



# HRL 12500W

## 12V 500W

HRL 12500W is specially designed for high efficient discharge and long life application. It's characteristics are small volume, light weight and high discharge efficiency. It can be used for more than 260 cycles at 100% discharge in cycle service.



### Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	500W @15 minute-rate to 1.67V per cell @25°C (77°F)
Weight	Approx. 45.7kg(100.54 lbs)
Maximum Discharge Current	800A(5sec)
Internal Resistance	Approx. 3.7mΩ
Operating Temperature Range	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)
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	50A
Current Limit	
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	Thread lead alloy recessed terminal to accept 1/4"-20bolt
Container Material	-PP plastics (UL 94 HB)*Flammability resistance of PPE (UL94-V0) can be available upon request..

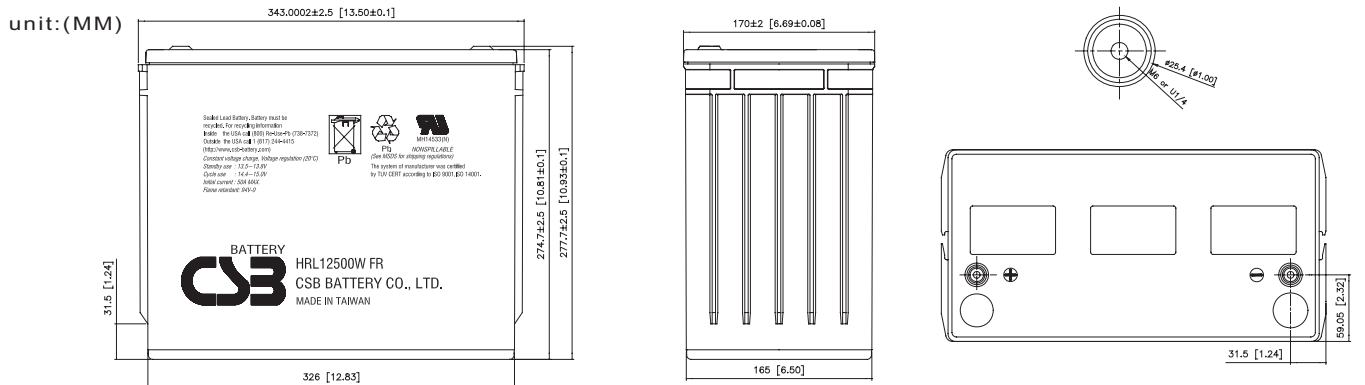
MH14533(N)

TUV CERT  
ISO 9001  
No.:041005117

RWTUV  
ISO 14001  
NO. UM 1-12-0045

CSB-manufactured batteries are UL-recognized components under UL924 as well as ISO 9001 and ISO 14001 certified.

### Dimensions



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

F.V/Time	5MIN	7.5MIN	10MIN	15MIN	20MIN	30MIN	40MIN	50MIN	60MIN	90MIN
1.85V	304.00	267.00	242.00	211.00	177.00	140.00	111.00	92.80	79.70	57.30
1.80V	369.00	323.00	282.00	233.00	199.00	153.00	123.00	102.00	87.30	62.00
1.75V	424.00	371.00	320.00	255.00	216.00	162.00	130.00	107.00	91.10	64.50
1.70V	462.00	411.00	353.00	271.00	225.00	166.00	133.00	109.00	93.50	65.40
1.67V	471.00	427.00	370.00	280.00	230.00	168.00	134.00	110.00	94.30	66.10
1.60V	491.00	455.00	401.00	294.00	235.00	172.00	136.00	112.00	95.70	67.20

