Kinetik® PRO GEL

UPG No. 47600

KU1

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.

Maintenance - Free

Specification

Nominal Voltage	12 volts
Nominal Capacity	77º F (25º C)
20-hr. (1.55A)	31.0 Ah
10-hr. (2.88A)	28.8 Ah
5-hr. (5.26A)	26.3 Ah
1-hr. (18.6A)	18.6 Ah
Approximate Weight	22.5 lbs (10.2 kgs)
Internal Resistance (approx.)	12mΩ

Shelf Life (% of normal capacity at 77º F (25º C))

3 Months	6 Months	12 Months
91%	82%	64%

Temperature Dependancy of Capacity (20 hour rate)

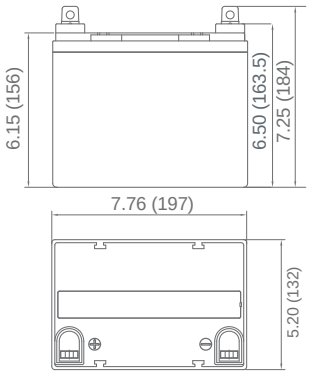
104º F	77º F	32º F	5º F
102%	100%	85%	65%

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 Recomends	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

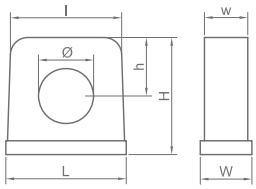
Physical Dimensions in (mm)



L: 7.76 in (197 mm)
W: 5.20 in (132 mm)
H: 6.15 in (156 mm)
TH: 7.25 in (184 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 (Lead Flag)

Type \ Dimension	L	l	W	w	H	h	Ø
L	17.5	16.16	7.5	6.3	17	8.5	8

Polarity
Left - Positive

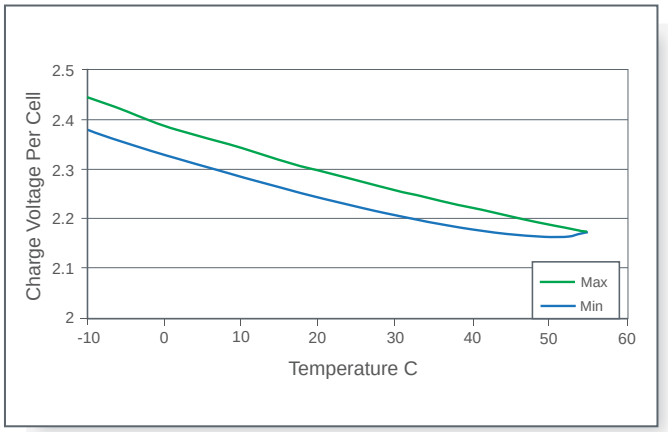
Constant Power Discharge - Watts per cell @ 20-25˚C

End V per Cell	5M	10M	15M	20M	25M	30M	35M	40M	45M	60M	90M	2 hr	3 hr	4 hr
1.85	142	102	83.1	70.3	60.7	53.6	48.2	43.8	40.2	32.0	22.7	17.7	12.4	9.7
1.80	151	109	88.8	75.0	64.8	57.3	51.5	46.7	42.9	34.2	24.3	18.9	13.2	10.4
1.75	161	116	94.5	79.8	69.0	60.9	54.7	49.7	45.6	36.4	25.8	20.1	14.1	11.0
1.70	164	118	96.6	81.6	70.5	62.3	55.9	50.8	46.6	37.2	26.4	20.5	14.4	11.3
1.67	166	119	97.4	82.3	71.1	62.8	56.4	51.3	47.1	37.5	26.6	20.7	14.5	11.4
1.65	166	120	97.8	82.6	71.4	63.1	56.7	51.5	47.2	37.7	26.7	20.8	14.6	11.4
1.60	168	121	99	83.4	72.1	63.7	57.2	52.0	47.7	38.0	27.0	21.0	14.7	11.5

