



# TPL series TPL121350A



## Valve Regulated Lead Acid Battery

Maintenance-Free Sealed Lead Acid Battery.  
Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99%.

### General Design for Standby Power Applications

#### 【Design Life】

Up to 12 Years in Standby Service at 25°C  
Eurobat (20°C) : >12 YEARS VERY LONG LIFE

#### 【Operating Temperature Range】

Nominal Operating Temperature : 25°C (77°F)  
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)

#### 【Float Charging Voltage】

13.5 ~ 13.8 VDC/Unit at 25°C (77°F)

#### 【Equalization Charging Voltage】

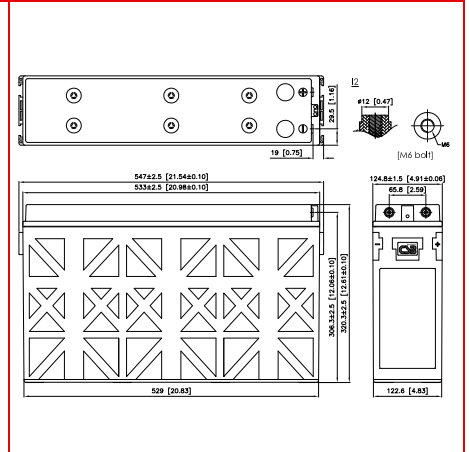
14.4 ~ 15.0 VDC/Unit at 25°C (77°F)

#### 【Self Discharge】

Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F);  
Fully recharging is required before usage, and charged sooner if stored at higher temperature than 25°C (77°F).

### Specification Design according with IEC 60896-21/22:2004

Nominal Voltage	12V (6 cells per unit)		
Nominal Capacity	135AH @10HR-rate to 1.80V per cell @25°C (77°F)		
Weight	Approx. 54.80 Kg (120.78 lbs)		
Maximum Discharge Current	800A (5sec)		
Internal Resistance	Approx. 3.70 mΩ		
Short Circuit Current	2593A		
Maximum Charge Current	40.5A		
Terminal types	I2 thread lead alloy terminal to accept M6 bolt		
Terminal tightening torque	51.7±10.3 Kgf·cm / 44.9±9.0 Lbf·in / 5.1±1.0 N·m		
Container Material	Flame Retardant ABS (UL 94-V0)		
Dimensions	Length (L)	547.0±2.5 mm	21.54±0.10 inch
	Width (W)	124.8±1.5 mm	4.94±0.06 inch
	Overall Height (H)	320.3±2.5 mm	12.72±0.10 inch



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

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.67V	250	159	93.2	68.1	54.2	39.9	32.1	26.7	22.8	17.6	14.3	7.51
1.70V	236	153	91.0	66.7	53.6	39.5	31.7	26.3	22.4	17.2	14.2	7.43
1.75V	213	144	87.2	64.7	52.7	38.4	30.8	25.3	21.6	16.9	13.8	7.26
1.80V	189	132	82.3	62.2	51.3	37.2	29.4	24.5	21.1	16.3	13.5	7.09
1.83V	174	125	79.1	60.7	49.9	35.9	28.5	23.8	20.5	15.8	13.0	6.92
1.85V	164	119	76.4	59.2	48.7	35.0	27.9	23.2	20.0	15.5	12.8	6.75

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

F.V/Time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.67V	2658	1718	1022	751	602	447	362	301	257	198	162	85.2
1.70V	2544	1672	996	739	601	446	360	299	256	196	161	84.9
1.75V	2339	1586	958	716	587	440	354	292	249	195	160	84.1
1.80V	2095	1488	927	699	574	432	342	286	247	191	157	83.2
1.83V	1954	1387	893	684	561	420	335	280	242	186	153	81.8
1.85V	1857	1343	871	668	545	410	330	275	237	184	152	80.3

Please refer to the official site for the latest rating confirmation. URL: [www.csb-battery.com](http://www.csb-battery.com)

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Recognized under UL 1989,  
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