



# TPL 121000

## 12V 100Ah

TPL121000 is a front terminal battery up to 12 years expected life under normal float charge. As with all CSB batteries, all are rechargeable, highly efficient, leak proof and maintenance free.

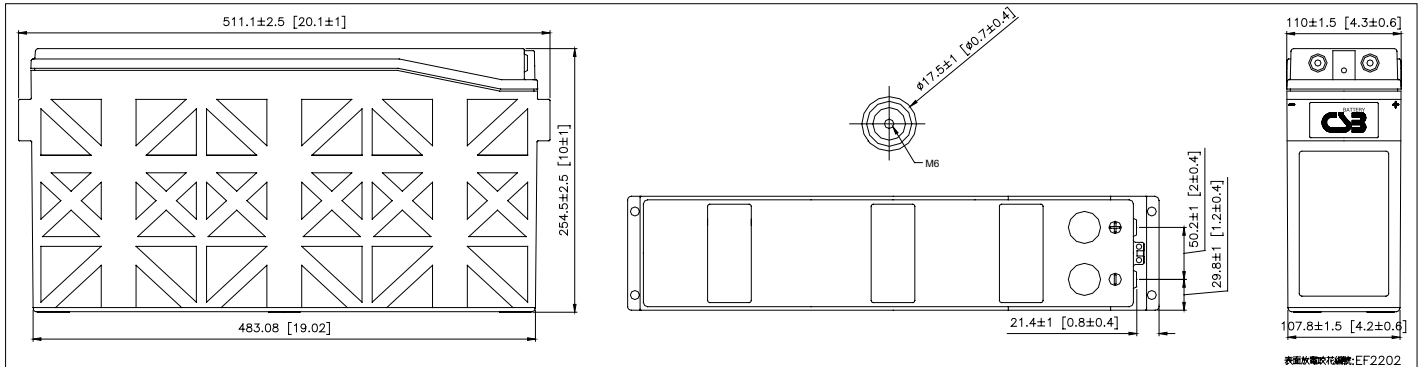
### Specification

Nominal Voltage(V)	12
Capacity25 °C (77°F)	100 Ah @ 8hr-rate to 1.75V per cell Height : 254.5 mm(10.02 inch)
Dimensions (mm)	Length : 511.1 mm(20.12 inch)
	Width : 110 mm(4.33 inch)
	Approx. 36kg(79.37 lbs)
Weight	Approx. 4.5mΩ
Internal Resistance. Approx (mΩ)	PPE(UL 94-V0/File E161759)/L.O.I higher than 28 .
FlameRetardantContainer/	
Cover UL - Laboratories Rating	
Float Charging25 °C (77°F)	2.275±0.025V/cell Temperature coefficient -3.3mV/°C (1.8mV/°F)
Maximum Discharge Current in 5 seconds	800A
Maximum Charge Current(C/5)	30A
Service Temperature Range	Discharge: -20°C~50°C (-4°F~122°F)
	Charge: -20°C~50°C (-4°F~122°F)
	Storage: -20°C~40°C (-4°F~104°F)
Terminal Type	I2-Thread lead alloy recessed terminal to accept M6 bolt
Terminal Hardware Initial Torque	110-in-lbs.(12.4 N-m)



