

General Series Battery

(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 10 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

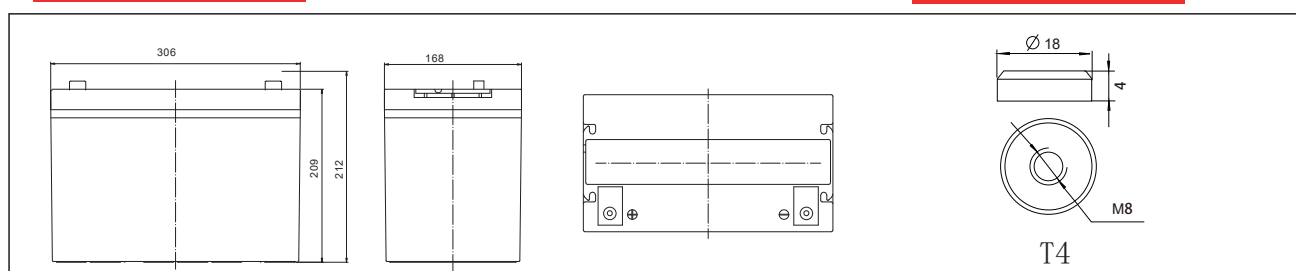
- * Positive Lead dioxide
- * Electrolyte Sulfuric acid
- * Separator Fiber glass
- * Container ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper

Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		90 Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	306mm(12.04inch)	168mm(6.61inch)	209mm(8.22inch)	212mm(8.34inch)
Approx Weight	25.0kg(55.1lbs)±3%			
Capacity @ 25°C (77°F)	10 hour rate(9A, 10.8V)	8 hour rate(10.2A, 10.5V)	3 hour rate(21.4A, 10.8V)	1 hour rate(54A, 9.6V)
	90Ah	82.0Ah	64Ah	54Ah
Max. discharge current	900A(5 sec.)			
Internal Resistance	Full charged at 25°C: Approx 5.5mΩ			
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	
	14.40-15.0V(Initial charge current less than 27A)		13.50-13.80V	

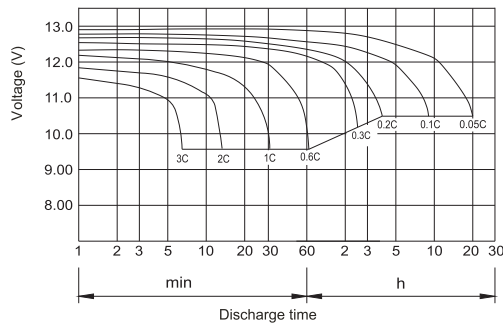
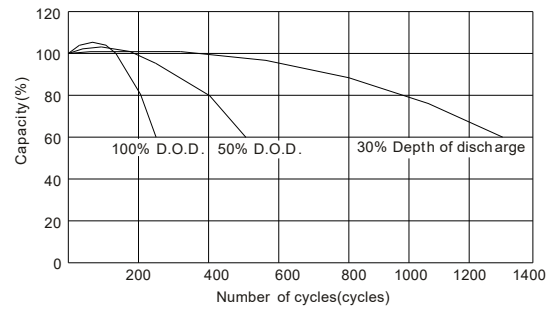
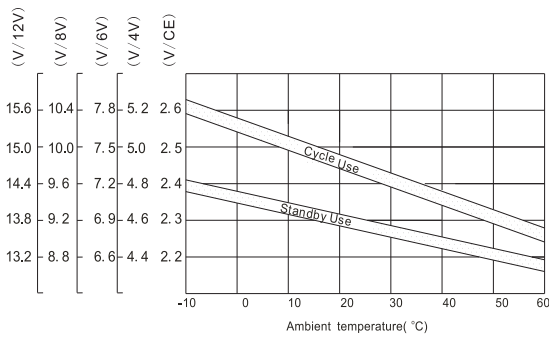
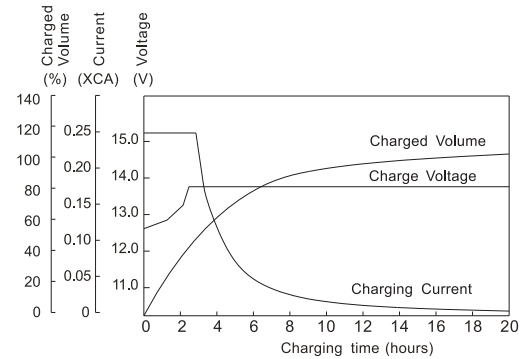
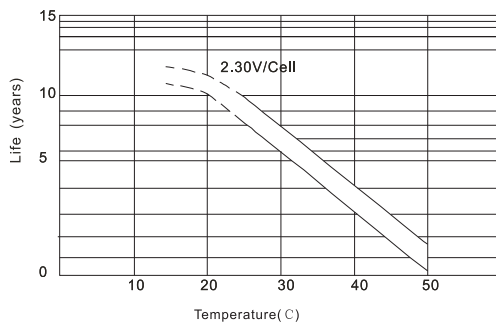
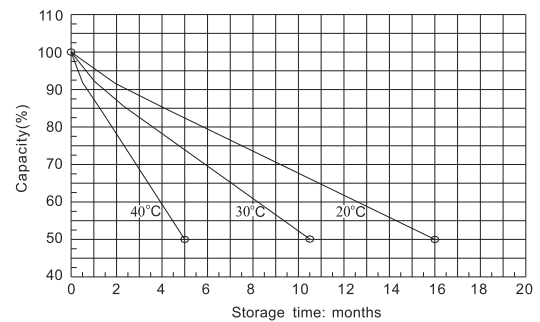
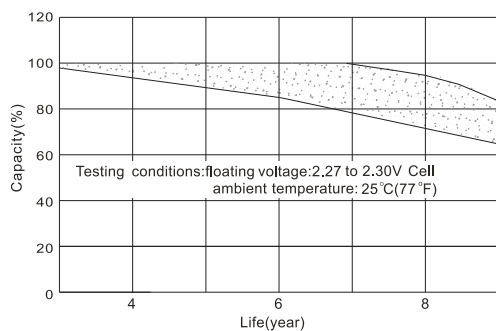
Outer dimensions (mm)

Terminal Type (mm)



Constant Current(Amp) and Constand Power(Watt) Discharge Table at 25°C(77°F)

FV/TIME		5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
9.60V	A	288	190	153	103	54	32	23.1	18.0	14.9	10.5	9.5	5.1
	W	2975	2028	1641	1103	583	346	257.4	202.5	168.8	120.7	109.1	59.3
10.20V	A	279	171	144	98	51	30	22.5	17.6	14.6	10.3	9.3	5.0
	W	2982	1913	1613	1101	574	346	260.6	204.1	170.0	120.0	108.9	58.1
10.50V	A	270	153	126	92	49	29	22.0	17.3	14.4	10.2	9.1	5.0
	W	2949	1744	1439	1056	569	340	255.9	202.2	168.8	119.6	107.6	58.5
10.80V	A	260	144	117	85	48	29	21.4	17.0	14.0	9.9	9.0	4.9
	W	2920	1666	1350	980	553	335	252.5	200.9	166.0	117.3	107.0	57.9
11.10V	A	252	135	108	76	46	28	20.7	16.6	13.7	9.6	8.6	4.6
	W	2853	1567	1259	885	540	330	245.9	197.2	163.3	115.3	103.2	55.6

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
