

General Series battery

GP series VRLA batteries are designed with a continuous rolling and stamping grid structure extremely low corrosion rate. The internal use of mechanical through wall welding reduces internal resistance, which is conducive to high current discharge. GP Series Batteries are the general purpose batteries with 12years 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

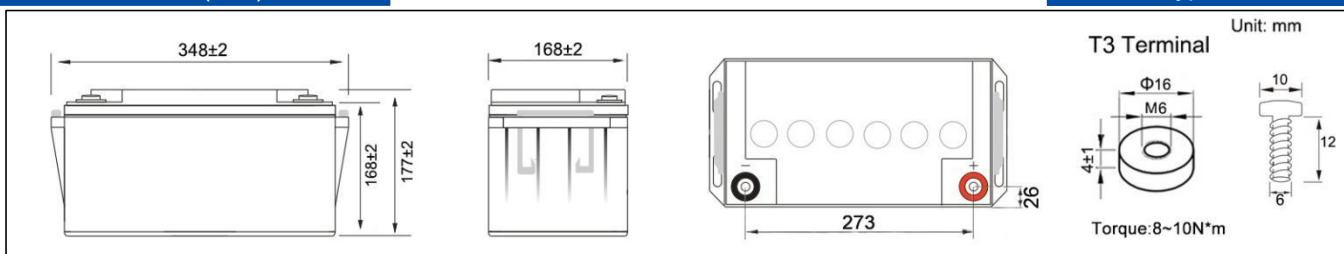
Construction

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

Specification

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Rated capacity (10 Hour rate)		65Ah	
Dimension	Length	Width	Height	Total Height
	348mm (13.70 inches)	168mm (6.61 inches)	177mm (6.97 inches)	177mm (6.97 inches)
Approx Weight	18.60kg(41.79lbs) ± 3%			
Internal Resistance	Full charged at 25℃(77℉):Approx 6.80mΩ			
Maximum Charge Current	19.5A			
Max.discharge current	650A (5Sec.)			
Short-circuit current	1140A			
Operating Temperature Range	Nominal Operating Temperature	Discharge	Charge	Storage
	25℃(77℉)	-15℃~ 50℃ (5℉~122℉)	-15℃~ 40℃ (5℉~104℉)	-15℃~ 40℃ (5℉~104℉)
Capacity @ 25℃ (77℉)	10 hour rate(6.50A,10.8V)	5 hour rate(11.20A,10.5V)	3 hour rate(16.93A,10.2V)	1 hour rate(40.2A,9.6V)
	65.00Ah	56.00Ah	50.79Ah	40.20Ah
Capacity affected by Temp.(10HR)	40℃ (104℉)	25℃ (77℉)	0℃ (32℉)	-15℃ (5℉)
	102%	100%	85%	65%
Charge method at 25℃(77℉)	Float Charging Voltage	Equalization Charging Voltage	Cycle Use Voltage	
	13.5~13.8 VDC (-3mV/cell/℃)	14.1~14.4 VDC (-4mV/cell/℃)	14.4~15.0 VDC (-5mV/cell/℃)	

Outer dimension (mm)

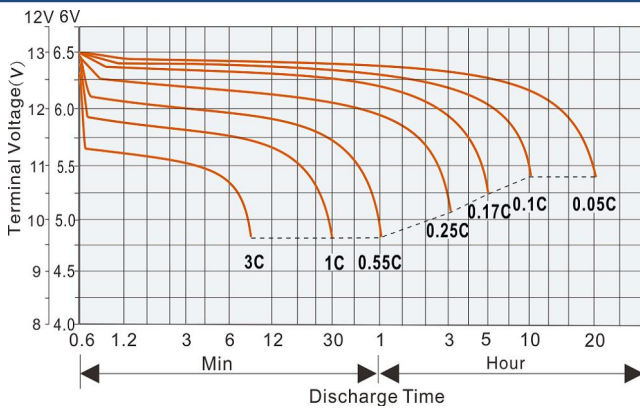


Terminal Type

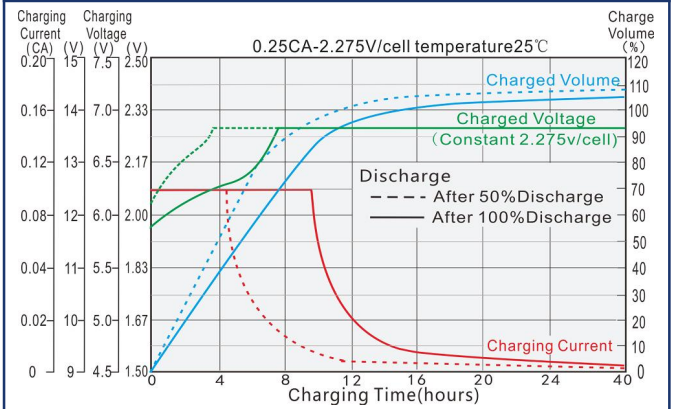
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃(77℉)

