

# STANDBY SERIES

## SN12007.5 (12V 7.5AH)



### Specifications

Nominal Voltage	12V	
Nominal Capacity(20hr)	7.2AH	
Dimension	Length	151±2mm(5.95inch)
	Width	65±2mm(2.56inch)
	Height	94.5±2mm(3.72inch)
	Total Height	100±2mm(3.94inch)
Approx Weight	Approx. 2.15kg(5.40lbs)	
Terminal Type	T1	
container Material	ABS(UL-94HB)	
Internal Resistance	Approx. 20mΩ	
Rated Capacity	7.2AH/0.36A	(20hr, 1.80V/cell,25°C/77°F)
	6.9AH/6.9A	(10hr, 1.80V/cell,25°C/77°F)
	6.26AH/1.252A	(5hr, 1.75V/cell,25°C/77°F)
	5.54AH/1.846A	(3hr, 1.75V/cell,25°C/77°F)
	4.46AH/4.46A	(1hr, 1.60V/cell,25°C/77°F)
Max. Discharge Current	112.5A(5S)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Charge Current Less Than 0.25CA	
	14.1V~14.7V@25°C(77°F)Temp. Coefficient -30mV/°C	
Floating Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V@25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C	103%
	25°C	100%
	0°C	86%
	-15°C	65%
Self-discharge	3 month	Remaining capacity: 91%
	6 month	Remaining capacity: 82%
	12month	Remaining capacity: 65%



### Constant Power Discharge at 25°C(77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	26.1	20.3	17	14.8	11.6	8.6	7.28	4.33	3.4	2.77	2.27	1.97	1.6	1.34	0.735
1.80V/cell	34.7	25.6	20.2	17.2	13.5	9.93	8.11	4.7	3.64	2.95	2.42	2.11	1.69	1.38	0.742
1.75V/cell	38.3	27.7	21.8	18.4	13.8	10.2	8.44	4.85	3.69	3	2.48	2.16	1.72	1.41	0.748
1.70V/cell	41	29.5	23	19.2	14.3	10.6	8.68	4.96	3.79	3.08	2.54	2.2	1.74	1.44	0.761
1.65V/cell	44.5	31.5	24.2	20.2	15	10.7	8.82	5	3.93	3.17	2.6	2.24	1.76	1.47	0.771
1.60V/cell	48	33.4	25.5	21.3	15.7	11.1	8.85	5.19	4.03	3.26	2.68	2.28	1.77	1.48	0.774

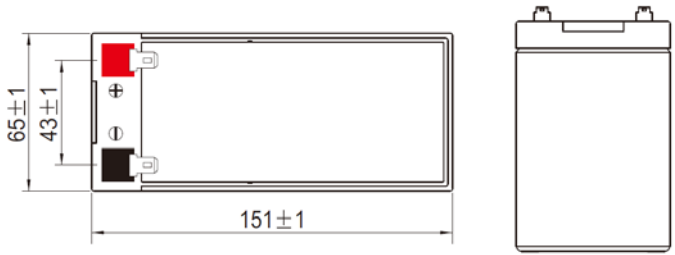
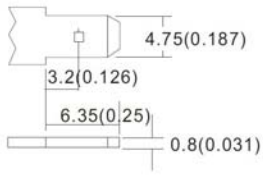
### Constant Current Discharge at 25°C(77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	14.3	11	9.09	7.86	6.07	4.47	3.77	2.23	1.75	1.42	1.16	1	0.81	0.677	0.371
1.80V/cell	19.2	14	11	9.3	7.17	5.2	4.22	2.43	1.88	1.52	1.24	1.08	0.859	0.698	0.375
1.75V/cell	21.6	15.4	12	10	7.44	5.4	4.42	2.52	1.91	1.55	1.28	1.11	0.874	0.716	0.379
1.70V/cell	23.8	16.8	12.8	10.5	7.74	5.62	4.56	2.59	1.97	1.59	1.31	1.13	0.886	0.731	0.386
1.65V/cell	26.2	18.1	13.6	11.2	8.17	5.76	4.67	2.63	2.05	1.64	1.34	1.15	0.9	0.746	0.391
1.60V/cell	29	19.7	14.6	11.9	8.63	6	4.71	2.74	2.11	1.7	1.39	1.18	0.909	0.754	0.393

