

General Series Battery

EXCITON EX1 Series VRLA batteries are designed with AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for common power backup system. GP Series Batteries are the general purpose batteries with 5 years floating design life at 25 °C Meet with IEC, BS, JIS and Eurobat standard. UL(MH62092), CE approved.

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

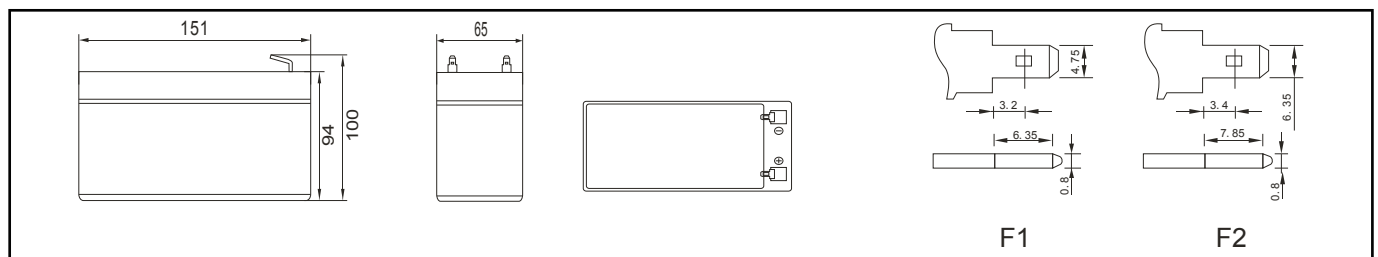
Construction

- * 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 (20 Hour rate)		7.2Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	151mm (5.94 inches)	65mm (2.56 inches)	94mm (3.7 inches)	100mm (3.94 inches)
Approx Weight	2.03kg(4.47lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour rate(0.37A, 10.5V)	10 hour rate(0.689A, 10.8V)	5 hour rate(1.37A, 10.5V)	1 hour rate(3.90A, 9.6V)
	7.2Ah	6.89Ah	6.85Ah	3.90Ah
Max. discharge current	105A (5 Sec.)			
Internal Resistance	Full charged at 25°C (77°F) : Approx 33mΩ			
Capacity affected by Temp.(20 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 2.16A)		13.50-13.80V	

Outer dimension (mm)

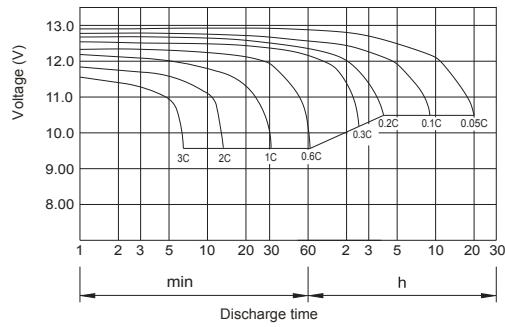


Terminal Type (mm)

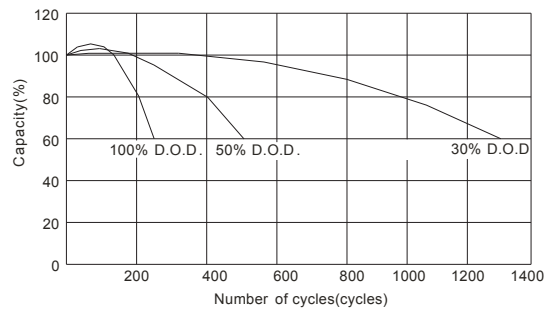
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)												
F.V/time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	23.800	16.129	12.200	7.300	3.900	2.854	2.848	2.028	1.384	0.892	0.726	0.407
	44.019	30.790	23.546	14.542	7.781	5.699	5.697	4.058	2.770	1.785	1.453	0.814
1.67V	21.129	15.052	11.566	7.144	3.872	2.826	2.833	2.018	1.377	0.884	0.715	0.386
	39.073	28.731	22.340	14.238	7.725	5.644	5.674	4.044	2.759	1.773	1.434	0.774
1.70V	20.001	14.513	11.281	7.082	3.843	2.823	2.826	2.013	1.376	0.876	0.706	0.376
	36.996	27.720	21.806	14.114	7.678	5.641	5.662	4.035	2.759	1.756	1.416	0.754
1.75V	18.102	13.658	10.806	6.957	3.787	2.787	2.809	2.000	1.369	0.873	0.700	0.370
	33.484	26.092	20.909	13.876	7.583	5.573	5.625	4.012	2.746	1.753	1.405	0.743
1.80V	16.173	12.739	10.362	6.801	3.759	2.767	2.791	1.989	1.365	0.866	0.689	0.358
	29.923	24.345	20.082	13.571	7.536	5.547	5.591	3.993	2.740	1.739	1.384	0.719
1.85V	14.244	11.820	9.823	6.614	3.702	2.736	2.766	1.972	1.358	0.854	0.677	0.346
	26.362	22.599	19.057	13.207	7.434	5.499	5.544	3.961	2.727	1.718	1.362	0.695

