

Powered by



SG1223W 12V 5.2Ah

This battery uses high purity raw materials and low density electrolyte to make the batteries have good cycle performance and low self-discharge rate. It is suitable for UPS, solar & wind energy, telecom system, electric power system



Specification

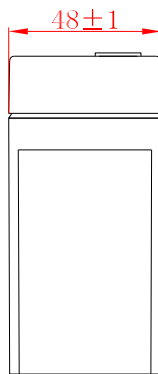
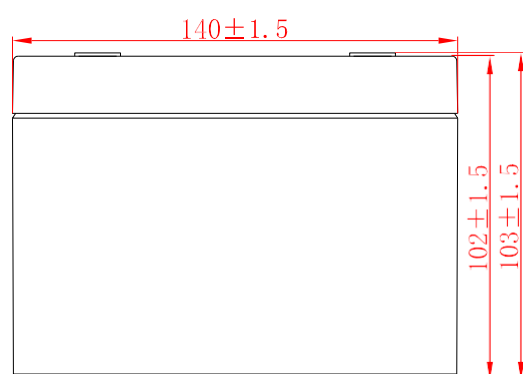
Cells Per Unit	6
Voltage Per Unit	12
Capacity	5.2Ah @ 20hr-rate to 1.75V per cell @25°C (77°F)
Weight	Approx. 1.63kg(3.59 lbs)
Maximum Discharge Current	80A(5sec)
Internal Resistance	Approx. 25 mΩ
Operating Temperature Range	Discharge: -15°C~50°C (5°F~122°F) Charge: -15°C~40°C (5°F~104°F) Storage: -15°C~40°C (5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C (77°F±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	1.6A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
Self Discharge	This battery can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	+F2-Faston Tab 250/-F1-Faston Tab 187
Container Material	ABS(UL 94-HB)



Dimensions :

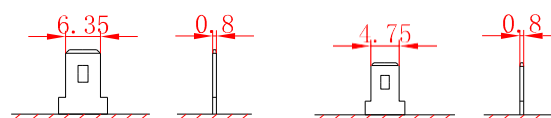
Unit: mm

Overall Height (H)	Container height (h)	Length (L)	Width (W)
103±1.5	102±1.5	140±1.5	48±1



Positive Terminal
F2 (250)

Negative Terminal
187 (F1)



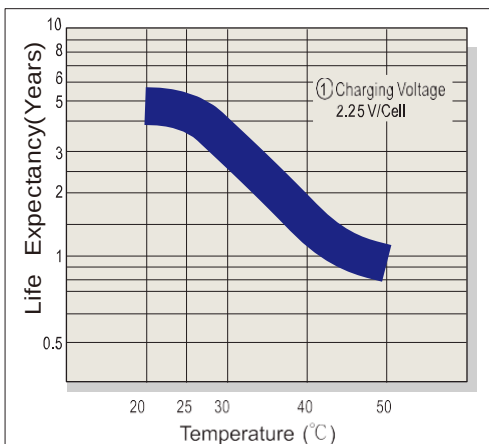
Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	16.3	9.6	5.49	3.14	1.28	0.869	0.492	0.264
1.67V	15.9	9.3	5.44	3.11	1.27	0.863	0.490	0.263
1.7V	15.7	9.1	5.40	3.08	1.26	0.856	0.488	0.262
1.75V	15.0	8.7	5.29	3.01	1.24	0.843	0.484	0.260
1.8V	13.5	8.1	5.09	2.87	1.20	0.818	0.474	0.255
1.85V	10.4	6.8	4.69	2.62	1.09	0.760	0.447	0.244

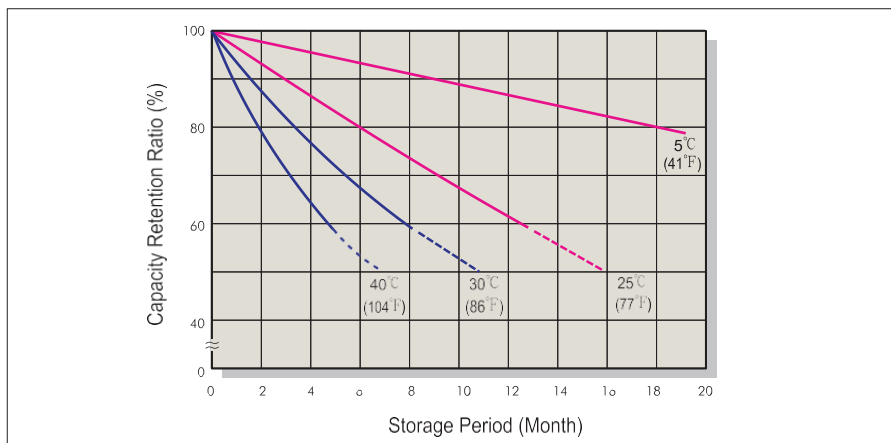
Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

F.V/Time	5min	15min	30min	1h	3h	5h	10h	20h
1.60V	28.1	16.8	10.61	5.98	2.52	1.662	0.968	0.523
1.67V	26.8	16.0	10.54	5.93	2.50	1.657	0.963	0.522
1.7V	26.0	15.4	10.47	5.88	2.48	1.646	0.959	0.520
1.75V	23.7	14.3	10.29	5.79	2.44	1.622	0.949	0.516
1.8V	20.4	12.7	9.91	5.61	2.35	1.569	0.930	0.507
1.85V	15.9	10.7	9.12	5.20	2.16	1.483	0.884	0.487

