

# GP 6120

## 6V 12Ah

GP 6120 is a general purpose battery up to 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>	3
<b>Voltage Per Unit</b>	6
<b>Capacity</b>	12Ah @ 20hr-rate to 1.75V per cell @25 °C (77°F)
<b>Weight</b>	Approx. 1.85 kg(4.08 lbs)
<b>Maximum Discharge Current</b>	150A/180A(5sec)
<b>Internal Resistance</b>	Approx. 8.5mΩ
<b>Operating Temperature Range</b>	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)
<b>Nominal Operating Temperature Range</b>	25°C±3°C(77°F±5°F)
<b>Float Charging Voltage</b>	6.75 to 6.9 VDC/unit Average at 25°C(77°F)
<b>Recommended Maximum Charging</b>	3.6A
<b>Current Limit</b>	
<b>Equalization and Cycle Service</b>	7.2 to 7.5 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>	F1/F2-Faston Tab187/250
<b>Container Material</b>	ABS(UL 94-HB/File E50263)*Flammability resistance of (UL 94-V0/File E88637) can be available upon request.

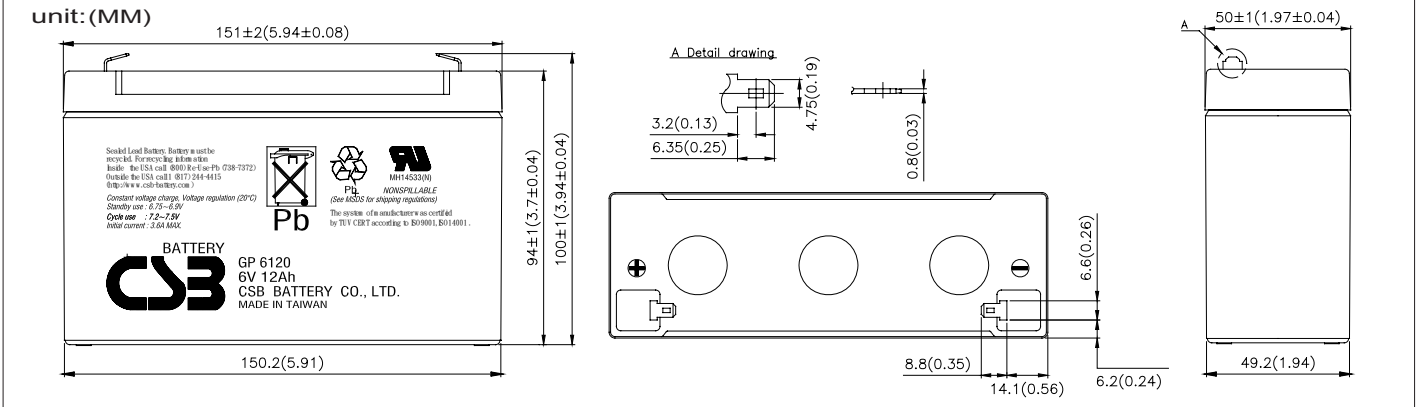
**MH14533(N)**

**TÜV CERT**  
ISO9001  
No.:041005117

**RWTV**  
ISO 14001  
NO.UM 1-12-0045

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

