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# XHRL12475W ▶ 12V 475W

XHRL12475W is specially designed for high efficient discharge and long life application. Its characteristics are high energy density, small footprint and high discharge efficiency. It can be used for more than 260 cycles at 100% discharge in cycle service, up to 10 years in standby service.



## ► Specification

Cells per unit	6
Voltage per unit	12
Capacity	475W @15 min-rate to 1.67V per cell @25 °C (77°F)
Weight	Approx. 35.3 kg (77.82 lbs)
Maximum Discharge Current	800A(5sec)
Internal Resistance	Approx. 3.7 mΩ
Operating Temperature Range	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)
Nominal Operating Temperature Range	25°C ±3°C (77°F ±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	47.5 A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
Self Discharge	CSB Batteries can be stored for more than 6 months at 25°C(77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	I2-Thread lead alloy recessed terminal to accept M6/M8 bolt
Container Material	Polypropylene(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.



MH14533(N)



ISO9001  
No.:041005117



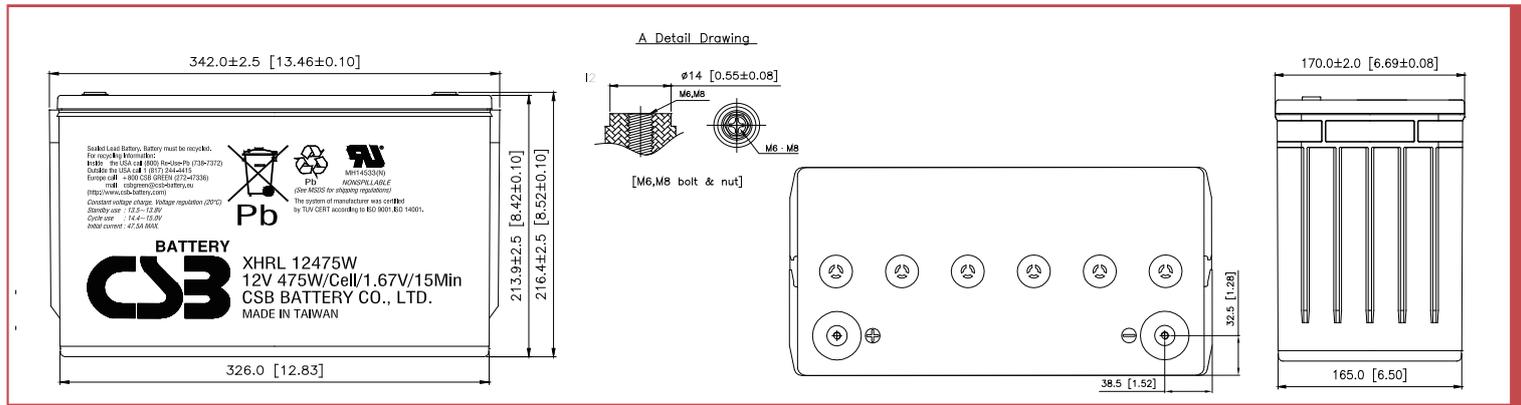
ISO 14001  
NO.UM 1-12-0045

CSB-manufactured VRLA batteries are UL-recognized components under UL1989.

CSB is also certified by ISO 9001 and ISO 14001.

## ► Dimensions :

Unit: mm (inch)	Overall Height (H)	Container height (h)	Length (L)	Width (W)
	216.4±2.5 (8.52±0.10)	213.9±2.5 (8.42±0.10)	342.0±2.5 (13.46±0.10)	170.0±2.0 (6.69±0.08)



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

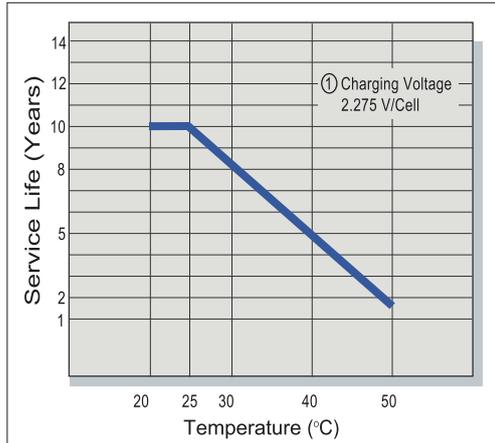
F.V/Time	2MIN	4MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	694	582	468	401	349	264	214	155	86.0	60.6
1.67V	614	522	431	376	331	254	209	152	84.8	59.4
1.70V	585	490	413	363	320	249	206	150	84.2	59.1
1.75V	549	437	381	334	301	237	199	145	82.3	57.8
1.80V	445	389	338	304	274	218	184	136	78.8	55.9
1.85V	383	327	296	268	240	198	164	124	73.2	52.6

