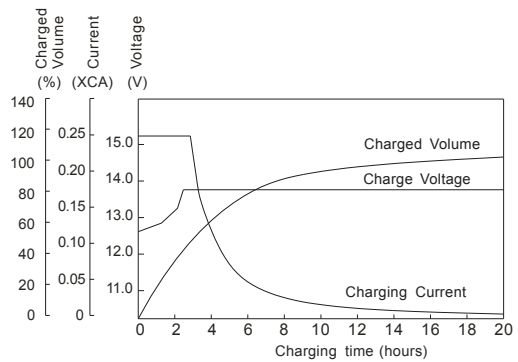
Cycle service life in relation to depth of discharge



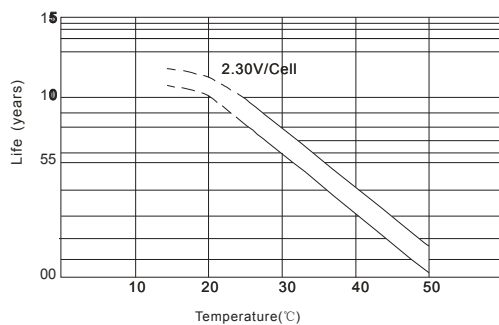
Relationship between charging voltage and temperature



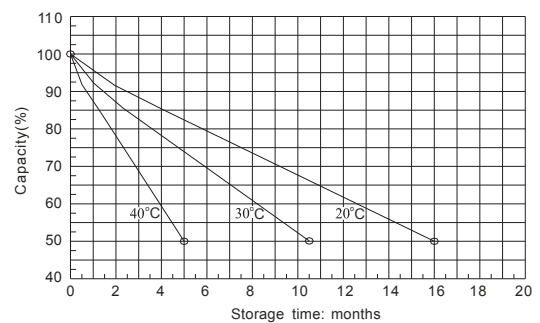
Constant voltage charging characteristic (0.25CA, at 25°C)



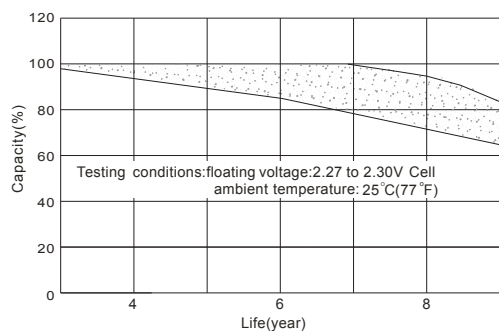
Temperature effects on float life



Self-discharge characteristic



Life characteristics of standby use



Charge characteristic Curve for standby use

