



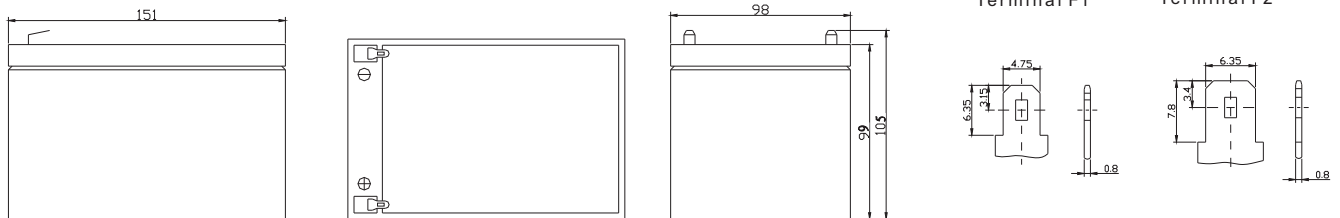
Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	15Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 4.50 Kg
Max. Discharge Current	140A (5 sec)
Internal Resistance	Approx. 12m Ω
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	4.2A
Equalization and Cycle Service	14.6 to 14.8 VDC/unit Average at 25°C
Self Discharge	SPA batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal F1/F2
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V2 can be available upon request.



Dimensions

Unit: m m Dimension: 151(L)×98(W)×99(H)



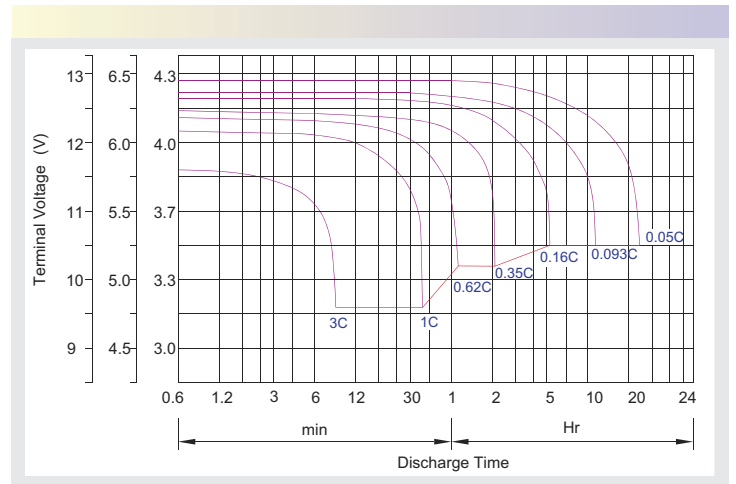
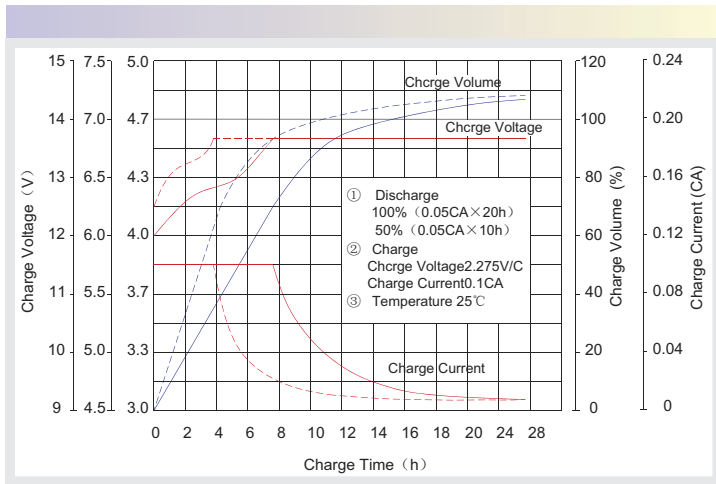
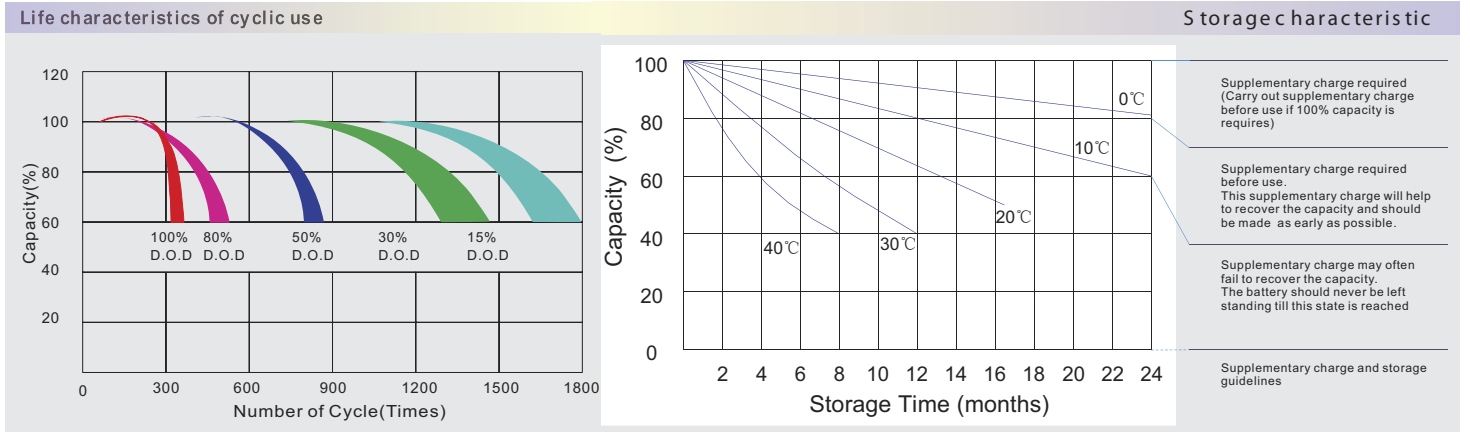
Constant Current Discharge Characteristics: A (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	62.77	41.40	32.68	18.89	10.342	6.329	4.365	3.381	2.778	1.778	1.553	0.847
10.0V	60.23	39.78	31.77	18.60	10.282	6.279	4.348	3.351	2.762	1.771	1.538	0.816
10.2V	56.98	38.41	30.91	18.45	10.192	6.244	4.331	3.307	2.745	1.764	1.522	0.801
10.5V	51.47	36.08	29.16	18.03	10.055	6.180	4.291	3.275	2.726	1.757	1.506	0.770
10.8V	45.97	33.62	27.39	17.60	9.876	6.145	4.251	3.249	2.711	1.750	1.474	0.739
11.1V	40.51	31.15	25.65	17.02	9.635	6.054	4.197	3.162	2.695	1.743	1.458	0.724

