



# Sealed Lead-Acid Battery

UPG No. 45981

## UB121100

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.

Maintenance-Free

### Specification

<b>Nominal Voltage</b>	12 volts		
<b>Nominal Capacity</b>	77° F (25° C)		
20-hr. (5.0A)	100 Ah		
10-hr. (9.3A)	93 Ah		
5-hr. (17A)	85 Ah		
1-hr. (60A)	60 Ah		
<b>Approximate Weight</b>	65 lbs (29.5 kgs)		
<b>Internal Resistance (approx.)</b>	4mΩ		
<b>Shelf Life</b> (% of normal capacity at 77° F (25° C))			
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)

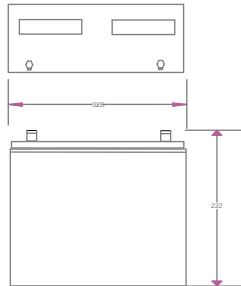
### Cycle Use (Repeating Use)

Initial Current	40 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:** 12.91in (327.9 mm)  
**W:** 6.77in (172 mm)  
**H:** 8.58in (217.9 mm)  
**TH:** 9.29in (236 mm)  
 Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

### Terminals



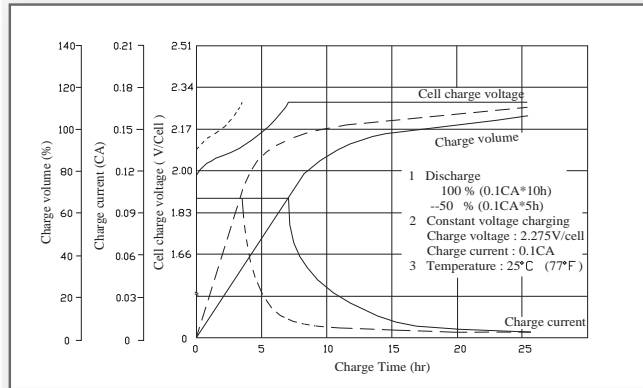
### Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	361.1	269.3	189.5	114.7	59.9	34.9	25.6	20.0	16.5	11.6	10.5	5.7
10.20V	325.2	245.4	169.6	108.7	56.3	33.3	24.9	19.5	16.2	11.4	10.2	5.5
10.50V	313.2	233.4	159.6	105.7	54.9	32.5	24.3	19.2	16.0	11.3	10.0	5.5
10.80V	301.2	221.4	149.6	102.7	52.9	31.7	23.7	18.9	15.6	11.0	10.0	5.4
11.10V	289.3	209.5	139.7	99.8	50.9	30.9	22.9	18.3	15.2	10.7	9.5	5.1

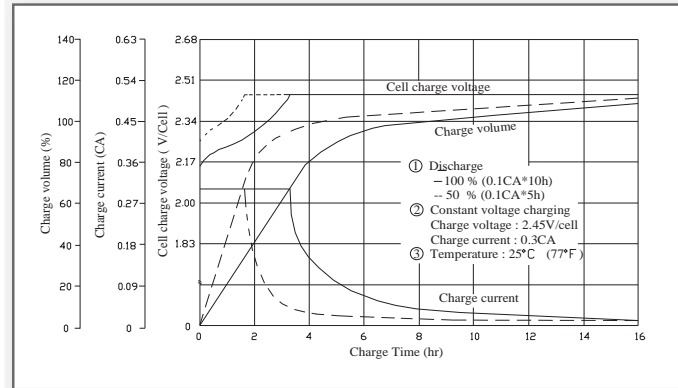
### Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	3919.2	2959.6	2013.0	1217.9	693.3	404.0	297.3	231.4	190.5	134.7	121.7	65.5
10.20V	3610.0	2724.2	1882.3	1207.0	651.4	386.0	289.3	225.4	149.7	131.7	118.7	63.8
10.50V	3552.1	2647.4	1809.5	1199.0	630.4	377.1	282.3	221.4	184.5	130.7	116.7	63.0
10.80V	3506.2	2577.5	1741.6	1196.0	613.5	369.1	276.3	217.5	181.5	127.7	115.7	62.7
11.10V	3442.4	2492.8	1661.8	1187.0	605.5	368.1	273.3	216.5	180.5	126.7	112.7	60.8