Note: The above data are average values.

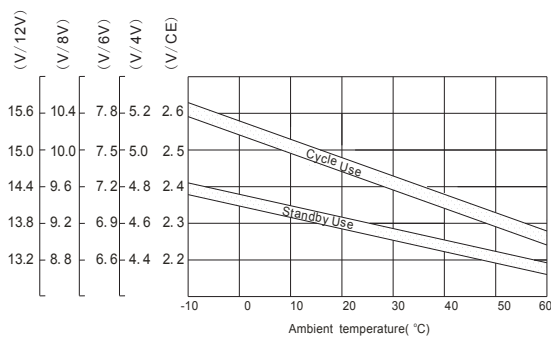
Discharge characteristic Curve



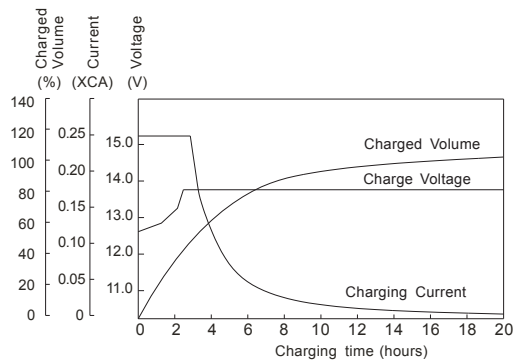
Cycle service life in relation to depth of discharge



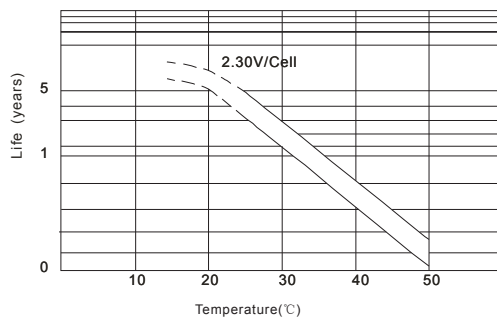
Relationship between charging voltage and temperature



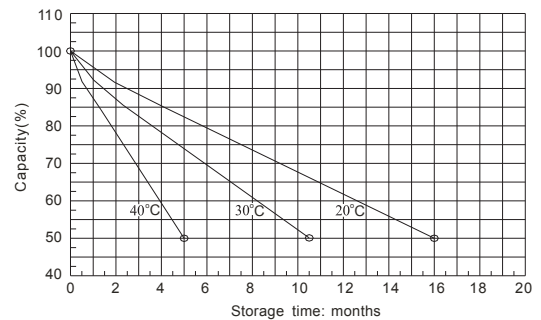
Constant voltage charging characteristic (0.25CA, at 25°C)



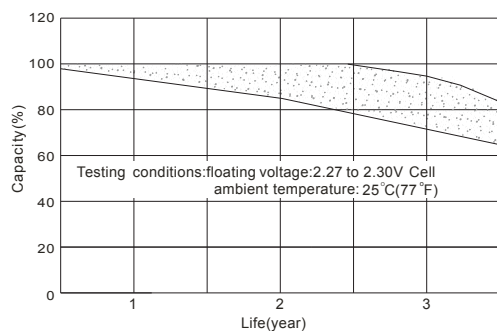
Temperature effects on float life



Self-discharge characteristic



Life characteristics of standby use



Charge characteristic Curve for standby use

