



# Sealed Lead-Acid Battery

Absorbant Glass Mat (AGM) technology for superior performance. Valve regulated, spill proof construction allows safe operation in any position. Approved for transport by air. D.O.T., I.A.T.A., F.A.A. and C.A.B. certified. U.L. recognized under file number MH 20567.

UPG No. 45977

# UB12500

Maintenance-Free

## Specification

<b>Nominal Voltage</b>	12 volts		
<b>Nominal Capacity</b>	77° F (25° C)		
20-hr. (2.50A)	50.0 Ah		
10-hr. (4.65A)	46.5 Ah		
5-hr. (8.50A)	42.5 Ah		
1-hr. (30.00A)	30.0 Ah		
<b>Approximate Weight</b>	32 lbs (14.5 kgs)		
<b>Internal Resistance (approx.)</b>	11 mΩ		
<b>Shelf Life (% of normal capacity at 77° F (25° C))</b>			
3 Months	6 Months	12 Months	
91%	82%	64%	
<b>Temperature Dependency of Capacity</b>	(20 hour rate)		
104° F	77° F	32° F	5° F
102%	100%	85%	65%



## Charge Method (Constant Voltage)

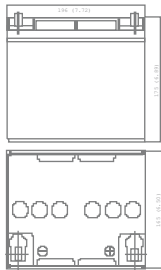
## Cycle Use (Repeating Use)

Initial Current	17.5 A or smaller
Control Voltage	14.5 - 14.9 V

## Float Use

Control Voltage	13.6 - 13.8 V
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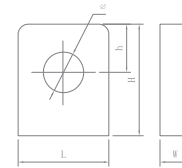
## Physical Dimensions: in (mm)



**L:** 7.72in (196.1 mm)  
**W:** 6.50in (165.1mm)  
**H:** 6.89in (175 mm)  
**TH:** 7.17in (182.1 mm)

Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

## Terminals



### L Series (L Type Terminal)

Dimension Type	L	W	H	h	ø
L2	17.0	9.0	17.0	9.0	6.5

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

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	158.2	115.4	81.2	49.2	25.7	15.0	11.0	8.6	7.1	5.0	4.5	2.5
10.20V	139.4	105.2	72.7	46.6	24.1	14.3	10.7	8.3	6.9	4.9	4.4	2.5
10.50V	134.2	100.0	68.4	45.3	23.5	13.9	10.4	8.2	6.8	4.8	4.3	2.5
10.80V	129.1	94.9	64.1	44.0	22.7	13.6	10.2	8.1	6.7	4.7	4.3	2.3
11.10V	124.0	89.8	59.9	42.8	21.8	13.3	9.8	7.8	6.5	4.6	4.1	2.2

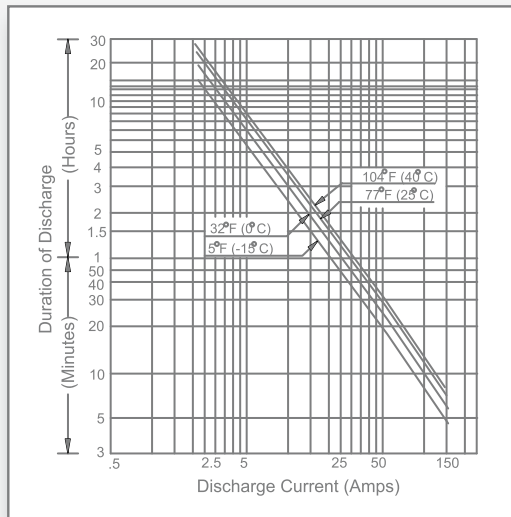
## Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	1679.6	1268.4	862.7	522.0	297.1	173.1	127.4	99.2	81.7	57.7	52.2	28.1
10.20V	1547.1	1167.5	806.7	517.3	279.2	165.4	124.0	96.6	64.2	56.4	50.9	27.4
10.50V	1522.3	1134.6	775.5	513.9	270.2	161.6	121.0	94.9	79.1	56.0	50.0	27.0
10.80V	1502.7	1104.7	746.4	512.6	262.9	158.2	118.4	93.2	77.8	54.7	49.6	26.9
11.10V	1475.3	1068.3	712.2	508.7	259.5	157.7	117.1	92.8	77.4	54.3	48.3	26.1

