

Powered by



MSV 500 ▶ 2V 500Ah

MSV 500 is a long service life battery up to 15 years expected life under normal float charge. As with all CSB batteries, all are rechargeable, highly efficient, leak proof and maintenance free.



► Specification

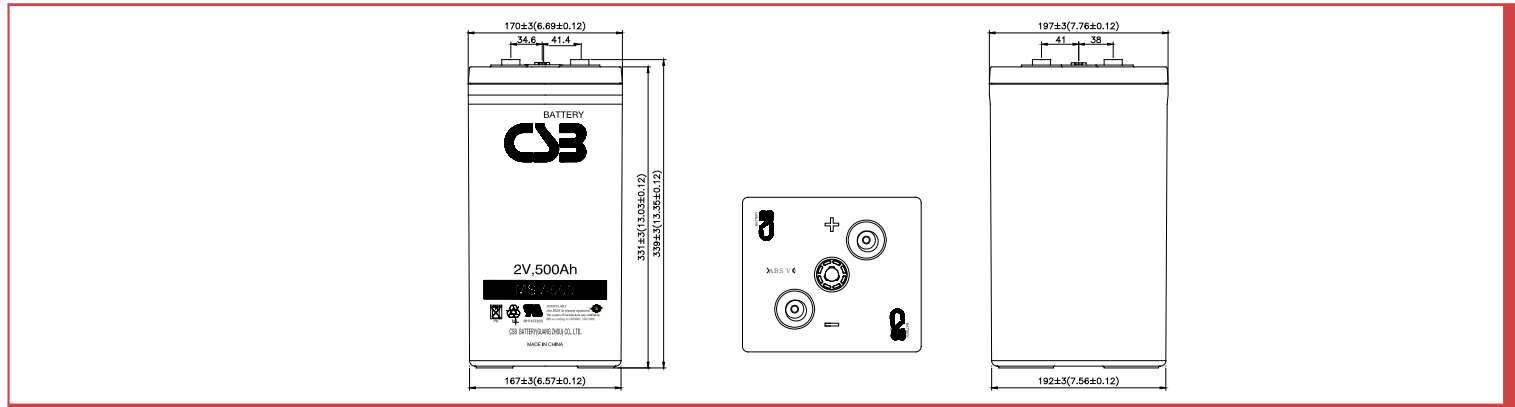
Cells Per Unit	1
Voltage Per Unit	2
Capacity	500Ah @ 10hr-rate to 1.80V per cell @25 °C (77°F)
Weight	Approx. 32.2 kg(70.99 lbs)
Maximum Discharge Current	3000A(5sec)
Internal Resistance	Approx. 0.40 mΩ
Operating Temperature Range	Discharge: -20°C~50°C(-4°F~122°F) Charge: 0°C~40°C(32°F~104°F) Storage: -20°C~40°C(-4°F~104°F)
Nominal Operating Temperature Range	25°C±3°C(77°F±5°F)
Float Charging Voltage	2.23±0.02/Cell at 25 °C(77°F) Temp. Coefficient ±3.3mV/°C(±1.8mV/°F)
Recommended Maximum Charging Current Limit	150A
Equalization / Cycle Use Charging Voltage	2.35V Temps coefficient ±3.3mV/°C(±1.8mV/°F)
Terminal	Pb-Ca-Sn Alloy(L / Recessed Terminal)
Container Material	The container and cover are made of flame retardant plastics which meet ABS(UL 94-V0/File E88637) specifications. The oxygen index level is higher than 28

CSB-manufactured VRLA batteries are UL-recognized components under UL924 and UL1989.

CSB is also certified by ISO 9001 and ISO 14001.

