

# GP 121000

## 12V 100.0Ah

GP 121000 is a general purpose battery with 3-5 years in standby service or more than 260 cycles at 100% discharge in cycle service. As with all CSB batteries, all are rechargeable, highly efficient, leak proof and maintenance free.



### Specification

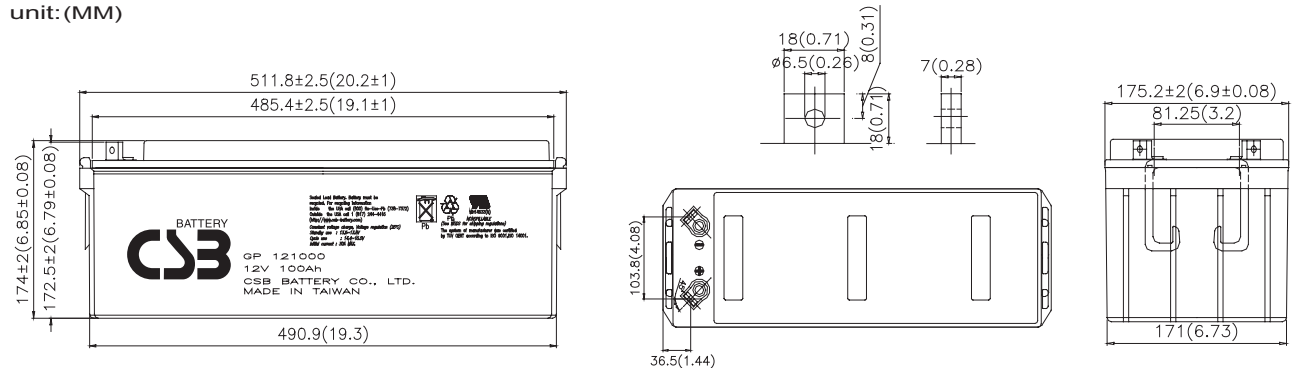
<b>Cells Per Unit</b>	6
<b>Voltage Per Unit</b>	12
<b>Capacity</b>	100Ah @ 20hr-rate to 1.75V per cell @25 °C (77°F)
<b>Weight</b>	Approx. 35kg(77.1 lbs)
<b>Maximum Discharge Current</b>	500A(5sec)
<b>Internal Resistance</b>	Approx. 7mΩ
<b>Operating Temperature Range</b>	Discharge: -20°C~50°C(-4°F~122°F) Charge: 0°C~40°C(32°F~104°F) Storage: -20°C~40°C(-4°F~104°F)
<b>Nominal Operating Temperature Range</b>	25°C±3°C(77°F±5°F)
<b>Float Charging Voltage</b>	13.5 to 13.8 VDC/unit Average at 25°C(77°F)
<b>Recommended Maximum Charging Current Limit</b>	30A
<b>Equalization and Cycle Service</b>	14.4 to 15.0 VDC/unit Average at 25°C(77°F)
<b>Self Discharge</b>	CSB Batteries 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.
<b>Terminal</b>	Bolt & Nut
<b>Container Material</b>	-Polypropylene (94-HB)



CSB-manufactured batteries are UL-recognized components under UL924 and UL1989. CSB is also certified by ISO 9001 and ISO 14001.

### Dimensions

unit: (MM)



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

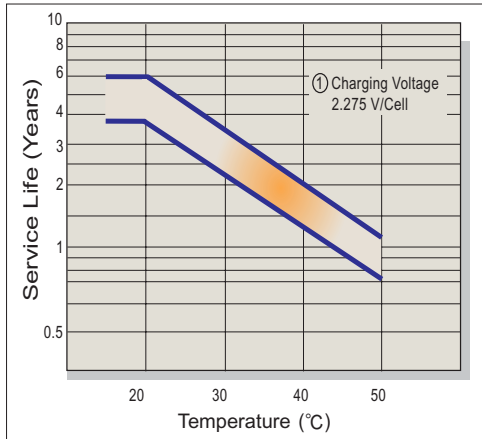
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	388	253	193	119	71.4	42.0	29.8	23.4	19.3	12.6	10.3	5.37
1.67V	364	243	188	118	71.4	41.7	29.7	23.3	19.2	12.5	10.2	5.22
1.70V	353	238	186	118	71.3	41.6	29.7	23.3	19.2	12.5	10.2	5.16
1.75V	329	228	180	115	70.9	41.5	29.6	23.2	19.1	12.4	10.0	5.02
1.80V	305	217	173	113	70.5	41.5	29.6	23.2	19.0	12.3	9.83	4.87
1.85V	281	206	167	111	70.1	41.5	29.6	23.1	18.9	12.1	9.66	4.73

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

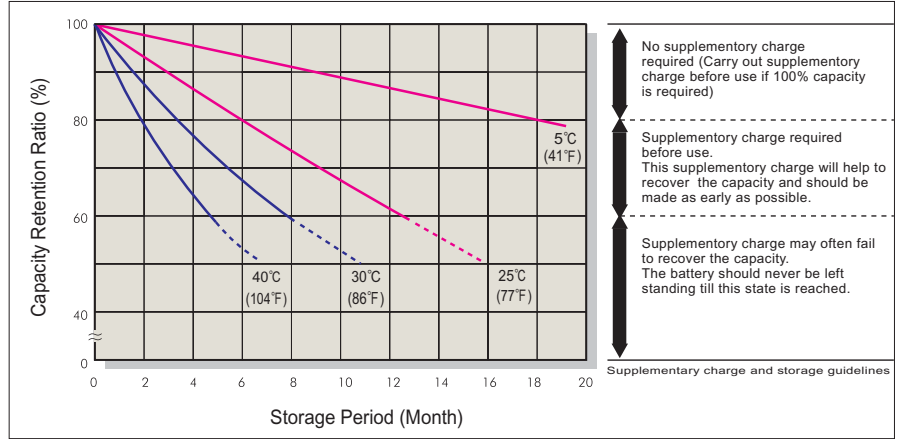
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	4650	3030	2320	1430	857	504	357	280	231	151	124	64.4
1.67V	4363	2911	2257	1416	856	501	356	279	230	150	123	62.7
1.70V	4240	2860	2230	1410	856	499	356	279	230	150	122	61.9
1.75V	3950	2730	2155	1385	851	499	356	279	229	149	120	60.2
1.80V	3660	2600	2080	1360	846	498	356	278	228	147	118	58.4
1.85V	3370	2470	2005	1335	841	498	356	278	227	146	116	56.7

