

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°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

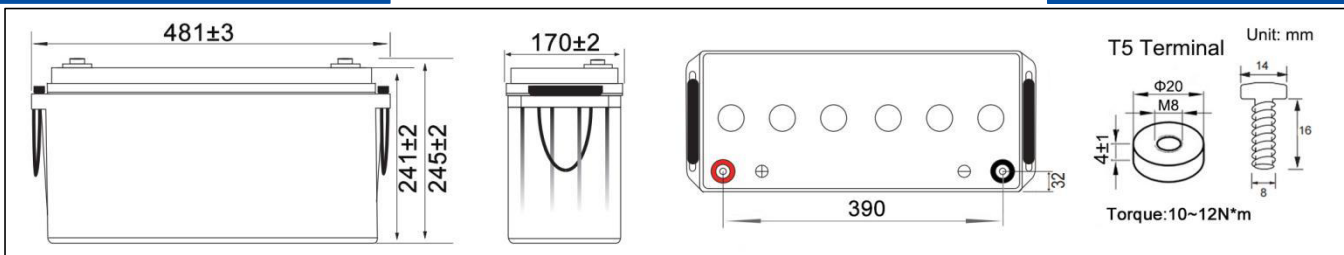
Construction

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

Specification

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Rated capacity (10 Hour rate)		150Ah	
Dimension	Length	Width	Height	Total Height
	481mm (18.93 inches)	170mm (6.69 inches)	241mm (9.48 inches)	245mm (9.64 inches)
Approx Weight	38.8kg(85.54 lbs) ± 3%			
Internal Resistance	Full charged at 25°C(77°F): Approx 3.10(mΩ/25°C ± 15%)			
Maximum Charge Current	45A			
Max.discharge current	1200A (5Sec.)			
Short-circuit current	2240A			
Operating Temperature Range	Nominal Operating Temperature	Discharge	Charge	Storage
	25°C(77°F)	-15°C~ 50°C (5°F~122°F)	-15°C~ 40°C (5°F~104°F)	-15°C~ 40°C (5°F~104°F)
Capacity @ 25°C (77°F)	10 hour rate(15.00A,10.8V)	5 hour rate(26.5A,10.5V)	3 hour rate(39.2A,10.2V)	1 hour rate(95.4A,9.6V)
	150.0Ah	132.5Ah	117.6Ah	95.4Ah
Capacity affected by Temp.(10HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Charge method at 25°C(77°F)	Float Charging Voltage	Equalization Charging Voltage	Cycle Use Voltage	
	13.5~13.8 VDC (-3mV/cell/°C)	14.1~14.4 VDC (-4mV/cell/°C)	14.4~15.0 VDC (-5mV/cell/°C)	

Outer dimension (mm)

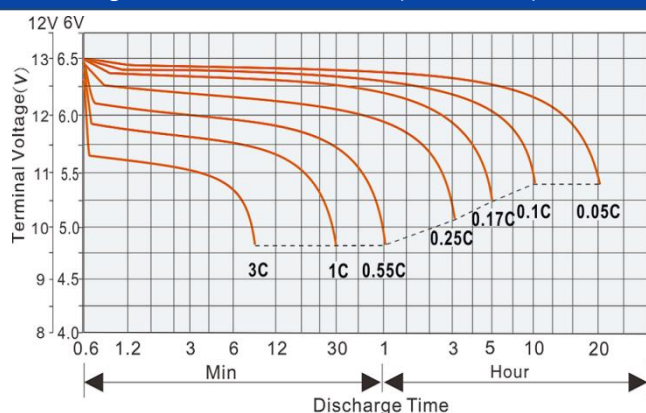


Terminal Type

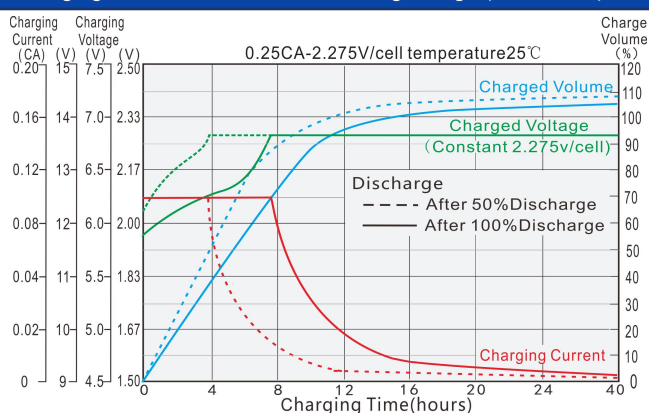
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

F.V/Time		5min	10min	15min	20min	30min	1h	1.5h	2h	3h	5h	8h	10h	20h
1.85V/cell	A	303	231	195	171	136	85.5	62.8	50.5	37.2	25.7	17.77	14.75	7.88
	W	570	440	375	331	265	170.0	125.6	101.3	74.8	51.8	35.94	29.89	16.04
1.80V/cell	A	349	254	210	181	142	88.0	64.4	51.6	37.9	26.1	18.05	15.00	8.03
	W	644	478	399	347	275	174.0	128.3	103.2	76.0	52.5	36.43	30.33	16.31
1.75V/cell	A	394	276	224	190	147	90.3	65.9	52.7	38.6	26.5	18.30	15.19	8.13
	W	712	512	422	361	283	178.0	130.8	105.0	77.1	53.2	36.86	30.65	16.49
1.70V/cell	A	438	297	237	199	152	92.5	67.3	53.7	39.2	26.8	18.52	15.36	8.22
	W	776	544	442	375	291	181.0	133.2	106.7	78.2	53.8	37.24	30.95	16.64
1.67V/cell	A	462	308	245	204	155	93.6	68.0	54.2	39.5	27.0	18.61	15.43	8.26
	W	810	560	455	383	295	183.0	134.3	107.5	78.7	54.0	37.39	31.07	16.71
1.60V/cell	A	508	328	257	212	160	95.4	69.0	55.0	40.0	27.3	18.77	15.55	8.33
	W	873	589	473	396	303	186.0	136.0	108.9	79.6	54.5	37.67	31.27	16.83