► Dimensions :

Overall Height (H)	Container height (h)	Length (L)	Width (W)
339±3 (13.35±0.12)	331±3 (13.03±0.12)	197±3 (7.76±0.12)	170±3 (6.69±0.12)



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

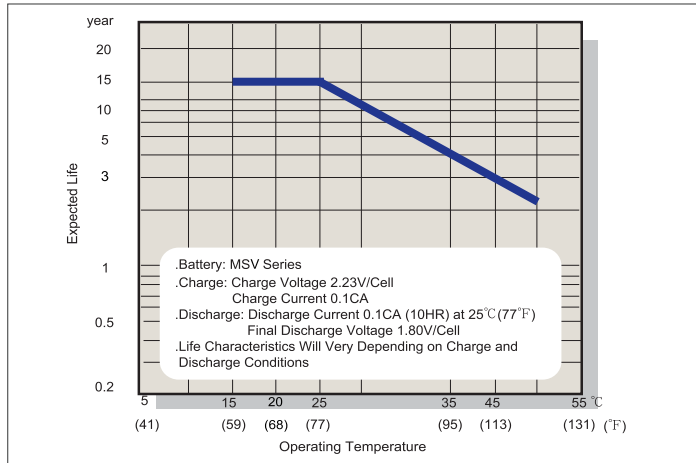
F.V/Time	15MIN	30MIN	60MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	711	490	324	191	144	114	96.3	83.8	66.3	56.3
1.67V	649	466	309	185	136	110	92.5	80.0	65.0	55.0
1.70V	603	455	304	181	135	109	91.3	78.8	63.8	53.8
1.75V	526	420	280	171	126	103	86.3	75.0	61.3	51.3
1.80V	457	367	264	165	121	98.8	83.8	73.8	60.0	50.0
1.83V	397	324	244	155	116	93.8	80.0	70.0	57.0	48.8

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

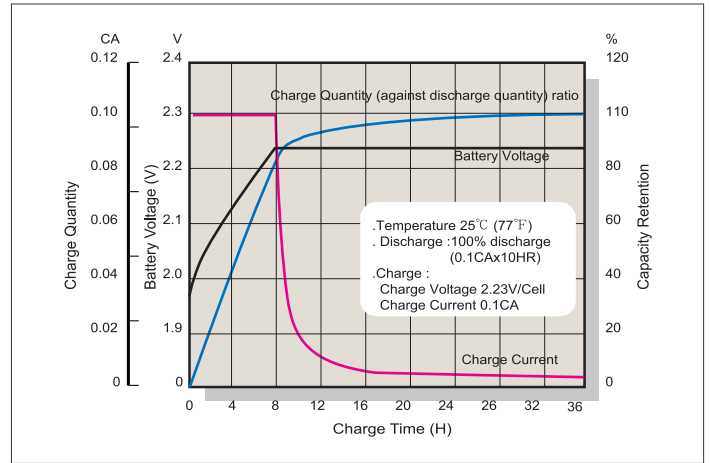
F.V/Time	15MIN	30MIN	60MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	1166	861	576	346	260	209	176	155	125	105
1.67V	1067	824	575	344	256	206	175	154	124	104
1.70V	1017	798	556	336	251	205	174	151	121	103
1.75V	921	744	520	321	241	196	166	145	119	100
1.80V	839	667	490	309	231	189	161	141	115	98.8
1.83V	715	578	451	290	221	180	154	135	110	95.0

Ratings are preliminary and subject to change.