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

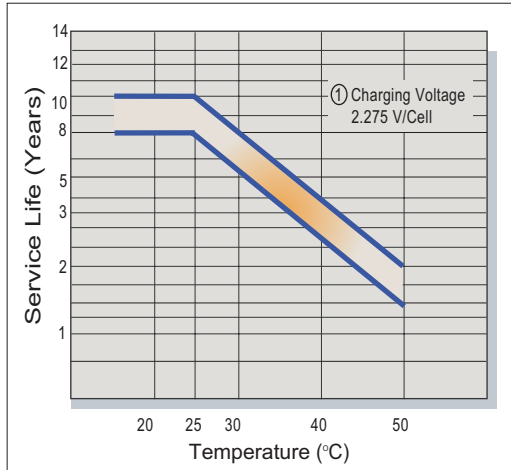
F.V/Time	5MIN	7.5MIN	10MIN	15MIN	20MIN	30MIN	40MIN	50MIN	60MIN	90MIN
1.85V	3366.00	2882.00	2573.00	2203.00	1964.00	1564.00	1297.00	1118.00	977.00	695.00
1.80V	4112.00	3548.00	3053.00	2497.00	2162.00	1724.00	1402.00	1186.00	1025.00	731.00
1.75V	4468.00	4037.00	3479.00	2748.00	2309.00	1822.00	1466.00	1237.00	1066.00	754.00
1.70V	4861.00	4330.00	3755.00	2932.00	2422.00	1885.00	1507.00	1258.00	1083.00	763.00
1.67V	4981.00	4439.00	3910.00	3018.00	2490.00	1910.00	1520.00	1276.00	1091.00	769.00
1.60V	5275.00	4691.00	4167.00	3181.00	2594.00	1951.00	1558.00	1292.00	1112.00	783.00

• All mentioned values are average values.

