

# GPL 12880

## 12V 88Ah

GPL 12880 is a general purpose battery up to 10 years expected life under normal float charge. As with all CSB batteries, all are rechargeable, highly efficient, leak proof and maintenance free.



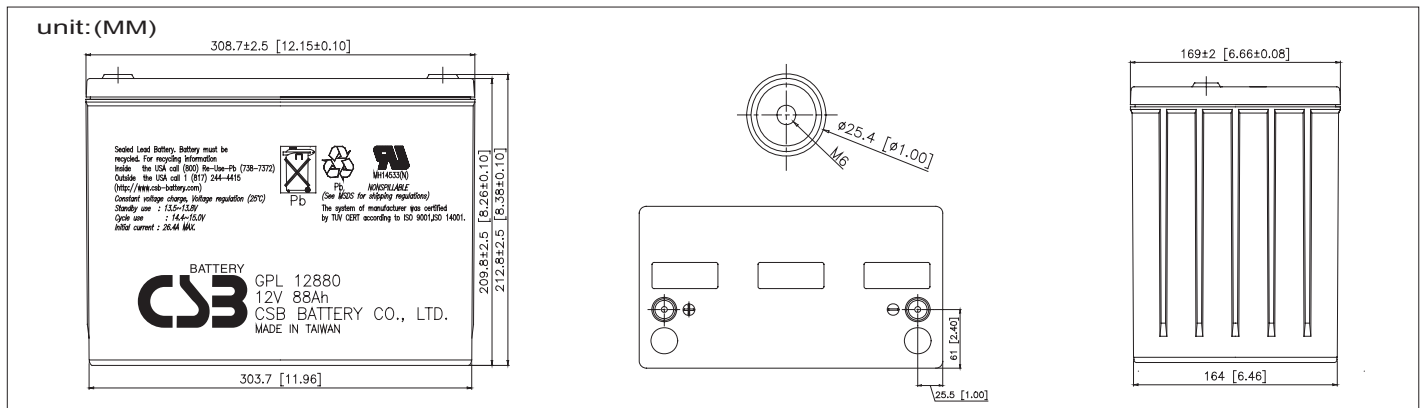
### Specification

<b>Cells Per Unit</b>	6
<b>Voltage Per Unit</b>	12
<b>Capacity</b>	88Ah @ 20hr-rate to 1.75V per cell @25 °C (77°F)
<b>Weight</b>	Approx. 29.7 kg(65.48 lbs)
<b>Maximum Discharge Current</b>	800A(5sec)
<b>Internal Resistance</b>	Approx. 4.5 mΩ
<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>	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
<b>Recommended Maximum Charging</b>	26.4A
<b>Current Limit</b>	
<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>	I2-Thread lead alloy recessed terminal to accept M6 bolt
<b>Container Material</b>	Polypropylene(UL 94-V0/File E50955)*Flammability resistance of (UL 94-HB/File E216959) can be available upon request.



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	381	252	187	109	62.6	36.4	25.2	19.6	16.5	11.0	9.10	4.92
1.67V	342	230	176	105	61.0	35.8	24.8	19.5	16.4	10.9	9.00	4.87
1.70V	323	221	171	103	60.3	35.5	24.6	19.4	16.3	10.8	8.97	4.85
1.75V	291	205	160	99.1	59.0	35.0	24.2	19.1	15.9	10.6	8.92	4.82
1.80V	258	187	151	95.0	57.7	34.4	23.7	18.7	15.5	10.4	8.88	4.79
1.85V	220	169	140	90.8	56.0	33.9	23.3	18.4	15.1	10.2	8.83	4.76

### 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	4,010	2,679	2,020	1,250	731	426	297	231	192	131	111	62.5
1.67V	3,632	2,496	1,908	1,205	716	422	293	229	188	129	110	62.2
1.70V	3,451	2,409	1,850	1,184	708	418	290	227	187	128	109	62.0
1.75V	3,131	2,251	1,756	1,143	695	414	287	225	185	127	108	60.9
1.80V	2,817	2,080	1,651	1,097	680	407	282	221	184	126	107	59.8
1.85V	2,500	1,887	1,563	1,045	662	401	278	218	181	124	106	58.7

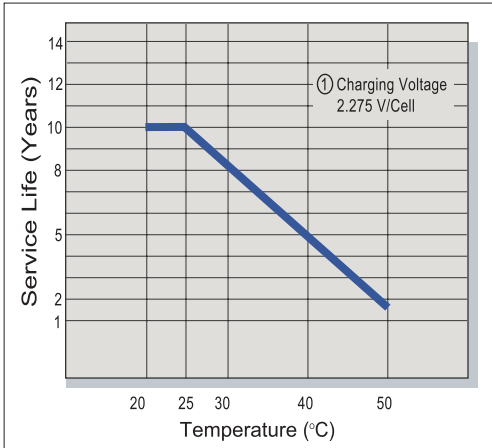
• All mentioned values are average values.