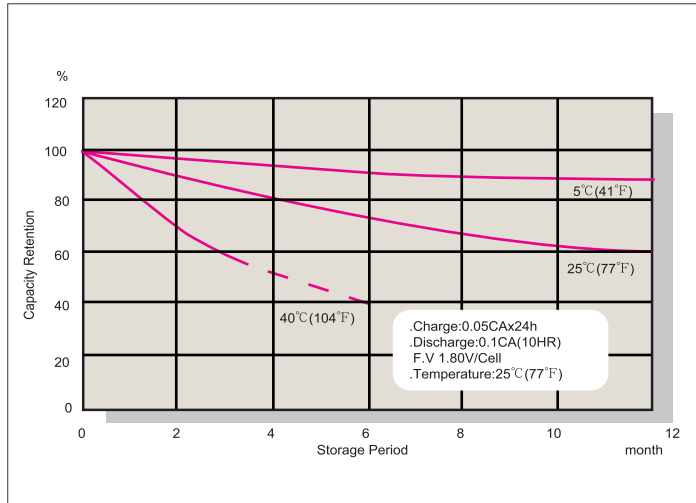
Expected Life V.S Operating Temperature



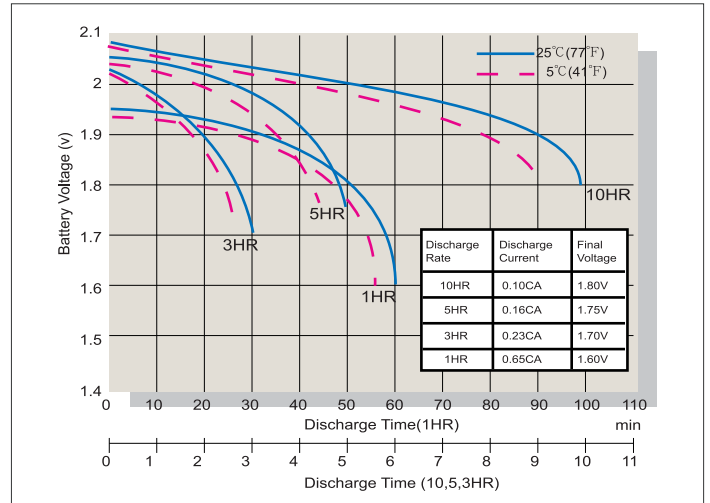
Typical Constant Voltage Charge Characteristics



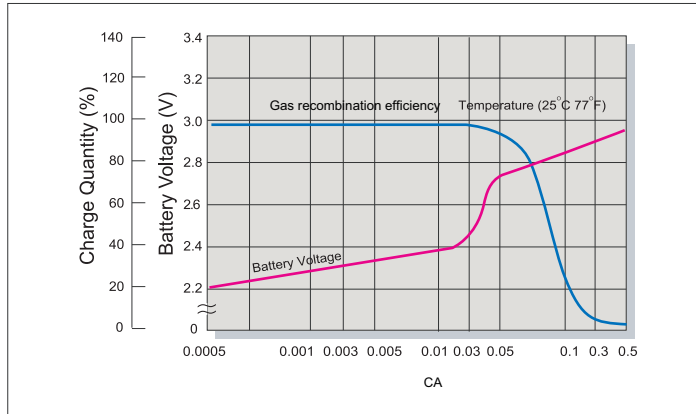
Capacity Retention Characteristics



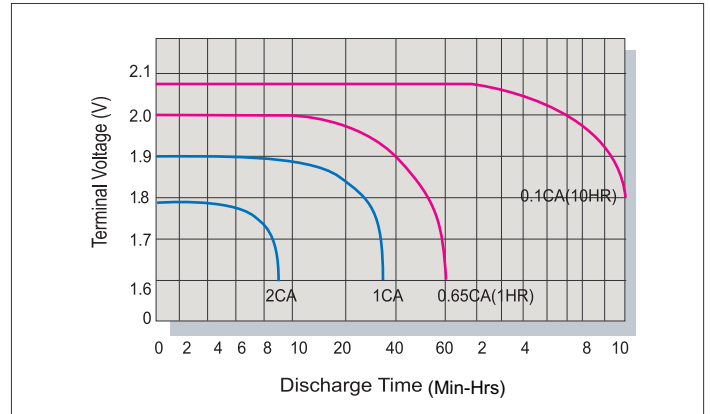
Discharge Characteristics



Oxygen Recombination Efficiency Chart



Terminal Voltage (V) and Discharge Time 25°C (77°F)



Charging Procedures

Application	Charge Voltage (V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Standby	25°C (77°F)	2.23	2.21~2.25	0.3C

Discharge Current VS. Discharge Voltage

Discharge Current (A)	Final Discharge Voltage (V/Cell)
0.05C > A	1.90
0.15C > A ≥ 0.05C	1.80
0.20C > A ≥ 0.15C	1.75
0.40C > A ≥ 0.20C	1.70
A > 0.40C	1.60

Sales Office URL: WWW.CSB-BATTERY.COM

GLOBAL HQ
CSB BATTERY CO., LTD. (TAIWAN)
 Tel : +886-2-2555-5600
 Fax : +886-2-2555-3300
 mail : service@csb-battery.com.tw

BEIJING OFFICE. (CHINA)
CSB BATTERY TECHNOLOGIES (BEIJING) CO., LTD.
 Tel : +86-10-59621300/1301/1302/1303
 Fax : +86-10-59621304
 mail : chinasls@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 : +86-21-5064-3314
 mail : chinasls@csb-battery.com

EUROPE HQ
CSB Battery Europe BV.
 Tel : +31(0)-180-418-140
 Fax : +886-2-2555-3300
 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