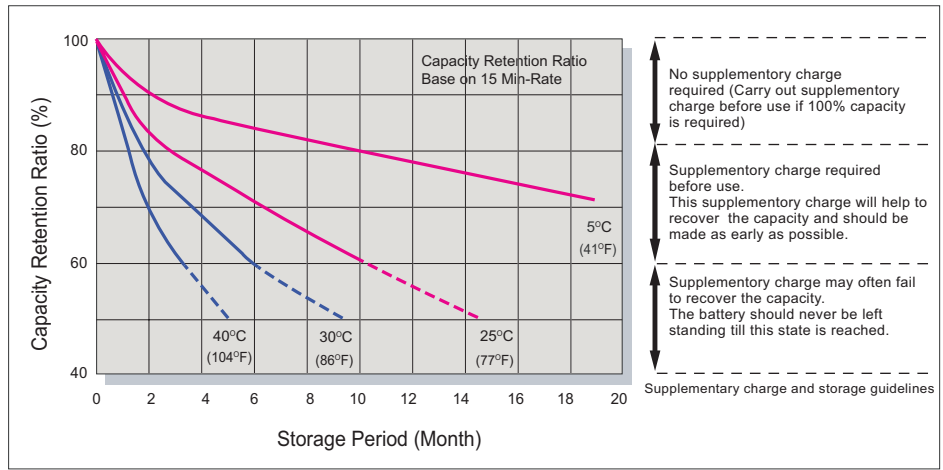
# HRL 12500W 12V 500W



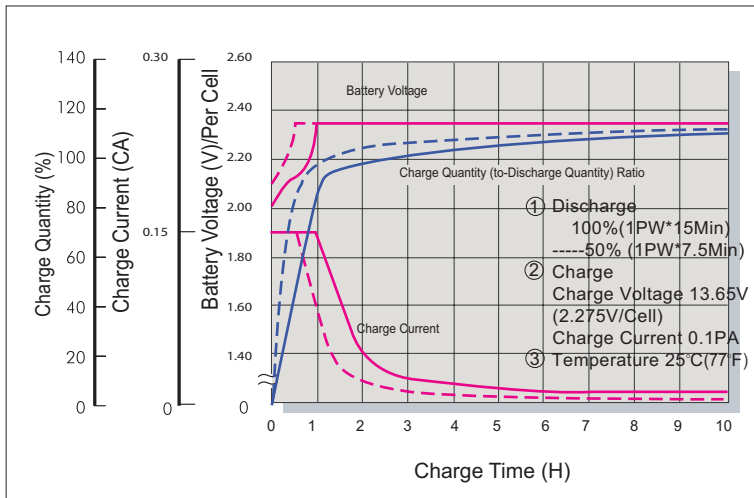
## Trickle (or Float) Service Life



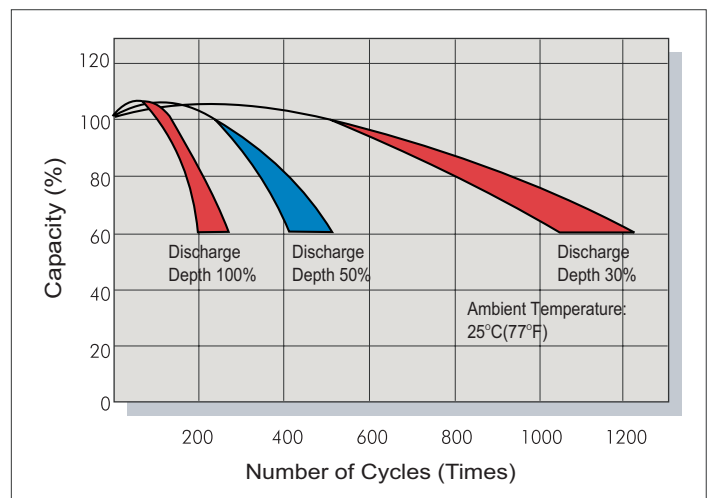
## Capacity Retention Characteristic



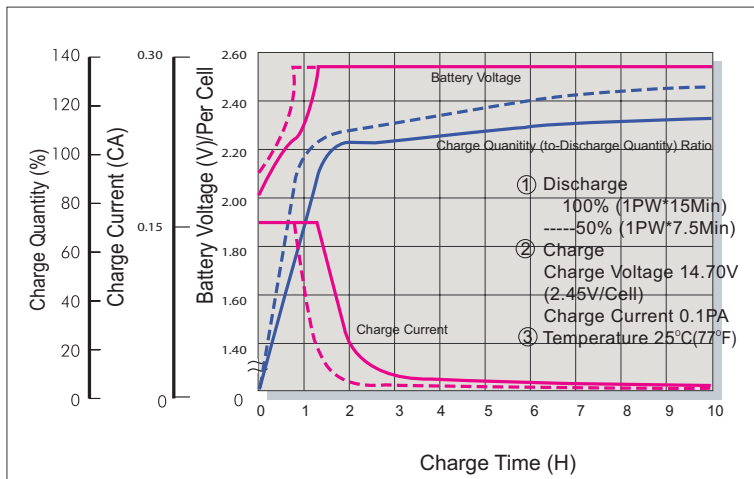
## Battery Voltage and Charge Time for Standby Use



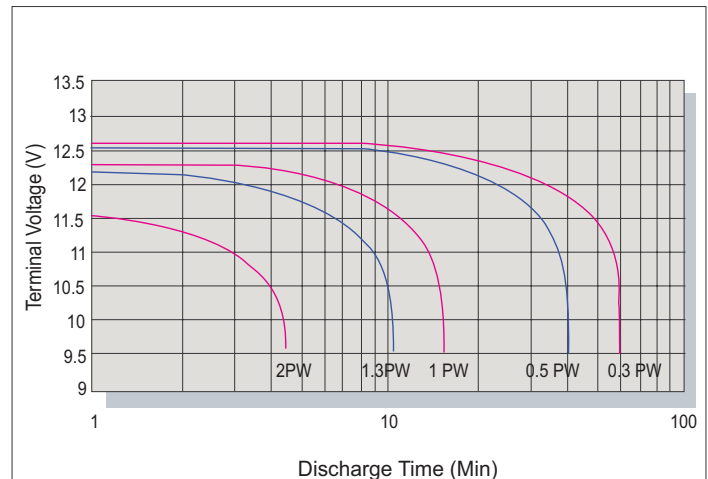
## Cycle Service Life



## Battery Voltage and Charge Time for Cycle Use



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



## 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	

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