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

### Dimensions



### TPL121000

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

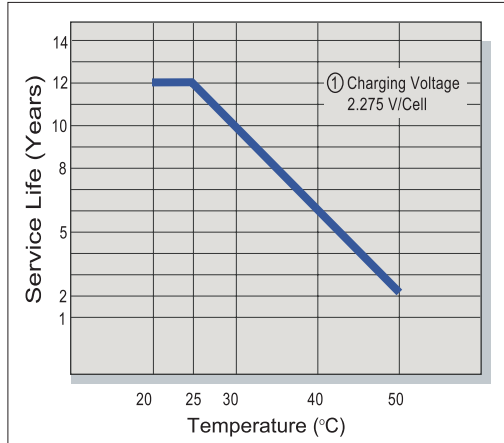
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	7HR	8HR	10HR	20HR
1.67V	186	118	69.1	40.1	29.6	23.8	19.8	16.9	14.7	13.0	10.6	5.56
1.70V	175	114	67.4	39.4	29.3	23.5	19.5	16.6	14.5	12.8	10.5	5.50
1.75V	157	106	64.0	38.0	28.4	22.8	18.8	16.0	14.0	12.5	10.3	5.38
1.80V	139	98.0	60.3	36.3	27.0	21.8	18.1	15.6	13.6	12.1	10.0	5.25
1.83V	129	92.5	58.0	35.1	26.1	21.1	17.6	15.2	13.2	11.7	9.63	5.13
1.85V	122	88.2	56.0	34.3	25.4	20.7	17.2	14.8	12.9	11.5	9.50	5.00
1.90V	105	78.6	51.4	32.1	23.6	18.8	15.6	13.3	11.8	10.5	8.69	4.63

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

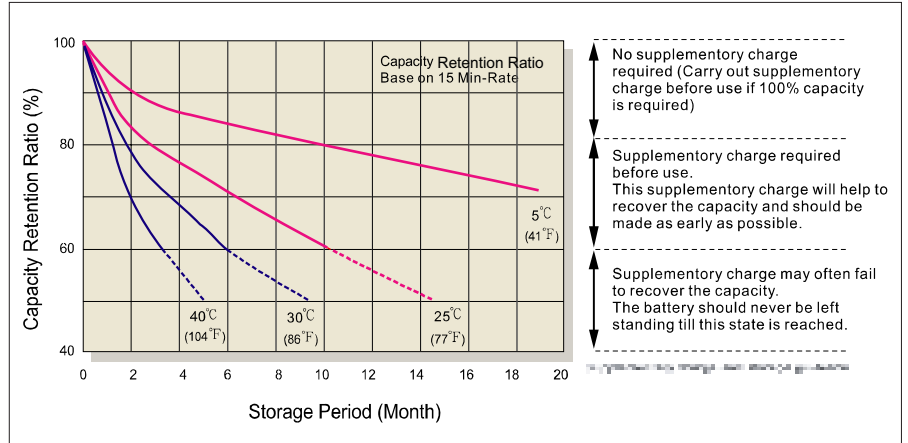
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	7HR	8HR	10HR	20HR
1.67V	1,969	1,272	757	446	331	268	223	191	166	147	120	63.1
1.70V	1,878	1,233	746	439	329	267	222	189	165	145	119	62.9
1.75V	1,716	1,161	723	428	322	261	216	185	162	144	118	62.3
1.80V	1,549	1,075	691	414	313	254	212	183	159	141	116	61.6
1.83V	1,450	1,025	669	405	305	246	207	179	155	138	114	60.6
1.85V	1,382	994	655	399	299	241	203	175	153	136	113	59.5
1.90V	1,208	913	606	381	282	225	187	160	141	126	104	55.7

• All mentioned values are average values.

