



# TPL series TPL 12900



## 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

### 【Design Life】

Up to 12 Years in Standby Service at 25°C  
Eurobat (20°C) : 10-12 years, 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)

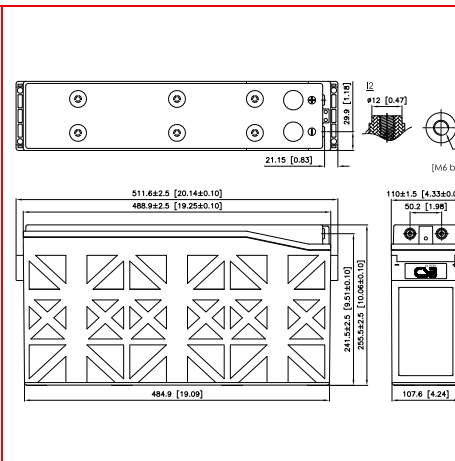
### 【Self Discharge】

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	90AH @8HR-rate to 1.75V per cell @25°C (77°F)		
Weight	Approx. 38.30 Kg (84.41 lbs)		
Maximum Discharge Current	800A (5sec)		
Internal Resistance	Approx. 3.80 mΩ		
Short Circuit Current	2216A		
Maximum Charge Current	27A		
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 (mm/inch)	Length (L)	511.6±2.5 mm	20.16±0.10 inch
	Width (W)	110.0±1.5 mm	4.44±0.06 inch
	Overall Height (H)	255.5±2.5 mm	10.11±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	167	106	62.2	45.1	36.1	26.6	21.4	17.8	15.2	11.7	9.56	5.01
1.70V	159	102	60.4	44.4	35.7	26.3	21.2	17.5	15.0	11.5	9.45	4.95
1.75V	143	96.2	57.8	43.3	35.2	25.6	20.5	16.9	14.4	11.3	9.23	4.84
1.80V	127	88.4	54.7	41.7	34.2	24.8	19.6	16.2	14.0	10.9	9.00	4.73
1.83V	117	83.0	52.6	40.5	33.2	23.9	18.9	15.9	13.6	10.6	8.77	4.61
1.85V	110	79.5	50.6	39.0	32.5	23.3	18.4	15.5	13.3	10.4	8.55	4.50

### 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	1772	1145	681	497	401	298	241	201	172	132	108	56.8
1.70V	1700	1117	673	494	397	294	240	200	170	131	107	56.6
1.75V	1556	1057	649	482	389	285	235	194	166	130	106	56.1
1.80V	1397	982	623	468	378	277	228	191	164	127	105	55.5
1.83V	1300	932	603	456	369	272	222	187	161	124	102	54.6
1.85V	1239	900	586	443	362	267	218	183	158	123	101	53.5

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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## Sales Offices

日立化成能源科技股份有限公司  
Hitachi Chemical Energy Technology Co., Ltd.

### BUSINESS HEADQUARTERS

Tel: +886-2-2880-5600  
Fax: +886-2-2888-3300

### USA OFFICE

Tel: +1-817-244-7777 / 1-(800)3-CSB-USA (272872)  
Fax: +1-817-244-4445

### SHENZHEN OFFICE (CHINA)

Tel: +86-755-8831-6488, 8831-6775  
Fax: +86-755-8831-6075

### EUROPE (EMEA) OFFICE

Tel: +31(0)180-418-140  
Fax: +31(0)180-418-327

### SHANGHAI OFFICE (CHINA)

Tel: +86-21-5046-1622, 5046-0833  
Fax: +86-21-5046-1046

### TAIPEI OFFICE

Tel: +886-2-2880-5600  
Fax: +866-2-2888-3300

### BEIJING OFFICE (CHINA)

Tel: +86-10-5820-5336, 5820-5338  
Fax: +86-10-5820-3053

Recognized under UL 1989,  
and certified by ISO 9001, 14001.