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

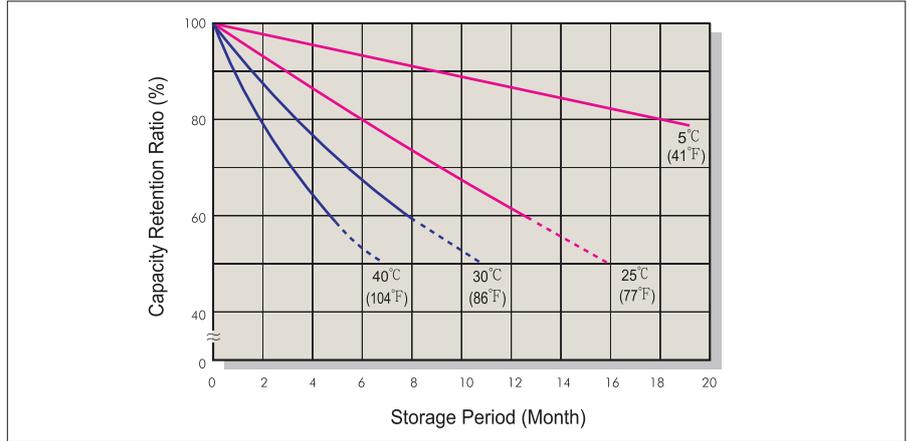
F.V/Time	2MIN	4MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	6,951	5,678	4,791	4,197	3,702	2,912	2,373	1,739	991	709
1.67V	6,328	5,324	4,513	4,032	3,560	2,851	2,323	1,716	987	706
1.70V	6,043	5,092	4,400	3,903	3,455	2,805	2,280	1,698	980	704
1.75V	5,511	4,666	4,144	3,627	3,284	2,691	2,193	1,650	966	691
1.80V	4,800	4,245	3,762	3,331	3,058	2,498	2,056	1,571	931	666
1.85V	4,161	3,801	3,315	3,010	2,789	2,208	1,862	1,453	874	625

Ratings presented herein are subject to revision without notice. Please refer to [www.csb-battery.com](http://www.csb-battery.com) to confirm the latest version.