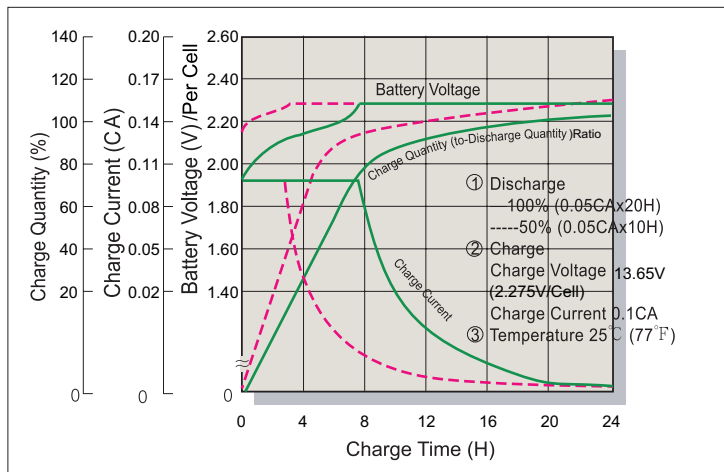
### Trickle (or Float) Service Life



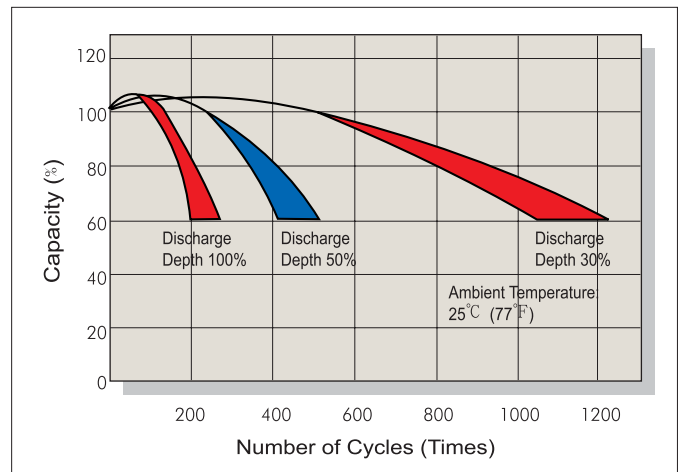
### Capacity Retention Characteristic



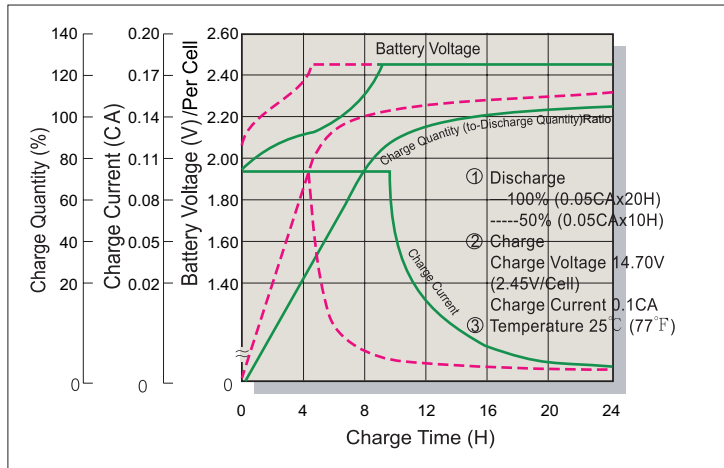
### Battery Voltage and Charge Time for Standby Use



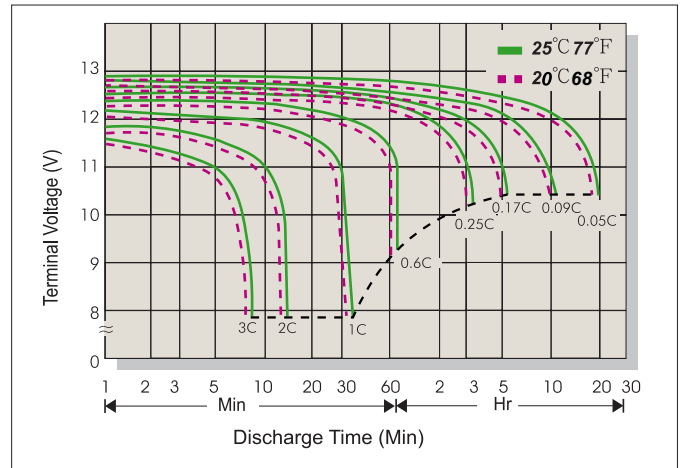
### Cycle Service Life



### Battery Voltage and Charge Time for Cycle Use



### Terminal Voltage (V) and Discharge Time



### 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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