F.V/Time		5min	10min	15min	20min	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	A	126	103	86.3	75.2	59.5	37.2	23.12	16.20	10.82	7.68	6.40	3.42
	W	236	195	165	144	115	73.3	46.09	32.45	21.77	15.49	12.92	6.92
1.80V/cell	A	144	113	92.4	79.5	61.9	38.0	23.48	16.48	11.02	7.78	6.50	3.47
	W	265	211	175	152	119	74.5	46.66	32.91	22.11	15.66	13.09	7.01
1.75V/cell	A	161	122	98.3	83.4	64.0	38.7	23.79	16.72	11.20	7.86	6.54	3.50
	W	290	225	184	158	123	75.6	47.14	33.30	22.42	15.79	13.15	7.06
1.70V/cell	A	178	131	104	87.1	65.9	39.4	24.07	16.93	11.35	7.93	6.58	3.52
	W	314	239	193	163	126	76.6	47.57	33.64	22.67	15.90	13.21	7.09
1.67V/cell	A	186	136	107	89.0	66.8	39.7	24.20	17.01	11.41	7.96	6.60	3.54
	W	325	247	197	166	127	77.1	47.77	33.76	22.77	15.94	13.24	7.12
1.60V/cell	A	200	144	112	92.0	68.0	40.2	24.40	17.14	11.50	8.00	6.62	3.56
	W	343	259	205	171	129	78.0	48.08	33.96	22.91	16.00	13.26	7.16

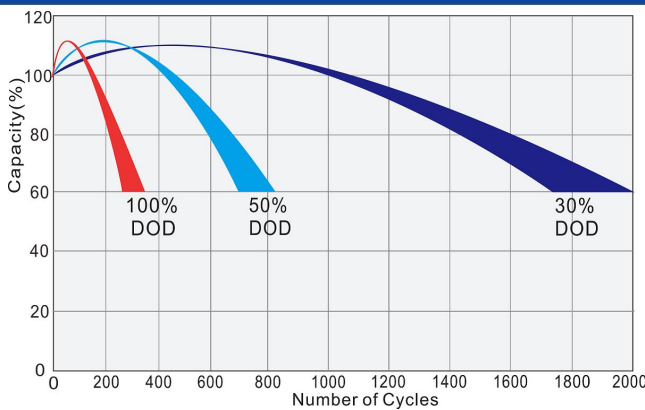
Discharge characteristic curve (25°C/77°F)



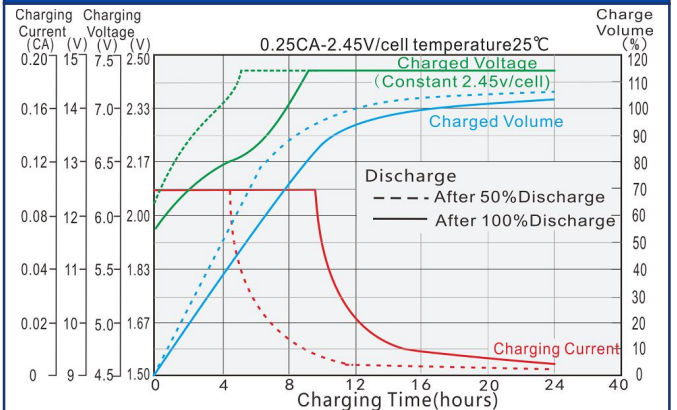
Charging characteristic curve of floating charge (25°C/77°F)



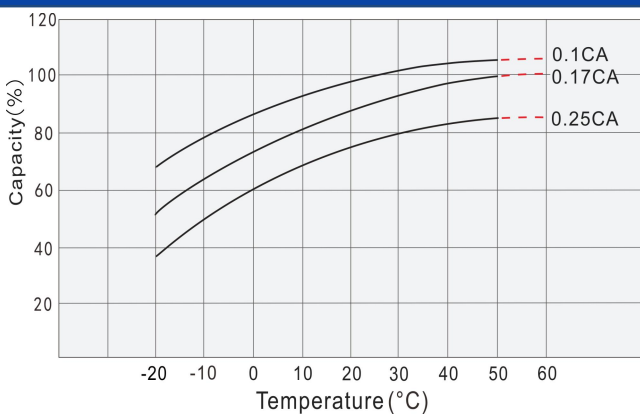
Cycle service life in relation to depth of discharge



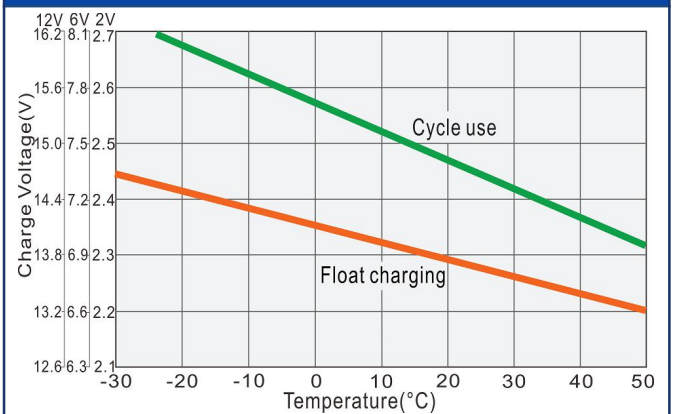
Cyclic charging characteristic curve (25°C/77°F)



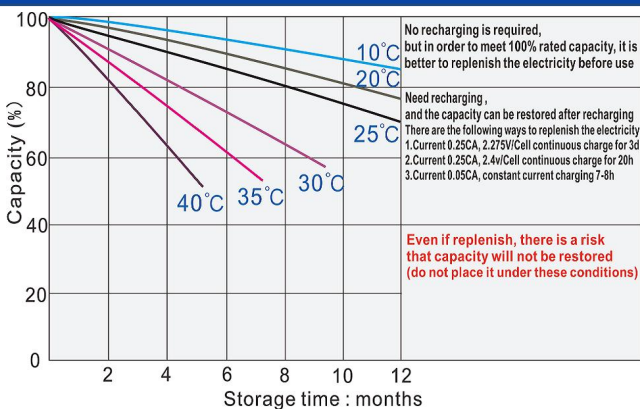
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self discharge characteristics



Temperature vs Float Life