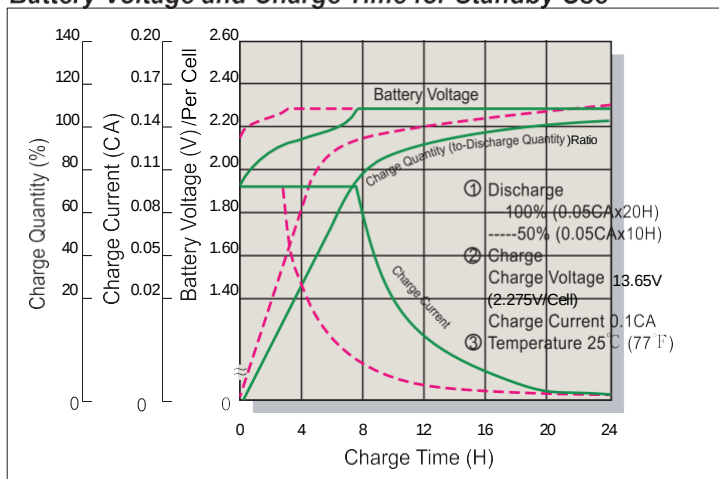
Trickle(or Float)Design Life



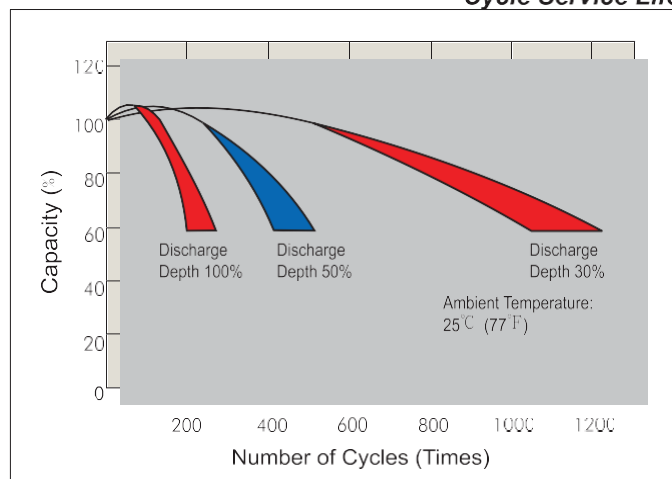
Capacity Retention Characteristic



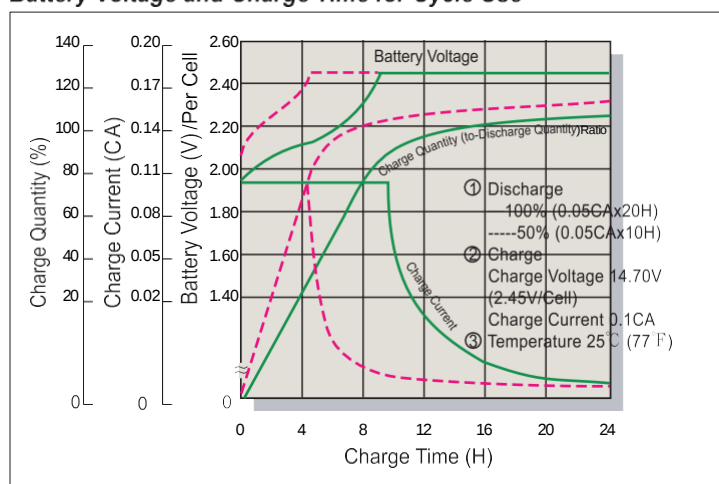
Battery Voltage and Charge Time for Standby Use



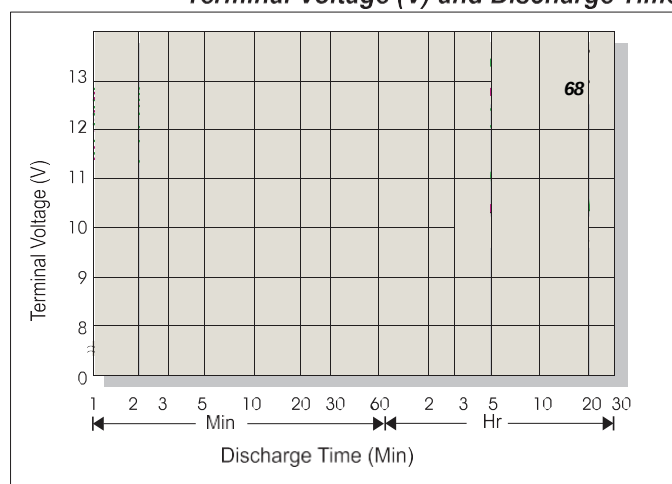
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.3C
Standby	25°C(77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.60
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Effect of temperature on capacity (20HR)

Temperature	Dependency of Capacity (20HR)
40 °C	102%
25 °C	100%
0 °C	85%
-15 °C	65%

Self-discharge Characteristics

Storage time	Preservation rate
3 Months	91%
6 Months	82%
12 Months	64%