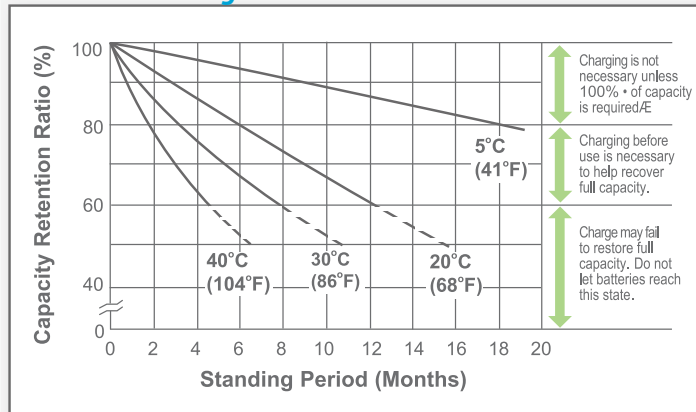
### Battery Charging Characteristics for Standby Use



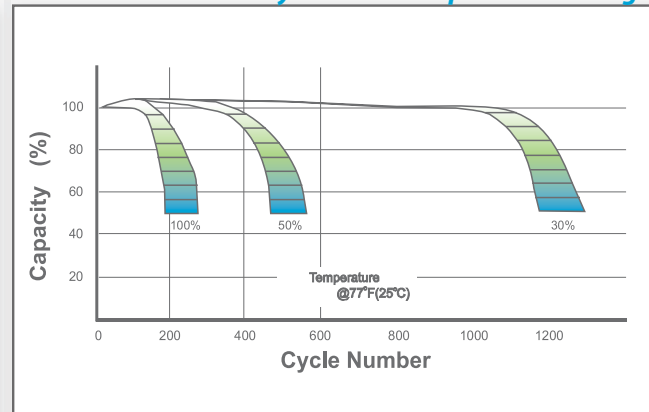
### Battery Charging Characteristics for Cyclic Use



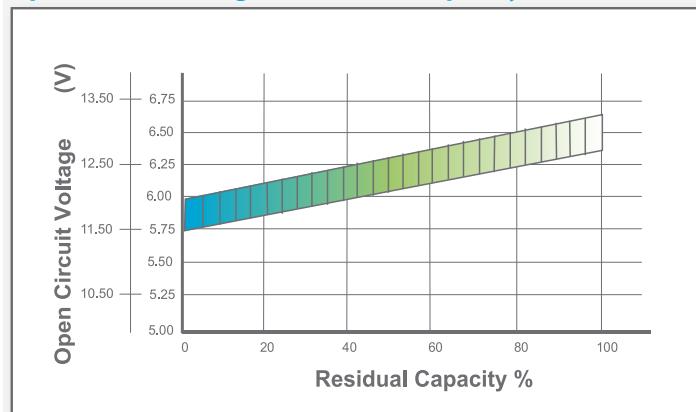
### Shelf Life & Storage



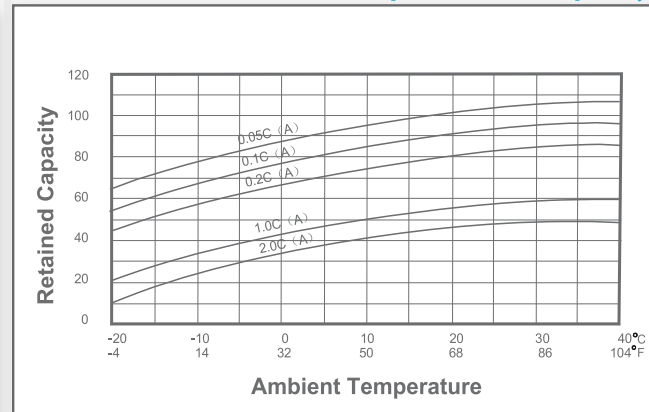
### Cycle Life vs Depth of Discharge



### 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	Discharge	0.2C<(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C	
Standby	25°C(77°F)	2.325	2.30-2.35							



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