● All mentioned values are average values.

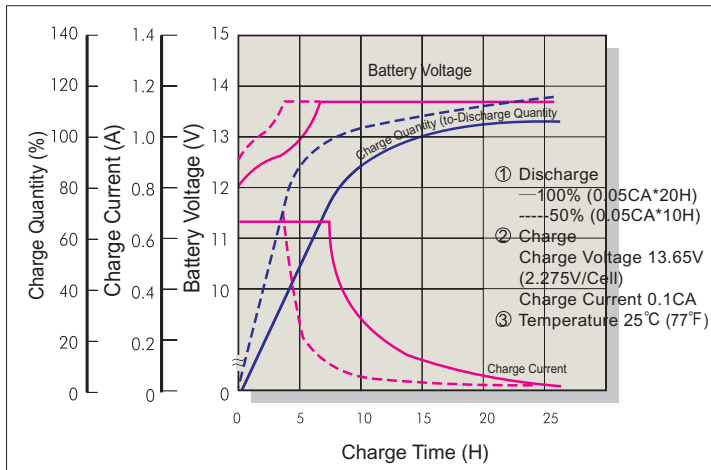
### Trickle (or Float) Service Life



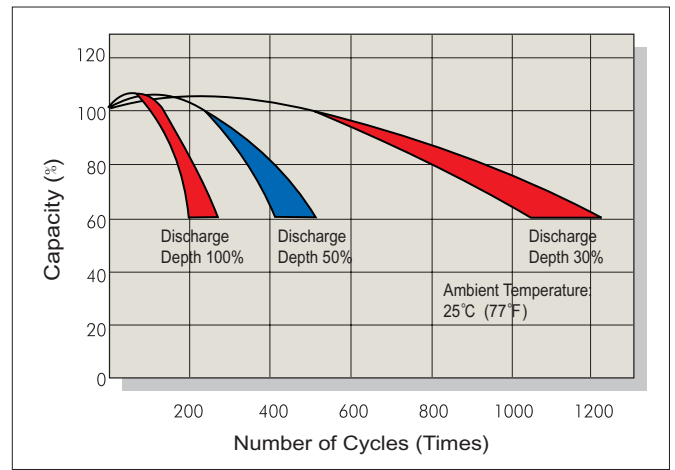
### Capacity Retention Characteristic



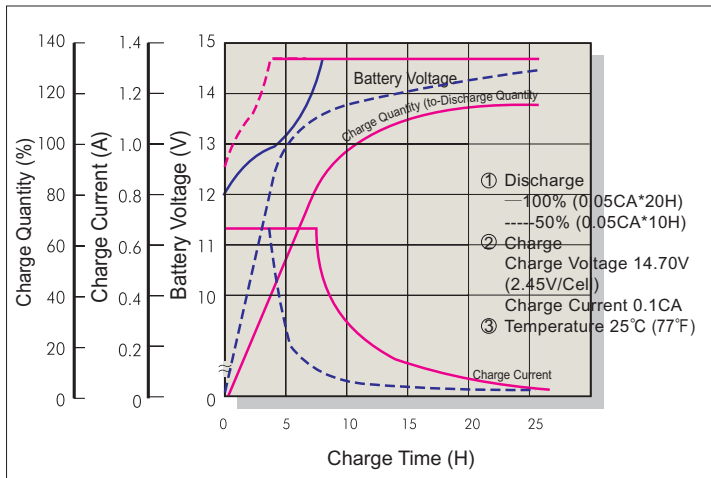
### Battery Voltage and Charge Time for Standby Use



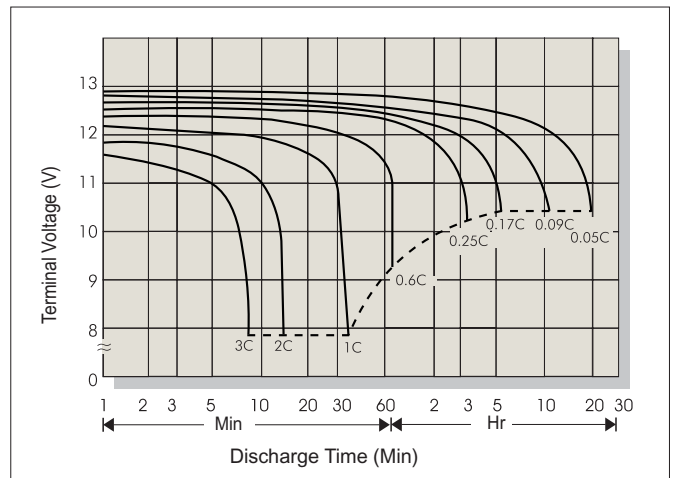
### Cycle Service Life



### Battery Voltage and Charge Time for Cycle Use



### Terminal Voltage (V) and Discharge Time (25°C 77°F)



### 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	1.55	1.30
Discharge Current (A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C