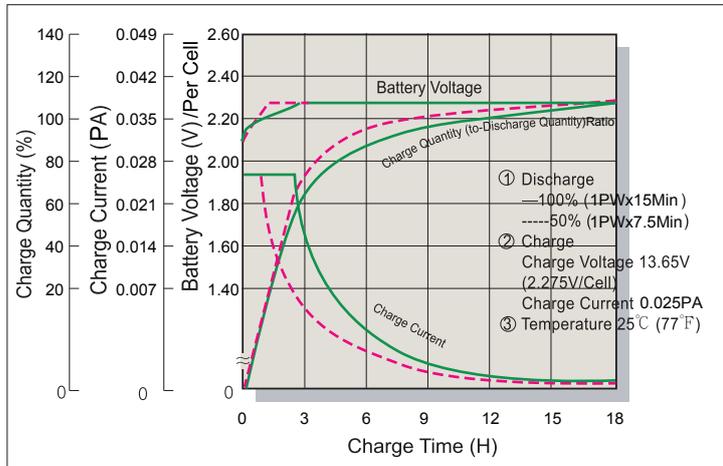
### Trickle (or Float) Service Life



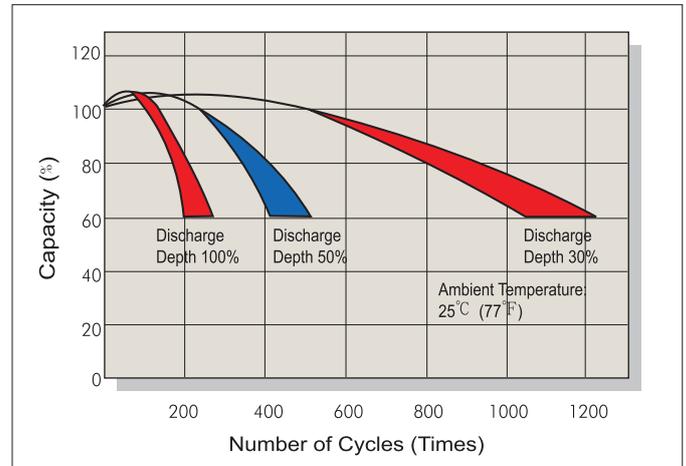
### Capacity Retention Characteristic



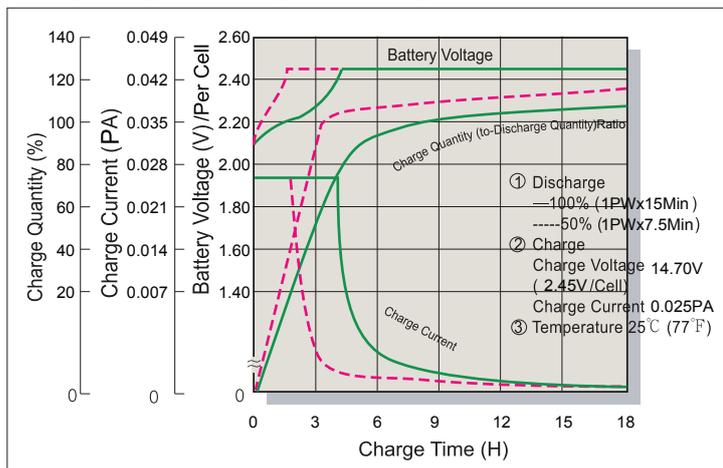
### Battery Voltage and Charge Time for Standby Use



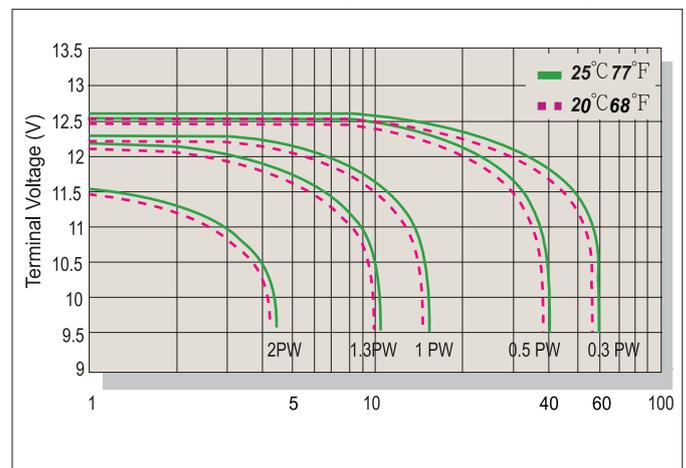
### Cycle Service Life



### 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	0.1PA
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 Power(W)	0.1P>(W)	0.1P≤(W)<0.25P	0.25P≤(W)<1.0P	(W)≥1.0P

Sales Office URL:WWW.CSB-BATTERY.COM

**GLOBAL HQ**  
**CSB BATTERY CO., LTD. (TAIWAN)**  
 Tel : +886-2-2880-5600  
 Fax : +886-2-2888-3300  
 mail : service@csb-battery.com.tw

**BEIJING OFFICE. (CHINA)**  
**CSB BATTERY TECHNOLOGIES (BEIJING) CO., LTD.**  
 Tel : +86-10-5820-5336/5338  
 Fax : +86-10-58203053  
 mail : chinasl@csb-battery.com

**AMERICA HQ**  
**CSB BATTERY TECHNOLOGIES INC. (U.S.A)**  
 Tel : +1-817-244-7777/1-(800)3-CSB-USA(272872)  
 Fax : +1-817-244-4445  
 mail : csb@csb-battery.com

**SHANGHAI OFFICE. (CHINA)**  
**CSB BATTERY LOGISTIC (SHANGHAI) CO., LTD.**  
 Tel : +86-21-5046-1622/5046-0833  
 Fax : +86-21-5064-1046  
 mail : chinasl@csb-battery.com

**EUROPE HQ**  
**CSB Battery Europe BV.**  
 Tel : +31(0)-180-418-140  
 Fax : +31(0)-180-418-327  
 mail : eurosales@csb-battery.eu

**SHENZHEN OFFICE.( CHINA )**  
**CSB BATTERY LOGISTIC ( SHANGHAI ) CO., LTD.**  
 Tel : +86-755-8831-6488/6396/6356  
 Fax : +86-755-8831-6548  
 mail : she@csb-battery.com.cn