### Dimensions



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

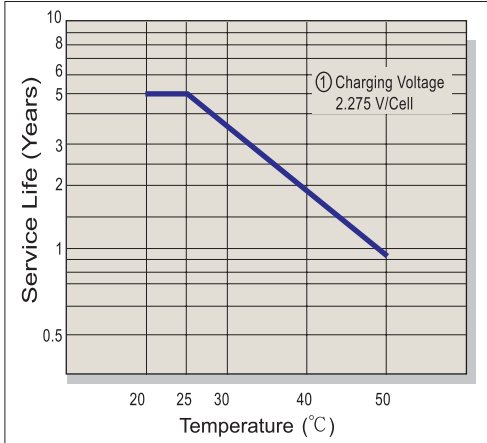
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	48.2	31.4	24.1	14.8	8.83	5.12	3.66	2.89	2.33	1.53	1.23	0.640
1.67V	44.5	29.9	23.2	14.6	8.68	5.03	3.64	2.88	2.32	1.52	1.22	0.623
1.70V	42.9	29.2	22.9	14.5	8.61	4.98	3.63	2.87	2.31	1.51	1.21	0.616
1.75V	40.0	28.0	22.2	14.3	8.47	4.92	3.62	2.86	2.30	1.50	1.20	0.600
1.80V	37.0	26.7	21.4	14.1	8.33	4.83	3.60	2.84	2.28	1.49	1.18	0.584
1.85V	33.9	25.4	20.6	13.9	8.22	4.76	3.58	2.82	2.27	1.48	1.17	0.568

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

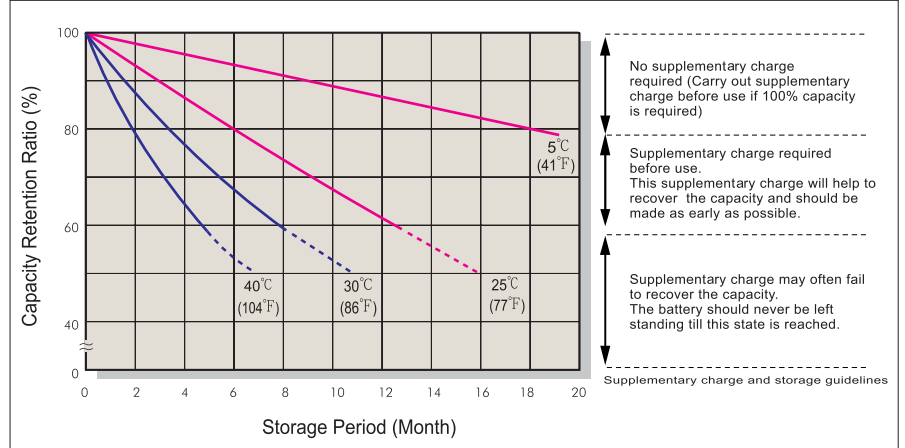
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	289	189	145	89.0	53.0	30.7	22.0	17.4	14.0	9.24	7.35	3.75
1.67V	268	180	140	88.0	52.2	30.4	21.9	17.3	13.9	9.19	7.28	3.65
1.70V	258	176	138	87.3	51.8	30.2	21.8	17.2	13.8	9.17	7.25	3.58
1.75V	241	169	133	86.0	51.0	29.6	21.7	17.1	13.7	9.11	7.15	3.54
1.80V	222	160	129	84.5	50.0	29.0	21.6	17.0	13.6	9.04	7.05	3.42
1.85V	204	152	124	83.0	49.0	28.4	21.5	16.9	13.5	8.98	6.95	3.31

• All mentioned values are average values.