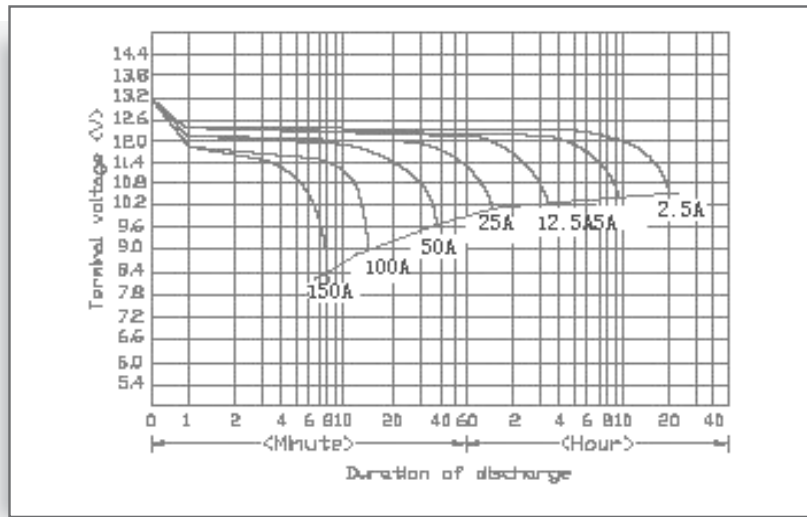
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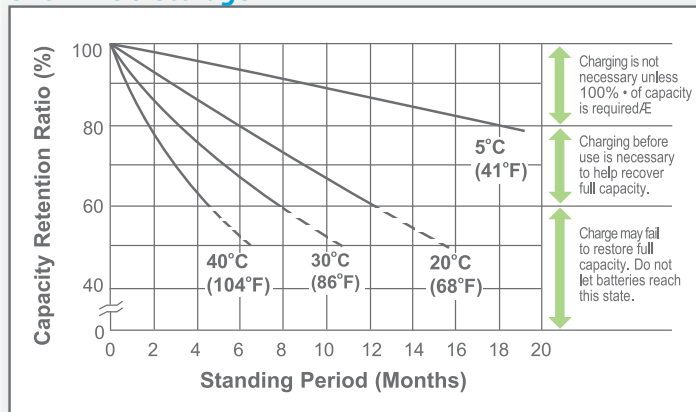
## Discharge Time vs. Discharge Current



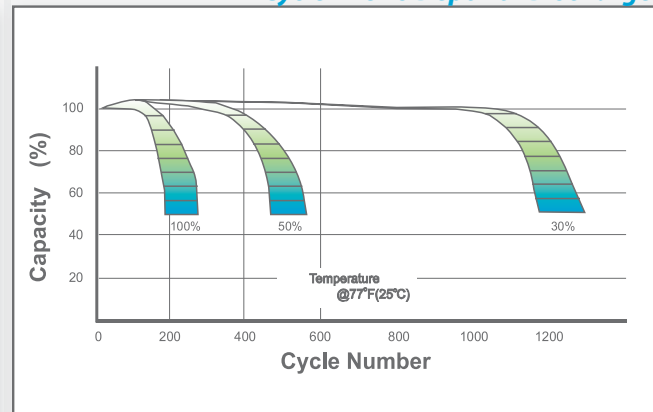
## Discharge Characteristics



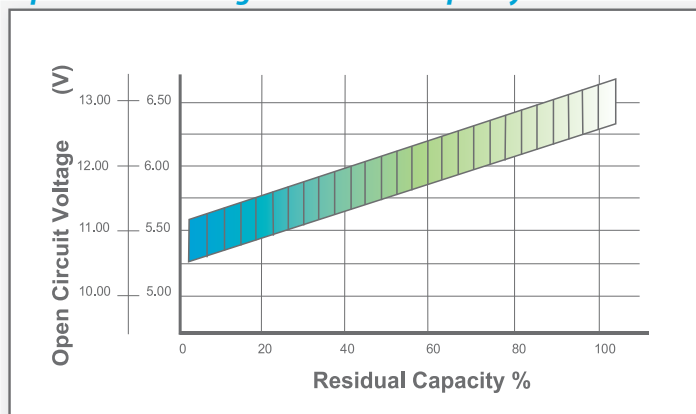
## Shelf Life & Storage



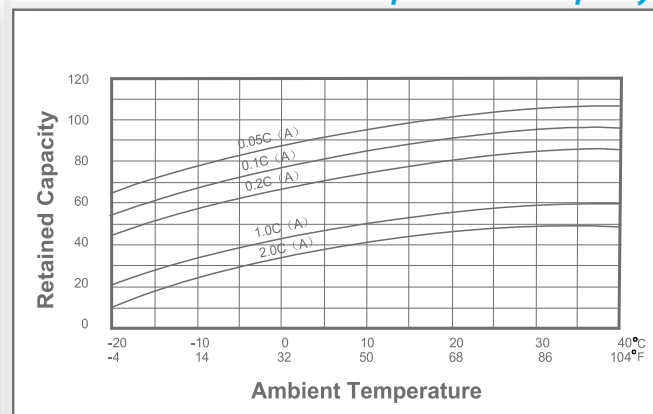
## Cycle Life vs Depth of Discharge



## Open Circuit Voltage vs Residual Capacity



## Effect of Temperature on Capacity



## Charge Current & Final Discharge Voltage

Application	Charge Voltage(V/Cell)			Max.Charge Current	Final Discharge Voltage V/Cell	Discharge Current(A)	1.75	1.70	1.60	1.30
	Temperature	Set Point	Allowable Range							
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.35C						
Standby	25°C(77°F)	2.325	2.30~2.35			0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C	



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