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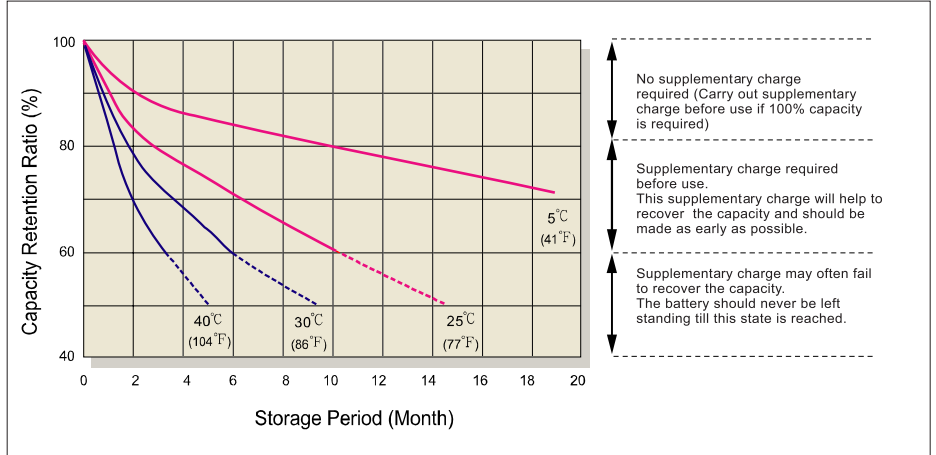
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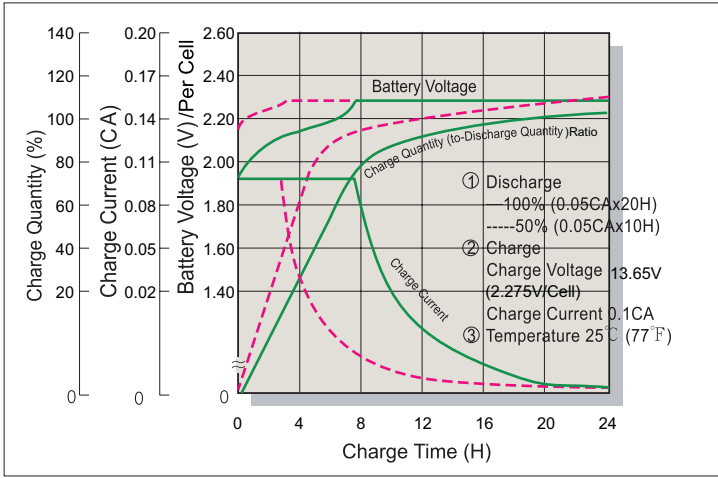
### Trickle (or Float) Service Life



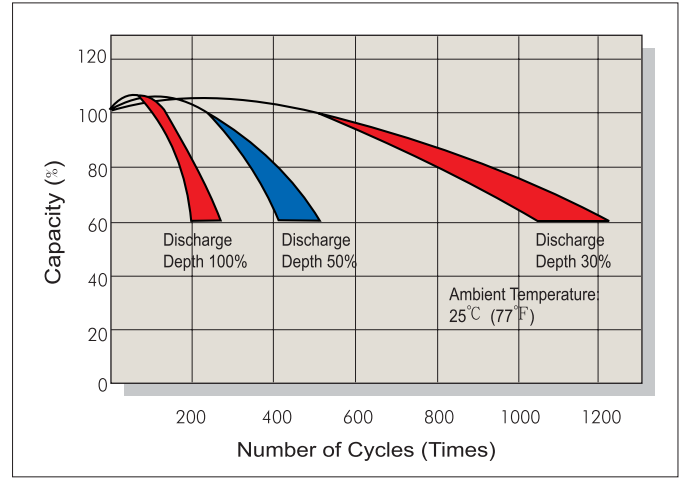
### Capacity Retention Characteristic



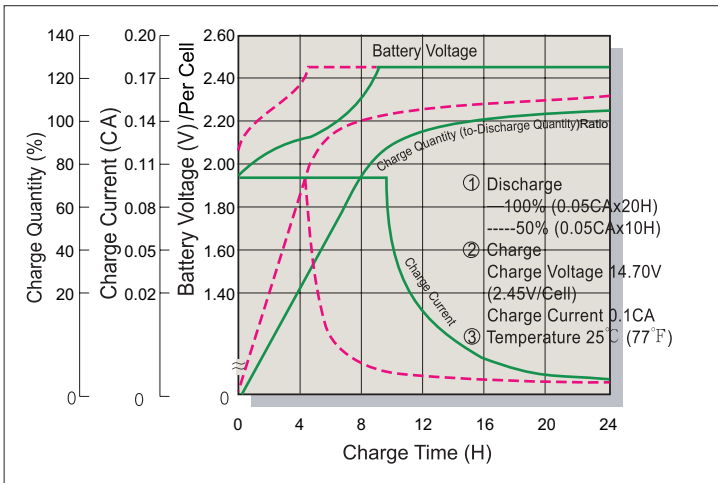
### Battery Voltage and Charge Time for Standby Use



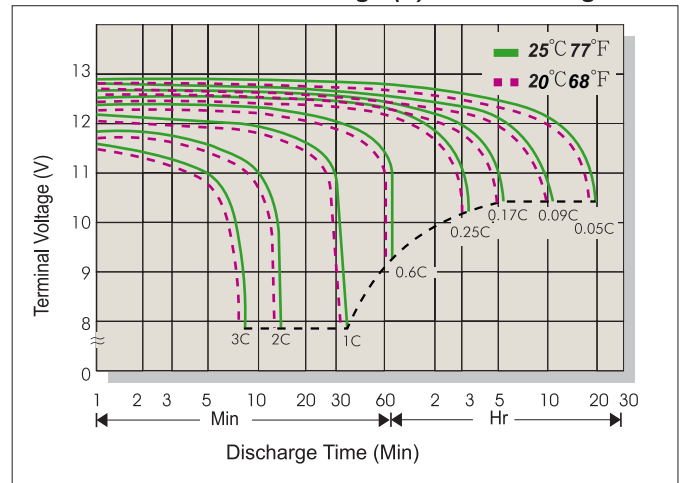
### Cycle Service Life



### 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

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