Constant Power Discharge Characteristics: W (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	667.1	440.3	364.2	222.1	122.5	74.99	51.83	40.20	33.25	21.29	18.61	10.151
10.0V	653.8	439.8	357.5	217.4	121.9	74.68	51.73	39.97	33.09	21.23	18.43	9.790
10.2V	632.4	426.6	350.6	216.0	121.1	74.37	51.53	39.64	32.92	21.16	18.26	9.610
10.5V	578.8	409.0	332.4	211.8	119.5	73.95	51.32	39.23	32.75	21.08	18.07	9.248
10.8V	517.2	382.6	314.1	207.8	117.2	73.53	50.99	39.02	32.55	21.00	17.69	8.873
11.1V	455.5	356.3	296.0	201.6	114.4	72.71	50.44	37.98	32.35	20.91	17.50	8.700

All mentioned values are average values.



Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

Charge the batteries at least once every six months, if they are store at 25 degree celcius.

Charging Method:

Constant Voltage	14.5-14.9V, 5-11h, Max Current 0.3CA
------------------	--------------------------------------

Maintenance & Cautions

Float Service:
※ Every month, recommend inspection every battery voltage.
※ Every three months, recommend equalization charge for one time.
Equalization charge method:
Discharge: 100% rate capacity discharge.
Charge: Max. current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h.
※ Effect of temperature on float charge voltage: -3mV/°C/Cell.
※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.