

universal battery® GEL TYPE

Gelled Silica 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.

UBU-1

Maintenance-Free

Specification

Nominal Voltage		12 volts	
Nominal Capacity		77° F (25° C)	
20-hr. (1.65A)		33.0 Ah	
10-hr. (3.00A)		30.7 Ah	
5-hr. (5.60A)		28.0 Ah	
1-hr. (19.8A)		19.8 Ah	
Approximate Weight		20.9 lbs (9.48 kgs)	
Internal Resistance (approx.)		12mΩ	
Shelf Life (% of normal capacity at 77° F (25° C))			
3 Months		6 Months	12 Months
91%		82%	64%
Temperature Dependency of Capacity		(20 hour rate)	
104° F	77° F	32° F	5° F
102%	100%	85%	65%
GEL Operational Temperature			
Charge		32°F to 113°F (0°C to 45°C)	
Discharge		5°F to 131°F (-15°C to 55°C)	
GEL Storage Temperature		5°F to 104°F (-15°C to 40°C)	
UPG Recommends		32°F to 86°F (0°C to 30°C) Storage	



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

Charge Method (Constant Voltage)

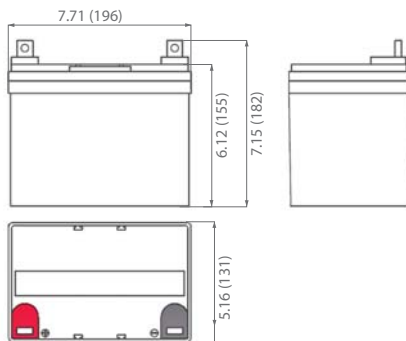
Cycle Use (Repeating Use)

Initial Current	6.6 A or smaller
Control Voltage	14.2 - 14.4 V

Float Use

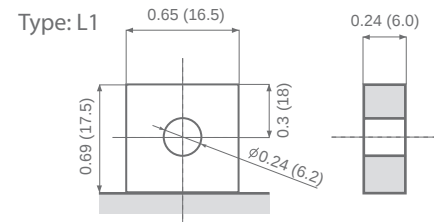
Control Voltage	13.2 - 13.4 V
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Physical Dimensions: in (mm)



L: 7.71 in (196 mm)
W: 5.16 in (131 mm)
H: 6.12 in (155 mm)
TH: 7.15 in (182 mm)
 Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

Terminals



Polarity
 Right - Negative

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

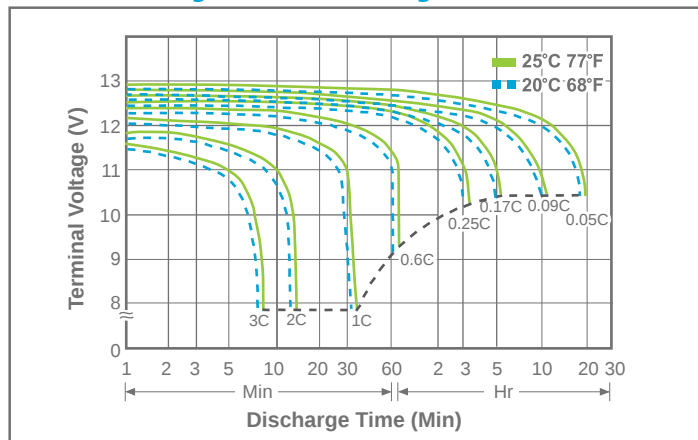
F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR
9.60	77.4	59.4	46.5	31.2	18.9	116	8.07	5.48	3.65	3.05	1.60
9.90	75.1	57.6	45.6	30.6	18.5	115	8.03	5.45	3.64	3.03	1.59
10.2	73.5	56.4	44.6	30.0	18.1	114	7.95	5.40	3.62	3.02	1.58
10.5	71.2	54.6	43.2	29.0	17.6	113	7.87	5.35	3.61	3.01	1.58
10.8	60.4	53.0	42.4	28.5	17.2	112	7.79	5.29	3.60	3.00	1.58

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

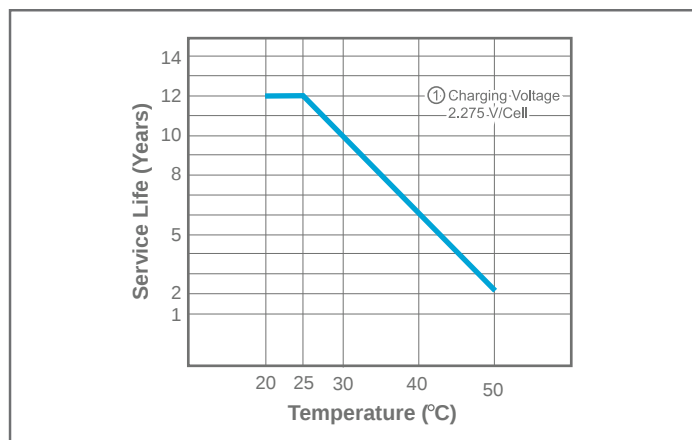
F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR
9.60	813	642	511	350	215	134	94.9	64.8	43.8	36.4	19.2
9.90	788	622	500	343	213	133	94.4	64.5	43.6	36.2	19.1
10.2	772	609	490	336	207	132	93.5	63.8	43.5	36.0	19.0
10.5	748	590	475	326	200	131	92.6	63.2	43.3	35.9	18.9
10.8	634	573	466	319	196	129	91.6	62.6	43.2	35.8	18.9