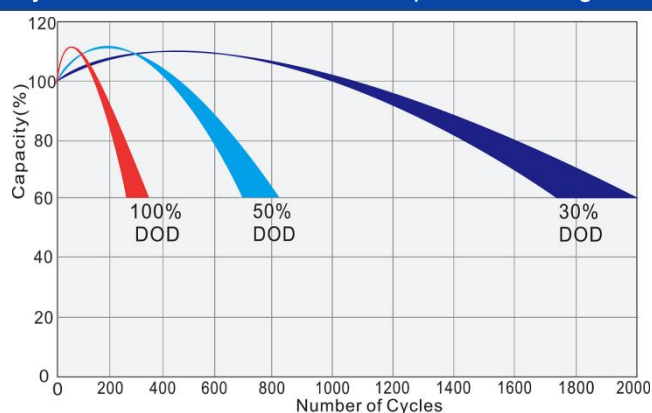
Discharge characteristic curve (25°C/77°F)



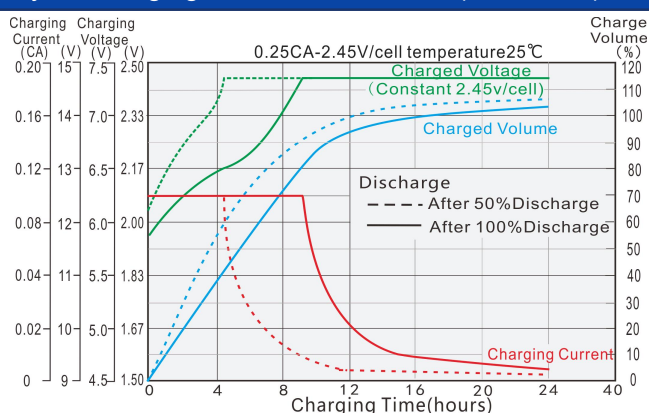
Charging characteristic curve of floating charge (25°C/77°F)



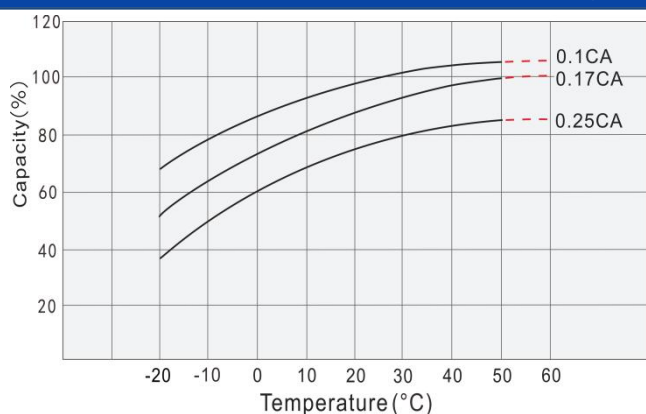
Cycle service life in relation to depth of discharge



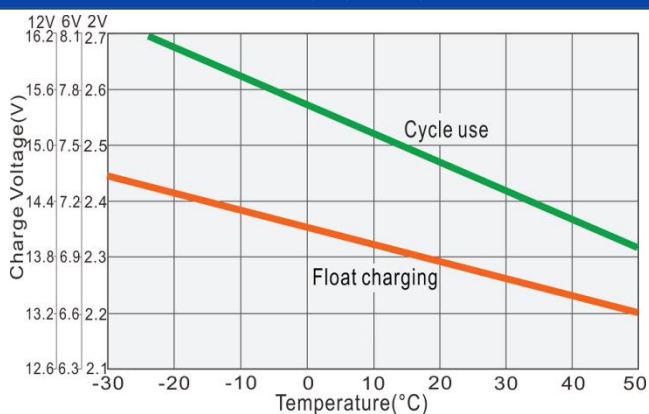
Cyclic charging characteristic curve (25°C/77°F)



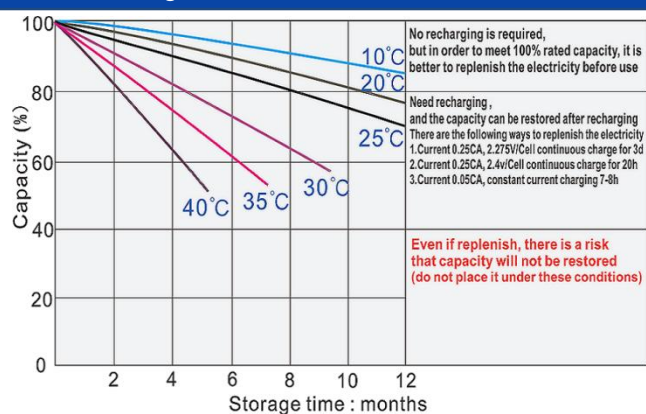
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self Discharge Characteristics



Temperature vs Float Life

