



**Valve Regulated Lead Acid Battery**

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

**Design for Standby Power Applications at Extreme Temperatures**

**【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 : -20°C ~ 50°C (-4°F~122°F)  
Charge: -20°C ~ 50°C (-4°F~122°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)

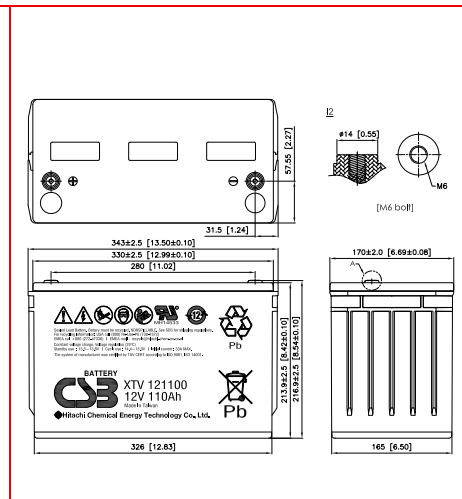
**【Self Discharge】**

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	110 Ah @20hr-rate to 1.75V per cell @25°C (77°F)		
Weight	Approx. 34.20 Kg (75.38lbs)		
Maximum Discharge Current	800A (5sec)		
Internal Resistance	Approx. 3.60 mΩ		
Short Circuit Current	2648A		
Maximum Charge Current	33A		
Terminal types	I2 thread lead alloy terminal to accept M6 bolt		
Terminal tightening torque	51.7±10.3 Kg·cm / 44.9±9.0 Lbf·in / 5.1±1.0 N·m		
Container Material	PP (UL 94-HB) & Flame Retardant (94-V0) available upon request		
Dimensions	Length (L)	343.0±2.5 mm	13.50±0.10 inch
	Width (W)	170.0±2.0 mm	6.69±0.08 inch
	Container Height (h)	213.9±2.5 mm	8.42±0.10 inch
	Overall Height (H)	216.9±2.5 mm	8.54±0.10 inch



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

F.V/Time	5 MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	425	307	235	138	78.6	55.8	43.7	31.2	20.0	13.1	10.7	5.53
1.67V	382	289	227	135	77.5	55.4	43.5	30.8	19.9	13.0	10.6	5.52
1.70V	364	276	222	134	77.2	55.0	43.0	30.7	19.7	12.9	10.5	5.51
1.75V	339	254	207	130	75.6	54.0	42.5	30.3	19.5	12.8	10.4	5.50
1.80V	289	232	188	123	72.3	52.1	41.2	29.4	18.9	12.6	10.2	5.33
1.85V	231	200	163	114	67.1	48.8	38.9	28.2	18.2	12.0	9.86	5.15

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

F.V/Time	5 MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	4173	3108	2509	1543	890	640	505	363	236	155	126	66.7
1.67V	3921	2975	2418	1515	884	635	502	361	235	154	125	66.6
1.70V	3745	2914	2368	1508	880	633	501	359	234	153	124	66.1
1.75V	3384	2783	2251	1464	862	622	493	356	231	152	123	65.7
1.80V	2988	2573	2053	1411	827	600	479	346	228	149	122	64.9
1.85V	2719	2220	1834	1323	773	567	455	334	218	145	118	62.3

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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**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.

