

General Series Battery

Energo® General (GP) 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

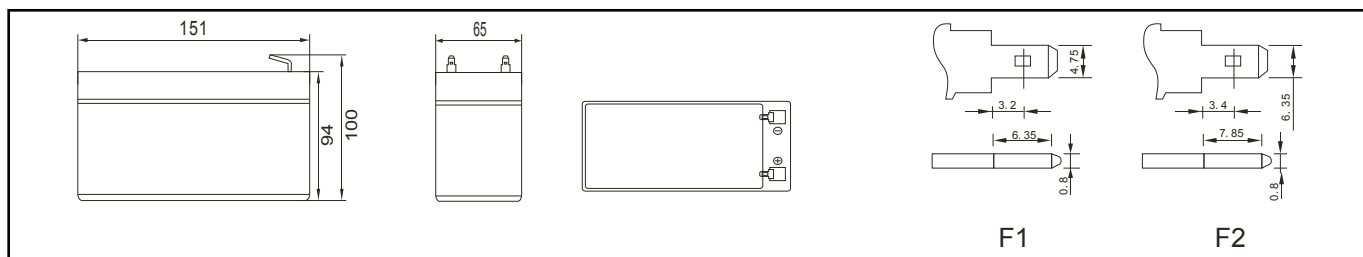
Construction

- * 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

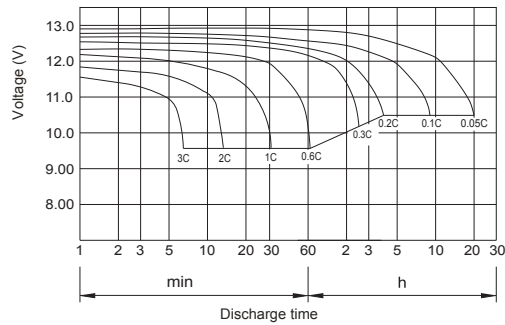
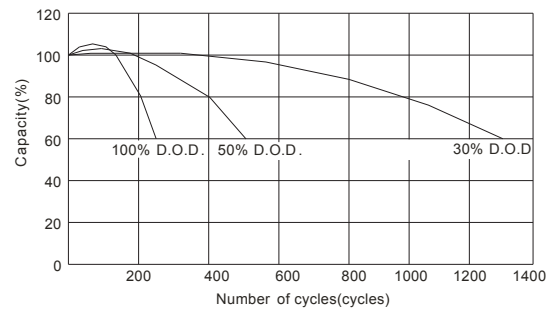
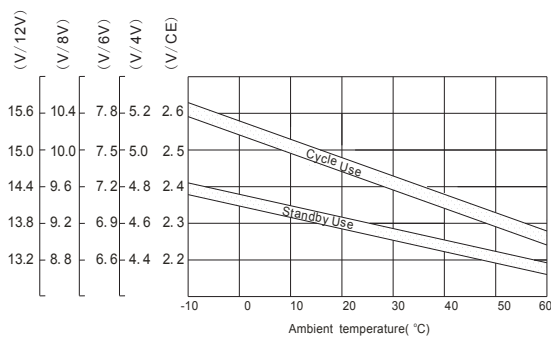
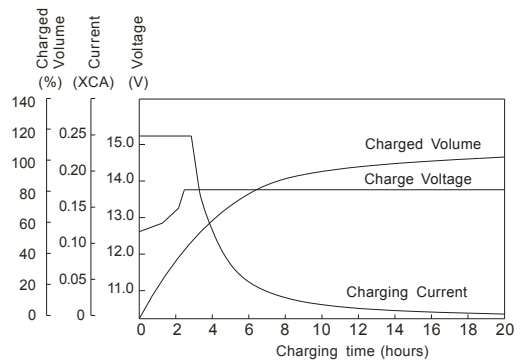
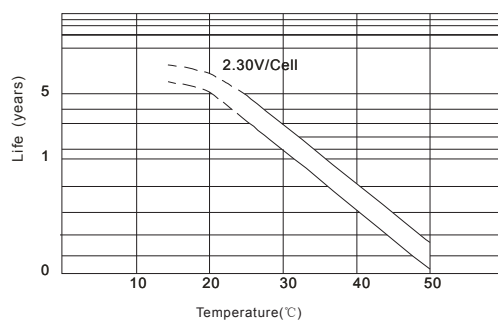
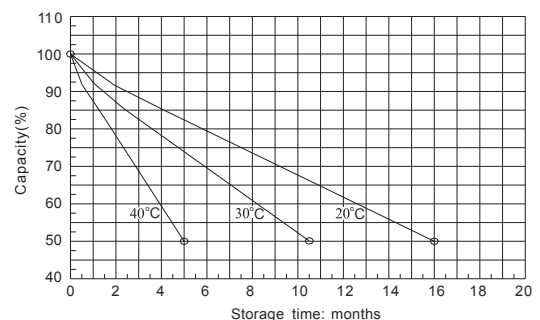
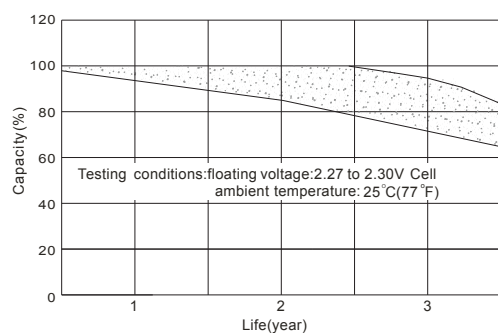
Battery Model	Nominal Voltage		12V	
	Rated capacity (20 Hour rate)		7.5Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	151mm (5.94 inches)	65mm (2.56 inches)	94mm (3.7 inches)	100mm (3.94 inches)
Approx Weight	1.99kg(4.63lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour rate(0.39A,10.5V)	10 hour rate(0.73A,10.8V)	5 hour rate(1.43A,10.5V)	1 hour rate(4.35A,9.6V)
	7.8Ah	7.3Ah	7.15Ah	4.35Ah
Max.discharge current	105A (5 Sec.)			
Internal Resistance	Full charged at 25°C (77°F) : Approx 30mΩ			
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 2.25A)		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	16.989	12.850	7.700	4.350	3.184	2.990	2.130	1.453	0.956	0.778	0.434
	44.019	32.431	24.801	15.338	8.678	6.357	5.982	4.261	2.908	1.912	1.557	0.868
1.67V	21.129	15.854	12.182	7.535	4.318	3.152	2.975	2.119	1.445	0.948	0.766	0.412
	39.073	30.261	23.531	15.018	8.616	6.296	5.957	4.247	2.897	1.900	1.536	0.827
1.70V	20.001	15.286	11.882	7.470	4.287	3.149	2.968	2.113	1.445	0.938	0.756	0.401
	36.996	29.197	22.968	14.888	8.563	6.292	5.945	4.237	2.897	1.882	1.517	0.805
1.75V	18.102	14.385	11.381	7.338	4.224	3.108	2.949	2.100	1.437	0.935	0.750	0.395
	33.484	27.482	22.023	14.636	8.458	6.216	5.907	4.213	2.884	1.878	1.506	0.793
1.80V	16.173	13.417	10.914	7.174	4.192	3.086	2.930	2.089	1.433	0.927	0.738	0.382
	29.923	25.642	21.152	14.314	8.406	6.187	5.871	4.192	2.877	1.863	1.482	0.767
1.85V	14.244	12.449	10.347	6.976	4.129	3.051	2.904	2.070	1.425	0.915	0.726	0.369
	26.362	23.803	20.073	13.930	8.292	6.133	5.821	4.159	2.864	1.841	1.460	0.742

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
