General Series Battery

General (GP) Series VRLA batteries are designed withAGM (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 10 years floating design life at 25℃
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

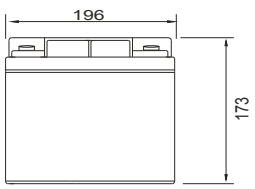
Construction

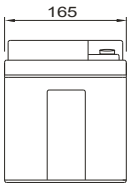
* Positive ..... Lead dioxide
* Electrolyte ..... Sulfuric acid
* Separator ..... Fiber glass
* Container ..... ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
* Negative ..... Lead
* Safety Valve ..... EPDR
* Terminal ..... Copper

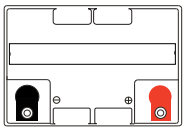
Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		45Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	196mm (7.71 inches)	165mm (6.49 inches)	173mm (6.81 inches)	173mm (6.81 inches)
Approx Weight	13.45kg(29.65lbs) ± 3%			
Capacity @ 25℃ (77 ℉)	10 hour rate(4.5A,10.5V)	5 hour rate(7.07A,10.5V)	3 hour rate(11.73A,10.8V)	1 hour rate(27A,9.6V)
	45Ah	35.35Ah	35.19Ah	27Ah
Max.discharge current	450A (5 Sec.)			
Internal Resistance	Full charged at 25℃ (77℉) : Approx8.5mΩ			
Capacity affected by Temp.(10 HR)	40℃ (104℉)	25℃ (77℉)	0℃ (32℉)	-15℃ (5℉)
	102%	100%	85%	65%
Self Discharge @25℃ (77℉)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method @25℃ (77℉)	Cycle Use		Float Use	
	14.40-14.70V (Initial charging current less than 13.5A)		13.50-13.80V	

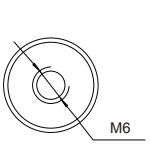
Outer dimension (mm)

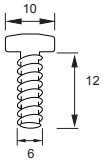






Terminal Type (mm)



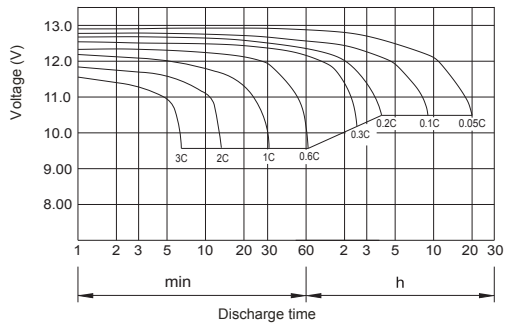


Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃ (77℉)

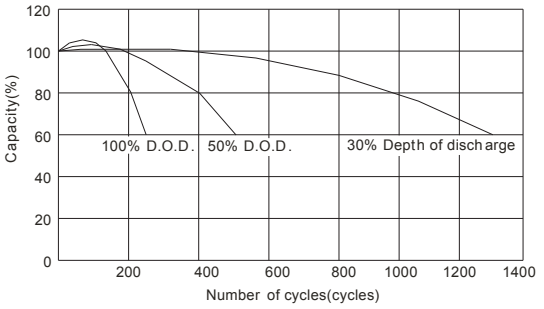
F.V/time	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	106.824	80.800	48.000	27.000	19.761	16.800	11.967	8.167	5.734	4.669	2.593
	203.924	155.944	95.616	53.865	39.457	33.615	23.945	16.341	11.473	9.343	5.189
1.67V	99.688	76.603	46.974	26.804	19.565	16.717	11.905	8.122	5.685	4.597	2.464
	190.282	147.958	93.620	53.478	39.076	33.475	23.862	16.280	11.399	9.217	4.940
1.70V	96.121	74.714	46.564	26.609	19.546	16.675	11.874	8.120	5.629	4.539	2.398
	183.590	144.422	92.805	53.152	39.052	33.405	23.808	16.281	11.291	9.105	4.811
1.75V	90.454	71.566	45.744	26.217	19.291	16.570	11.800	8.077	5.613	4.500	2.360
	172.805	138.480	91.236	52.500	38.583	33.190	23.671	16.203	11.268	9.034	4.738
1.80V	84.368	68.628	44.718	26.022	19.154	16.466	11.737	8.055	5.565	4.427	2.282
	161.238	133.000	89.231	52.174	38.404	32.987	23.557	16.166	11.179	8.895	4.585
1.85V	78.282	65.060	43.487	25.630	18.939	16.319	11.633	8.010	5.492	4.355	2.204
	149.671	126.216	86.838	51.466	38.068	32.708	23.370	16.091	11.044	8.758	4.433

