

UPG Sealed Lead-Acid Battery

STAY POWERED®

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. 46103

UB12900

Maintenance-Free

Specification

Nominal Voltage		12 volts	
Nominal Capacity		90° F (25° C)	
20-hr. (4.50 A)		90.0 Ah	
10-hr. (8.37 A)		83.7 Ah	
5-hr. (15.3 A)		76.5 Ah	
1-hr. (54.0 A)		54.0 Ah	
Approximate Weight		63.9 lbs (29 kgs)	
Internal Resistance (approx.)		5.0 mΩ	
Shelf Life (% of normal capacity at 68° F (20° C))			
3 Months	6 Months	12 Months	
91%	82%	64%	
Temperature Dependency of Capacity		(20 hour rate)	
104° F (40°C)	77° F (25°C)	32° F (0°C)	5° F (-15°C)
102%	100%	85%	65%
AGM Operational Temperature			
Charge		32°F to 104°F (0°C to 40°C)	
Discharge		5°F to 113°F (-15°C to 45°C)	
AGM Storage Temperature		5°F to 104°F (-15°C to 40°C)	



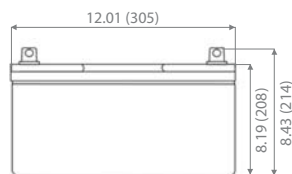
Due to continuous improvements to our products, product may vary slightly from depiction.

Charge Method (Constant Voltage)

Cycle Use (Repeating Use)

Initial Current	27 A or smaller
Control Voltage	14.6 - 14.8 V
Float Use	
Control Voltage	13.6 - 13.8 V

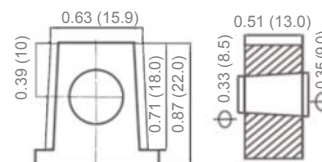
Physical Dimensions: in (mm)



L: 12.01 in (305 mm)
W: 6.61 in (168 mm)
H: 8.19 in (208 mm)
TH: 8.43 in (214 mm)
Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

Terminals

Z Series (Z Post)



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

F.V/Time	5MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	319.42	174.76	108.45	66.70	32.82	27.38	16.41	10.87	9.19	4.77
1.67V	303.30	172.72	106.80	65.53	31.75	26.99	15.83	10.68	9.10	4.74
1.70V	288.35	167.28	106.02	65.24	30.68	26.89	15.44	10.58	8.91	4.68
1.75V	262.33	163.50	104.95	63.88	29.71	26.31	15.05	10.39	8.83	4.59
1.80V	239.32	156.21	101.94	62.91	28.64	26.31	14.66	10.19	8.74	4.54

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

F.V/Time	5MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	3523.81	2000.0	1252.4	773.1	366.29	282.29	210.29	144.48	118.83	67.90
1.67V	3365.62	1966.6	1218.0	762.7	356.00	274.86	208.10	142.95	117.42	67.29
1.70V	3127.62	1883.4	1172.3	749.7	348.57	265.14	205.05	141.05	115.76	66.61
1.75V	2839.24	1792.0	1124.7	733.9	336.00	258.29	200.48	139.05	114.01	65.89
1.80V	2547.05	1690.6	1099.1	715.2	325.14	254.86	197.62	136.67	101.71	64.34

