



**TPL series**

**TPL 121800 12V 180AH**



**Valve Regulated Lead Acid Battery**

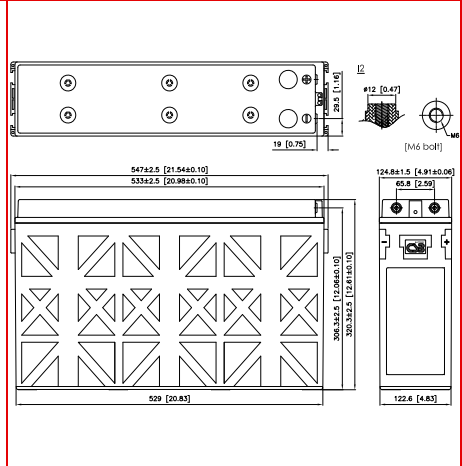
Maintenance-Free Sealed Lead Acid Battery.  
Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99%.

**Design for Standby Power Applications**

<p><b>【Design Life】</b> Up to 12 Years in Standby Service at 25°C Eurobat (20°C) : 10-12 years, Long Life</p> <p><b>【Operating Temperature Range】</b> 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)</p>	<p><b>【Float Charging Voltage】</b> 13.5 ~ 13.8 VDC/Unit at 25°C (77°F)</p> <p><b>【Equalization Charging Voltage】</b> 14.4 ~ 15.0 VDC/Unit at 25°C (77°F)</p> <p><b>【Self Discharge】</b> 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).</p>
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**Specification** Design according with IEC 60896-21/22:2004

Nominal Voltage	12V (6 cells per unit)		
Nominal Capacity	180AH @8HR-rate to 1.75V per PCS @25°C (77°F)		
Weight	Approx. 55.10 Kg (121.44 lbs)		
Maximum Discharge Current	800A (5sec)		
Internal Resistance	Approx. 3.60 mΩ		
Short Circuit Current	2593A		
Maximum Charge Current	54A		
Terminal types	I2 thread lead alloy terminal to accept M6 bolt		
Terminal hardware Torque	138.6 Kgf-cm / 120.3 Lbf-in / 13.58 N-m		
Container Material	Flame Retardant ABS (UL 94-V0)		
Dimensions (mm/inch)	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	326	209	126	90.8	71.9	52.1	41.3	34.6	30.1	23.6	19.2	9.92
1.70V	315	204	125	90.1	71.4	51.7	41.0	34.3	29.7	23.4	19.1	9.89
1.75V	278	192	123	88.8	70.7	50.6	40.0	33.2	28.5	22.5	18.7	9.81
1.80V	233	176	116	84.6	67.7	48.7	38.9	32.0	27.4	21.7	18.1	9.59
1.83V	204	166	110	81.2	65.4	47.4	37.8	31.0	26.5	21.0	17.7	9.41
1.85V	180	151	102	77.2	63.3	46.4	36.7	30.2	26.2	20.6	17.3	9.25

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	3426	2236	1386	1007	803	581	463	388	338	265	217	115
1.70V	3346	2206	1385	1003	798	580	463	387	336	264	216	114
1.75V	3011	2110	1377	993	787	576	457	380	327	258	216	114
1.80V	2577	1974	1320	969	778	563	451	371	318	252	211	113
1.83V	2282	1877	1265	938	758	552	442	363	310	247	208	111
1.85V	2028	1710	1178	895	737	543	431	355	308	243	205	110

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,  
and certified by ISO 9001, 14001.