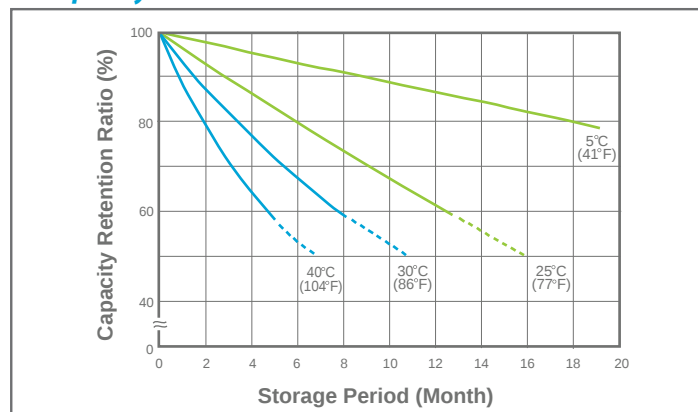
Terminal Voltage (V) and Discharge Time



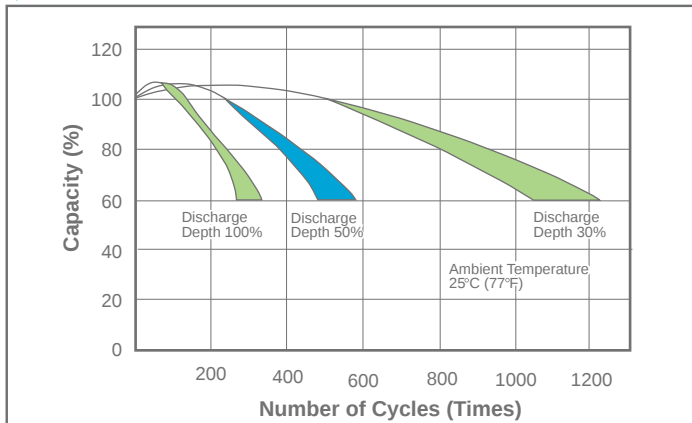
Trickle (or float) Service Life



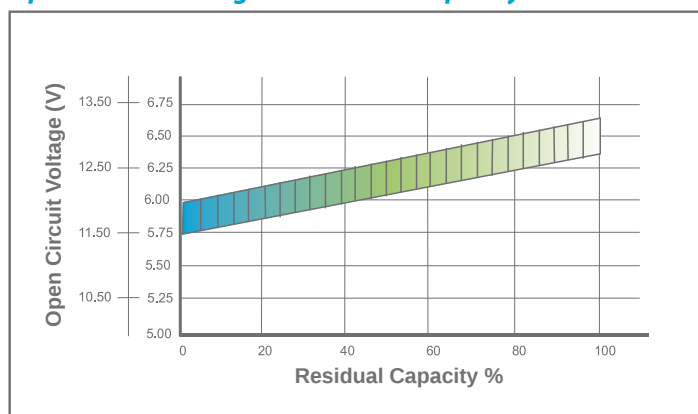
Capacity Retention Characteristic



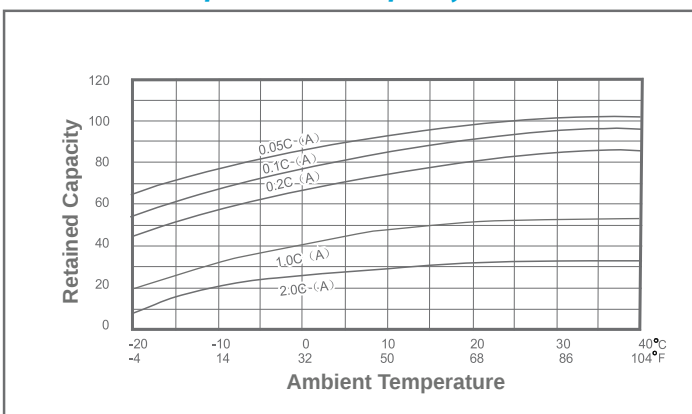
Cycle Service Life



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	1.75	1.70	1.60	1.30
	Temperature	Set Point	Allowable Range						
Cycle Use	25°C (77°F)	2.40	2.36~2.40	0.20C	Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C
Standby	25°C (77°F)	2.23	2.20~2.23						



ISO 9001:2008

Let UPG Power Your Life.

www.upgi.com

488 S. Royal Lane | Coppell, Texas 75019 | P 469.892.1122 | T 866.892.1122 | F 469.892.1123 | sales@upgi.com