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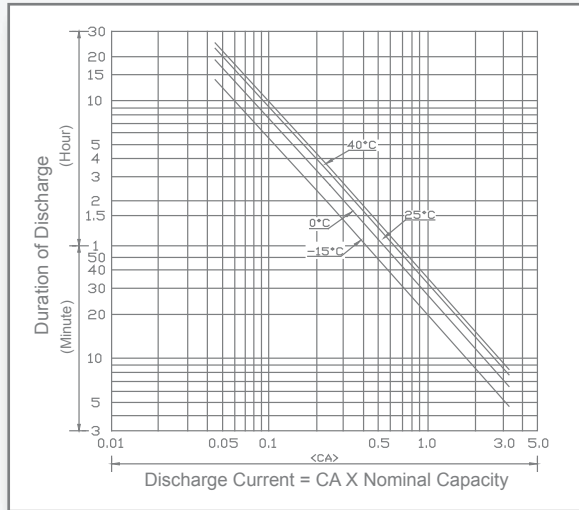
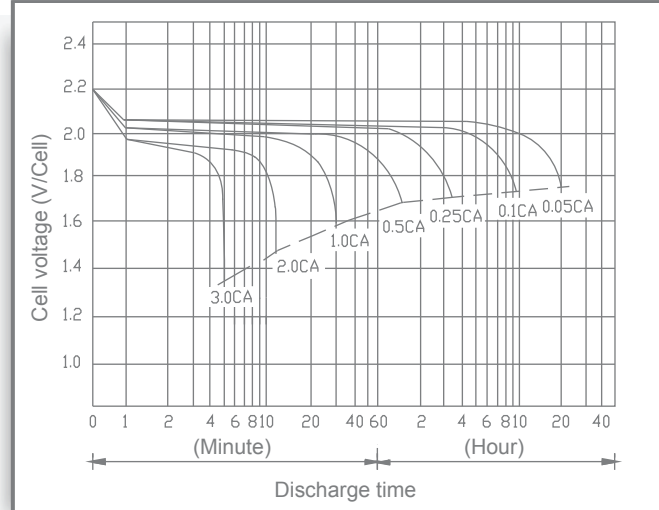
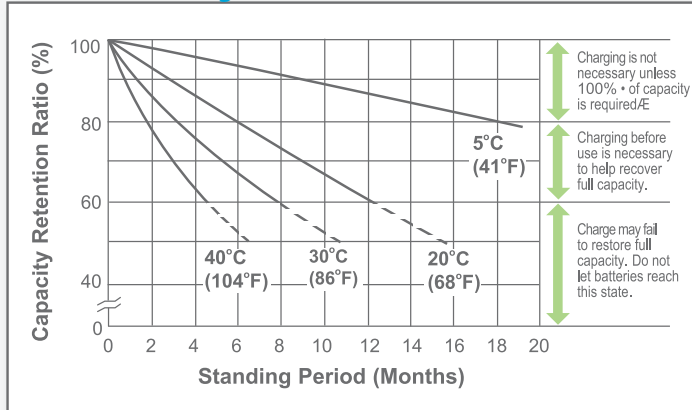
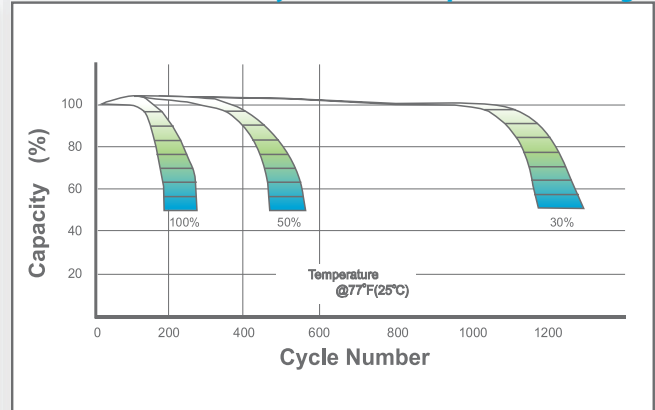
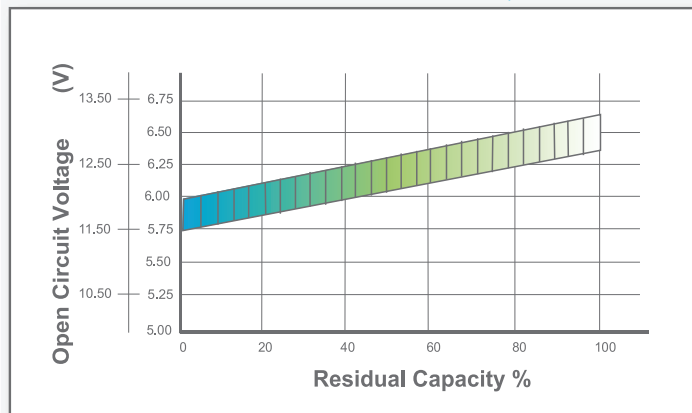
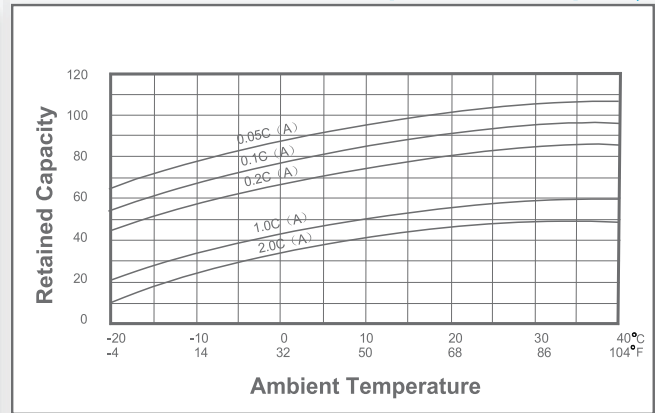
UPG is ISO 9001 Certified.

Made in Vietnam

All specifications subject to change without notice.

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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
	Temperature	Set Point	Allowable Range	
Cycle Use	25℃(77°F)	2.45	2.43~2.47	0.30C
Standby	25℃(77°F)	2.28	2.27~2.30	

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.30
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C