PATTERN BATTERY TECHNOLOGY CO., LIMITED
Head office :Room 1409,East Block,Costal Building,Hai De San Dao,Nanshan District,Shenzhen City,CHINA
E-mail: info@patternbattery.com
Web:www.patternbattery.com Office line:+86-755-86524336

DEEP CYCLE AGM BATTERY

PT SERIES
PT6-4.5



Specification

Nominal Voltage	6V	
Nominal Capacity(20HR)	4.5AH	
Dimensions	Length	70±1mm (2.76 inches)
	Width	47±1mm (1.85 inches)
	Container Height	100±2mm (3.94 inches)
	Total Height (with Terminal)	106±2mm (4.17 inches)
Approx Weight	Approx 0.74 kg	
Terminal	F1	
Container Material	ABS	
Rated Capacity	4.50 AH/0.225A	(20hr ,1.80V/cell,25°C/77°F)
	4.19 AH/0.419A	(10hr,1.80V/cell,25°C/77°F)
	3.6 AH/0.72A	(5hr,1.75V/cell,25°C/77°F)
	3.375 AH/1.125A	(3hr,1.75V/cell,25°C/77°F)
	2.745 AH /2.745A	(1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	63A (5s)	
Internal Resistance	Approx 45mΩ	
Operating Temp.Range	Discharge : -15～50°C (5～122°F)	
	Charge : 0～40°C (32～104°F)	
	Storage : -15～40°C (5～104°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 1.2A.Voltage 7.2V~7.5V at 25°C(77°F)Temp. Coefficient -15mV/°C	
Standby Use	No limit on Initial Charging Current Voltage 6.75V~6.9V at 25°C(77°F)Temp. Coefficient -10mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Pattern PT series battery may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

Applications

- *All purpose*
- *Uninterruptable Power Supply (UPS)*
- *Electric Power System (EPS)*
- *Emergency backup power supply*
- *Emergency light*
- *Railway signal*
- *Aircraft signal*
- *Alarm and security system*
- *Electronic apparatus and equipment*
- *Communication power supply*
- *DC power supply*
- *Auto control system*

Intertek

ISO14001 ISO9001 CE

Constant Current Discharge (Amperes) at 25 °C (77°F)

20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h	V/cell
4.275	3.420	2.610	2.115	1.350	1.035	0.855	0.675	0.585	0.495	0.398	0.216	1.85
5.085	4.005	2.835	2.385	1.440	1.080	0.900	0.698	0.630	0.558	0.419	0.225	1.80
5.490	4.185	3.015	2.475	1.485	1.125	0.945	0.720	0.653	0.585	0.431	0.234	1.75
5.760	4.365	3.195	2.565	1.530	1.170	0.981	0.765	0.675	0.653	0.448	0.243	1.70
6.075	4.500	3.330	2.655	1.620	1.215	1.013	0.810	0.698	0.675	0.465	0.252	1.65
6.300	4.725	3.465	2.745	1.710	1.260	1.058	0.855	0.743	0.720	0.481	0.261	1.60

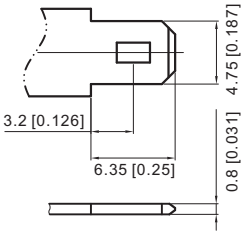
Constant Power Discharge (Watts/cell) at 25 °C (77°F)

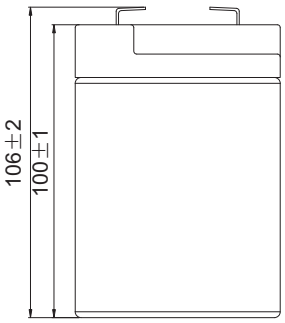
20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h	V/cell
7.909	6.327	4.829	3.913	2.498	1.915	1.582	1.249	1.082	0.916	0.736	0.400	1.85
9.153	7.209	5.103	4.293	2.592	1.944	1.620	1.256	1.134	1.004	0.753	0.405	1.80
9.608	7.324	5.276	4.331	2.599	1.969	1.654	1.260	1.142	1.024	0.754	0.410	1.75
9.792	7.421	5.432	4.361	2.601	1.989	1.668	1.301	1.148	1.109	0.761	0.413	1.70
10.024	7.425	5.495	4.381	2.673	2.005	1.671	1.337	1.151	1.114	0.766	0.416	1.65
10.080	7.560	5.544	4.392	2.736	2.016	1.692	1.368	1.188	1.152	0.770	0.418	1.60

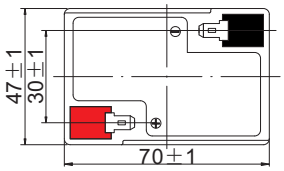
Dimensions

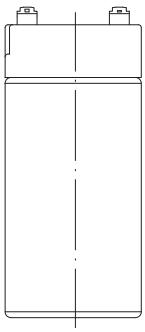
F1 Terminal

Unit: mm [inches]