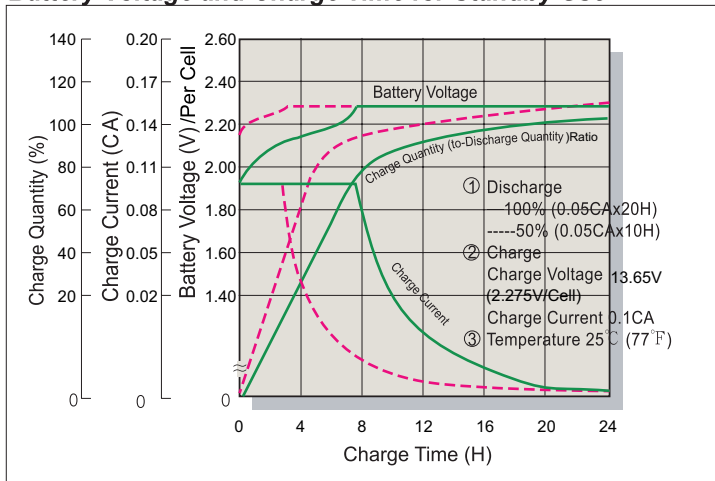
### Trickle (or Float) Service Life



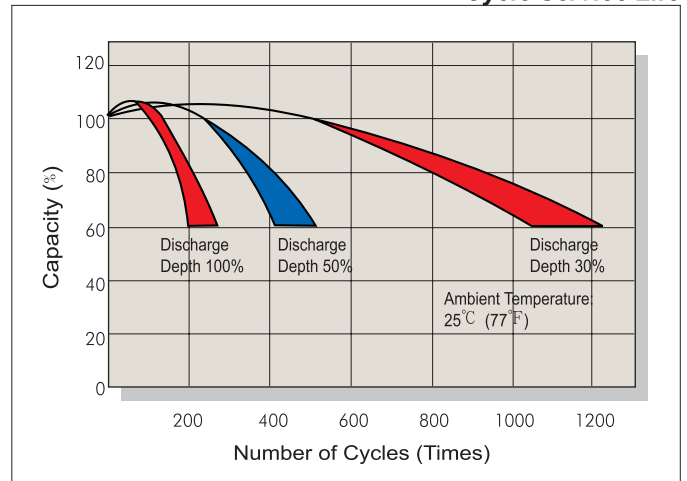
### Capacity Retention Characteristic



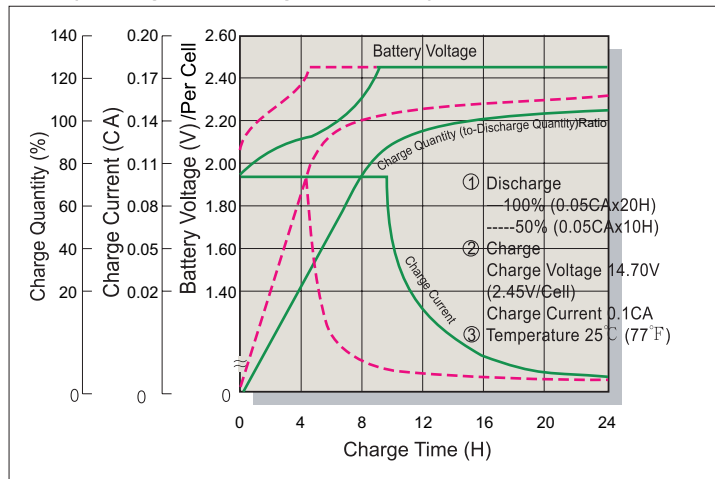
### Battery Voltage and Charge Time for Standby Use



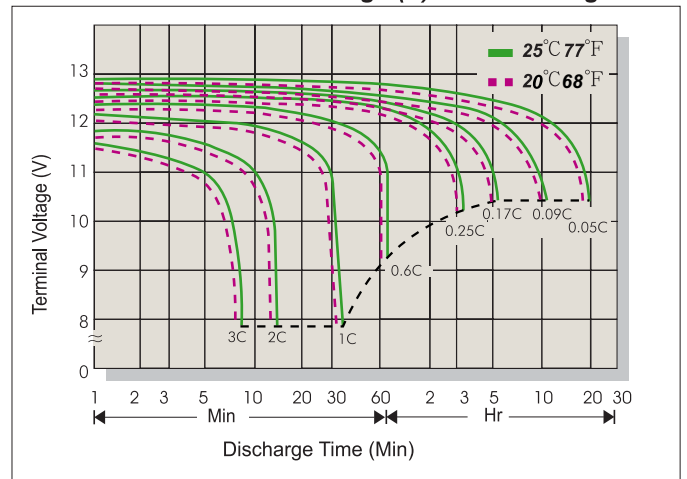
### Cycle Service Life



### Battery Voltage and Charge Time for Cycle Use



### Terminal Voltage (V) and Discharge Time



### 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	1.60	1.30
Discharge Current(A)	0.2C > (A)	0.2C < (A) < 0.5C	0.5C < (A) < 1.0C	(A) > 1.0C