Note: The above datas are average values. (Edition 2020-05)

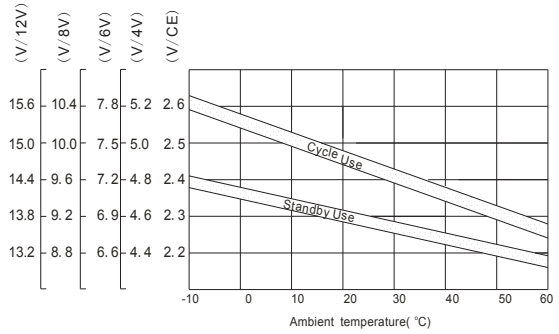
Discharge characteristic Curve



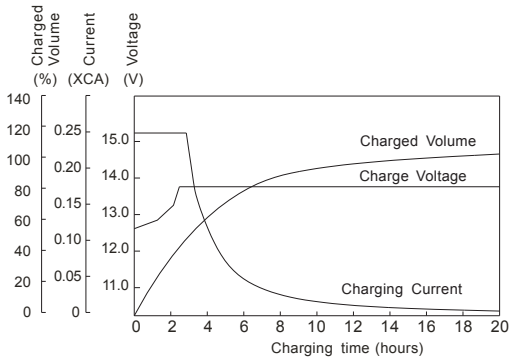
Cycle service life in relation to depth of discharge



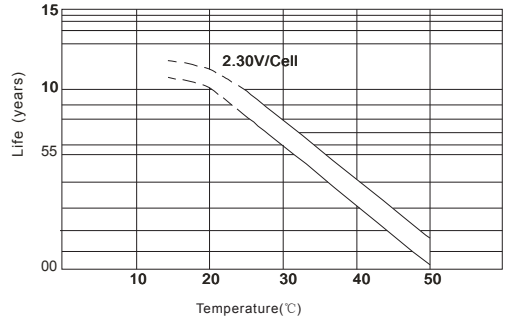
Relationship between charging voltage and temperature



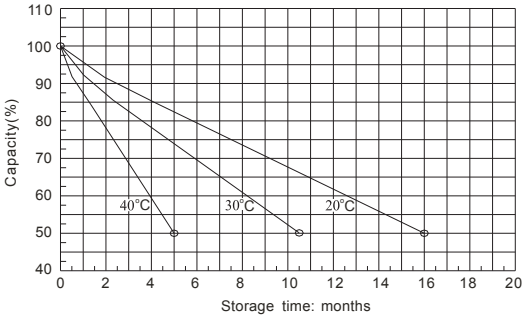
Constant voltage charging characteristic (0.25CA, at 25℃)



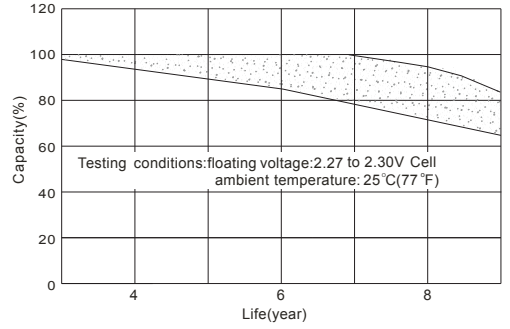
Temperature effects on float life



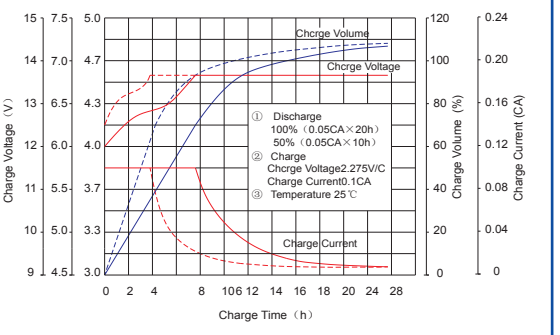
Self-discharge characteristic



Life characteristics of standby use



Charge characteristic Curve for standby use



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