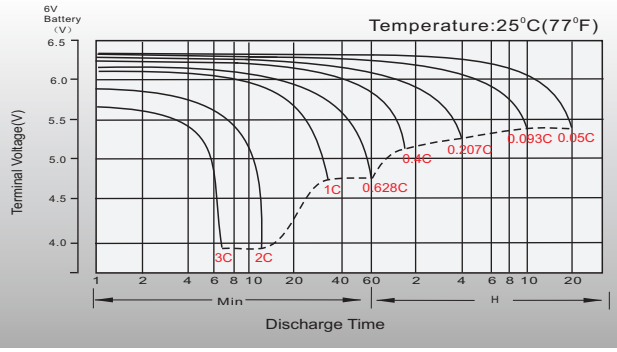




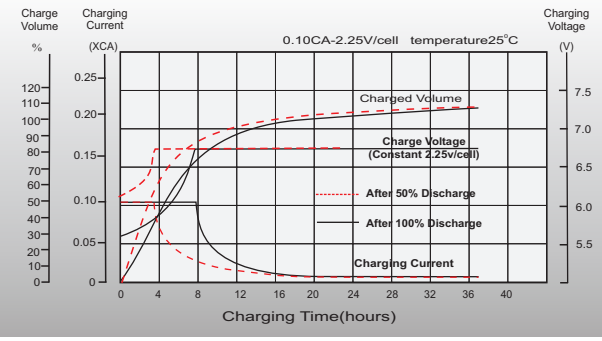




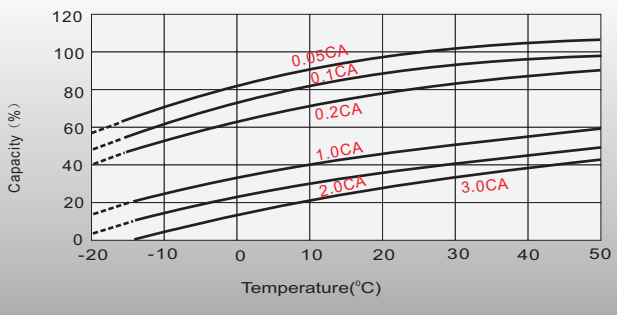
Discharge Characteristics



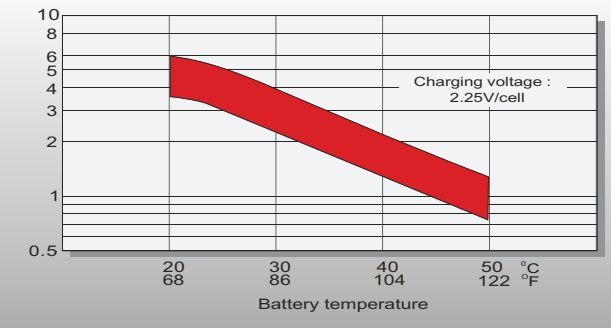
Float Charging Characteristics



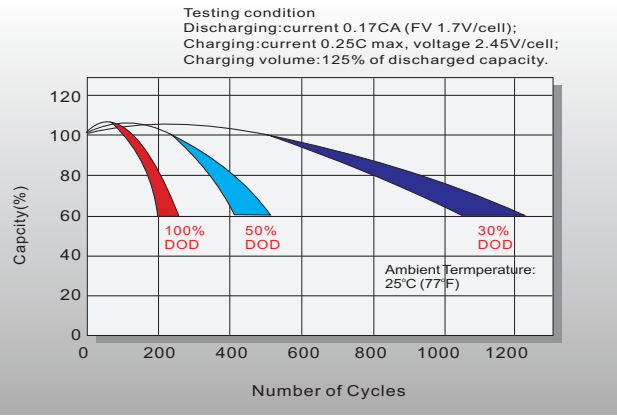
Temperature Effects in Relation to Battery Capacity



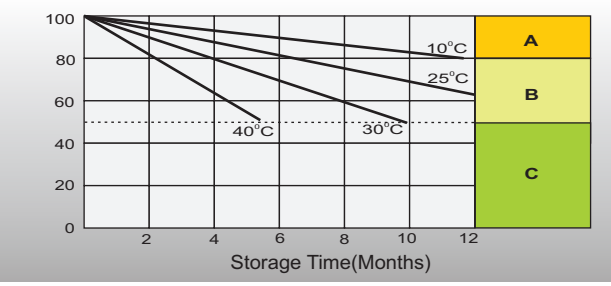
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

C Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

PATTERN BATTERY TECHNOLOGY CO., LIMITED