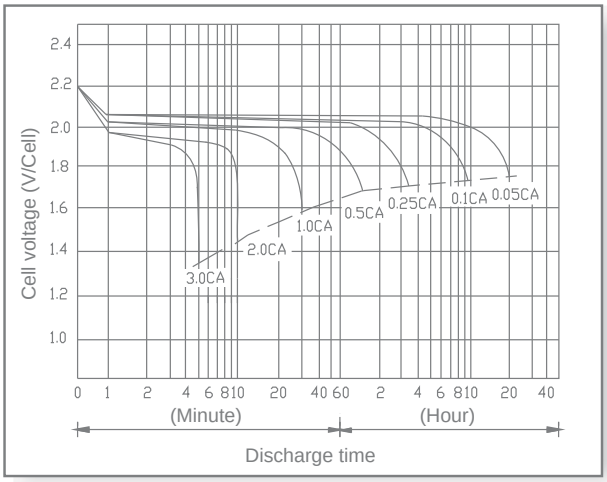
Constant Amps Discharge @ 20-25˚C

End V per Cell	5M	10M	15M	20M	25M	30M	35M	40M	45M	60M	90M	2 hr	3 hr	4 hr	5 hr	6 hr	7 hr	8 hr	10 hr	12 hr	20 hr
1.85	89.2	60.1	47.4	39.2	33.7	29.6	26.5	24.0	21.9	17.6	12.8	10.18	7.37	5.88	4.90	4.24	3.75	3.34	2.80	2.42	1.57
1.80	95.3	64.2	50.6	41.9	36.0	31.6	28.3	25.6	23.4	18.8	13.7	10.9	7.87	6.28	5.23	4.53	4.00	3.57	2.99	2.58	1.67
1.75	101.4	68.3	53.8	44.6	38.3	33.6	30.1	27.2	24.9	20.0	14.6	11.6	8.37	6.68	5.57	4.81	4.26	3.80	3.18	2.74	1.78
1.70	103.6	69.8	55.0	45.6	39.2	34.3	30.8	27.8	25.4	20.4	14.9	11.8	8.56	6.82	5.69	4.92	4.35	3.88	3.25	2.80	1.82
1.67	104.5	70.4	55.5	46.0	39.5	34.6	31.1	28.1	25.7	20.6	15.0	11.9	8.63	6.88	-	-	-	-	-	-	-
1.65	104.9	70.7	55.7	46.1	39.7	34.8	31.2	28.2	25.8	20.7	15.1	12.0	8.67	6.91	-	-	-	-	-	-	-
1.60	106	71.4	56.2	46.6	40.1	35.1	31.5	28.4	26.0	20.9	15.2	12.1	8.75	6.98	-	-	-	-	-	-	-

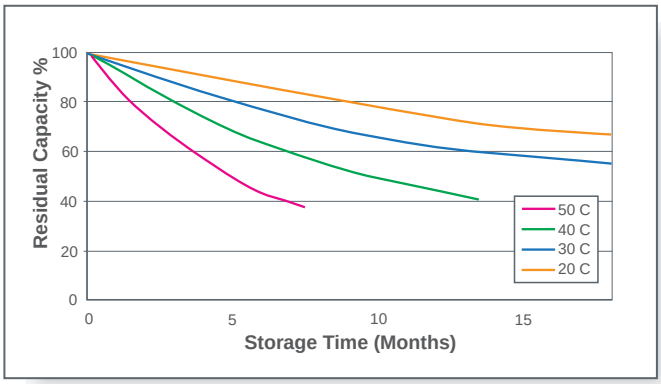
Relationship Between Charge Voltage and Temperature



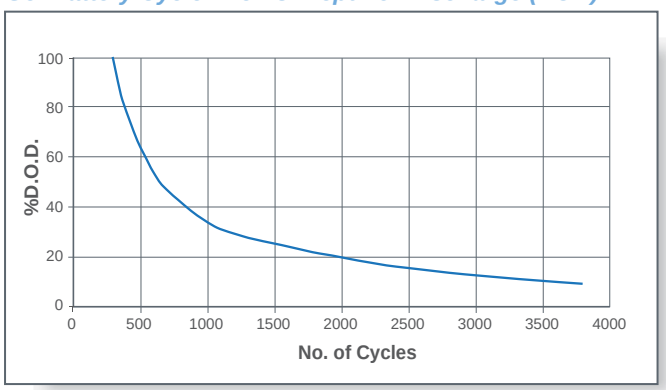
Discharge Characteristics



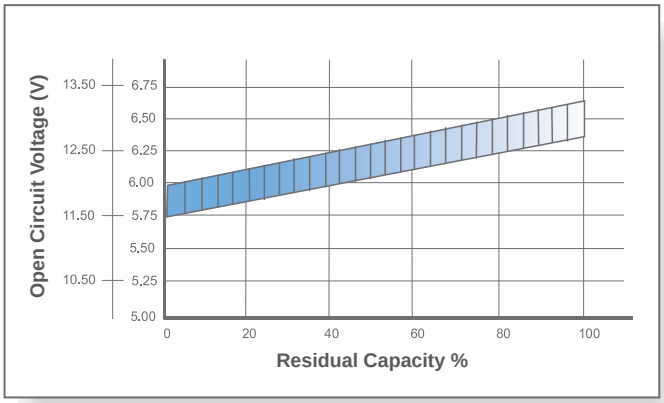
Self-Discharge Caracteristics



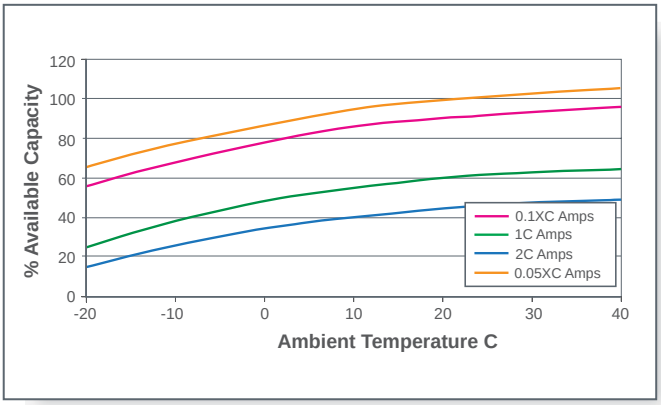
Gel Battery Cycle Life Vs. Depth of Discharge (DOD)



Open Circuit Voltage vs Residual Capacity



Capacity Vs Ambient Temperature



Charge Current & Final Discharge Voltage

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25℃(77℉)	2.40	2.36~2.40	0.20C
Standby	25℃(77℉)	2.23	2.20~2.23	

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