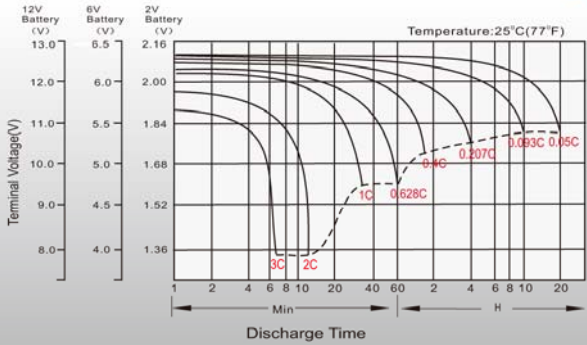
## Dimension

### T1 Terminal

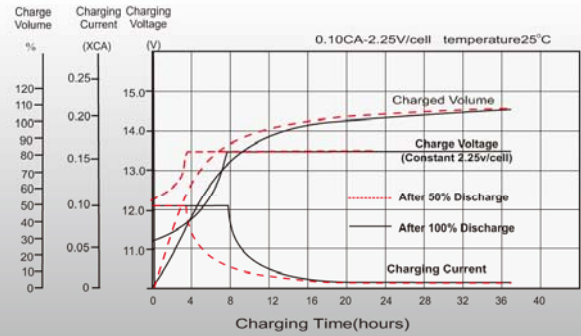
Unit: mm [inches]



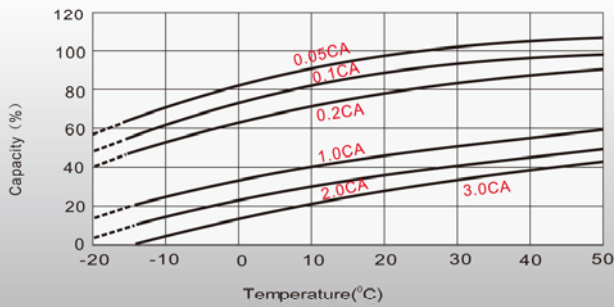
## Discharge Characteristics



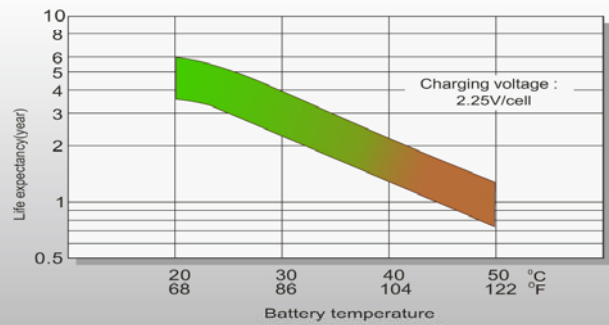
## Float Charging Characteristics



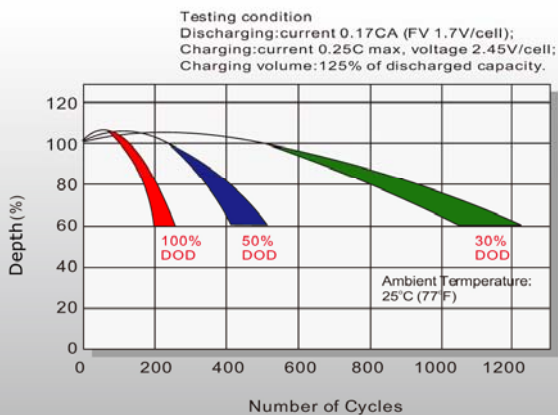
## Temperature Effects in Relation to Battery Capacity



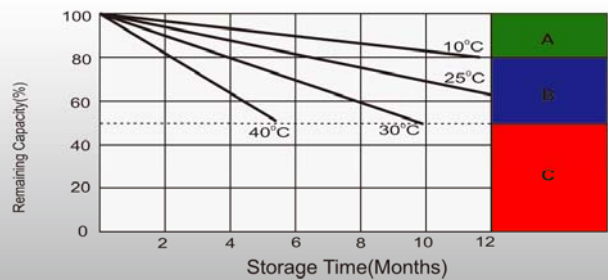
## Effect of Temperature on Long Term Float Life



## 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 limited current 0.25CA and constant voltage 2.25V/cell.  
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.  
3. Charged for 8-10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached.