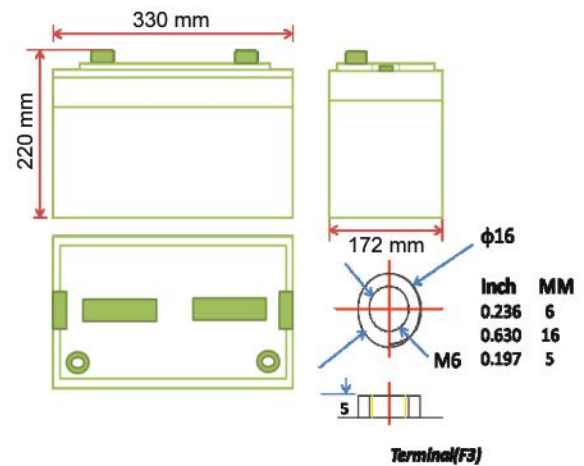




# Azimuth Solar Products Inc.

## Ultra Long Life 12V 108Ah Battery BULL12108L



### Specifications

### Ultra Long Life Battery 12V 108Ah

Battery Type	SiO <sub>2</sub> Composite Electrolyte Battery
Nominal Capacity (25°C/77°F)	108 Ah (1296 Wh) @ 20 Hour
Nominal Voltage	12V
Max Charge Current	27A
Max Charge Voltage	14.7V
Max Discharge Current (25°C/77°F)	1000A(5S)
Internal Resistance (25°C/77°F)	=< 6 mΩ
Depth of Discharge	100% DOD
Operational Temperature	-40°C to 65°C (-40°F to 149°F)
Self Discharge (25°C/77°F)	< 1.6% per Month
Life Cycle	3400 Cycles at 40% DOD; 1500 Cycles at 80% DOD; 620 Cycles at 100% DOD
Dimensions	33 x 17.2 x 22 cm (13 x 6.77 x 8.66")
Weight	31.5 kg (69.4 lbs)
Manufacturer	Soneil International Ltd.
Warranty	2 Years Workmanship





### DISCHARGE CURRENT & END DISCHARGE VOLTAGE

Discharge Current (A)	=>0.05C	~ 0.05C	~ 0.01C	~ 0.02C	0.02-0.5C	0.5-1C	1-3C	>3C
Final Discharge Voltage (V/Cell)	11.4	11.1	10.8	10.5	10.2	9.6	9.0	7.8

### CONSTANT CURRENT DISCHARGE CHARACTERISTICS UNITS AMPERES (25°C/77°F)

*Time (Minutes)*

End Voltage per Cell (V)	5	15	30	45	60	120	180	240	300	360	480	600	720	1200	1440
1.6	366.96	194.2	117.34	85.55	68.9	39.48	28.67	22.49	19.18	16.3	12.43	10.35	8.68	5.65	4.62
1.67	341.04	187.84	115.6	84.96	68.78	39.31	28.15	22.37	18.9	16.19	12.41	10.23	8.67	5.64	4.6
1.7	337.56	184.96	114.44	83.81	68.21	38.96	27.98	22.25	18.61	16.01	12.37	10.23	8.64	5.62	4.6
1.75	309.24	179.16	113.3	83.24	67.05	38.21	27.86	21.97	18.44	15.9	12.31	10.12	8.6	5.6	4.59
1.8	277.44	167.6	108.66	80.92	65.32	37.63	27.75	21.91	18.21	15.72	12.25	10	8.56	5.4	4.58
1.83	265.2	153.76	106.94	78.04	62.43	37.28	26.65	20.98	17.8	15.14	11.99	9.6	8.21	5.35	4.52
1.85	248.52	149.12	100	75.15	60.69	35.78	25.95	20.69	17.34	14.64	11.85	9.48	8.09	5.29	4.48

### DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL (25°C/77°F)

*Time (Minutes)*

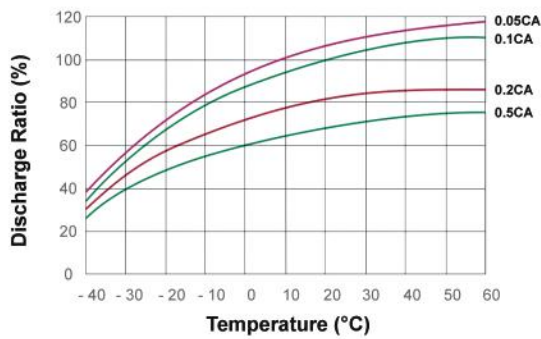
End Voltage per Cell (V)	5	15	30	45	60	120	180	240	300	360	480	600	720	1200	1440
1.6	613.2	341	219.62	160.09	128.79	74.56	54.5	43.17	36.47	31.33	24.16	20	16.82	11.21	9.19
1.67	583.73	335.79	210.74	158.94	128.36	74.56	53.81	43.12	36.47	31.27	24.16	19.94	16.82	11.21	9.19
1.7	580.26	333.48	210.25	158.94	127.72	73.98	53.5	42.96	35.89	31.04	23.99	19.77	16.65	11.15	9.19
1.75	540.38	329.43	209.7	158.94	127.15	73.4	52.93	42.88	35.78	30.81	23.87	19.63	16.65	11.15	9.13
1.8	495.89	312.67	206.33	156.05	126.57	73.4	52.22	42.77	35.54	30.81	23.81	19.54	16.65	10.87	9.13
1.83	478.54	287.24	204.6	151.42	121.37	72.82	51.36	41.32	35.14	29.82	23.81	18.96	16.36	10.75	9.07
1.85	443.29	280.88	190.15	145.65	117.9	71.09	50.57	40.8	34.16	29.24	22.89	18.78	16.07	10.63	9.02



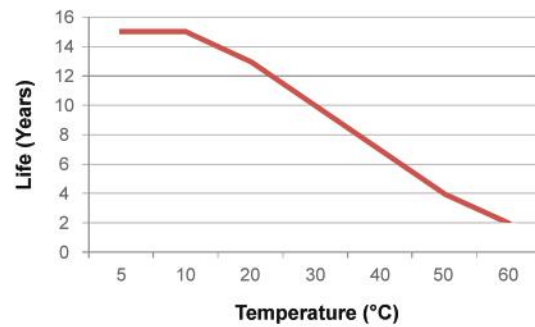
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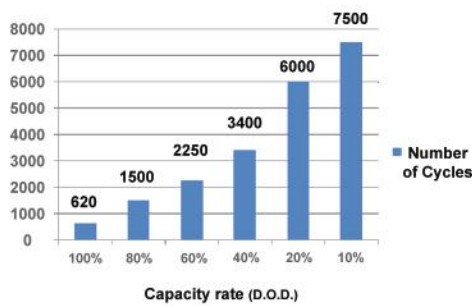
### TEMPERATURE AND DISCHARGE CAPACITY



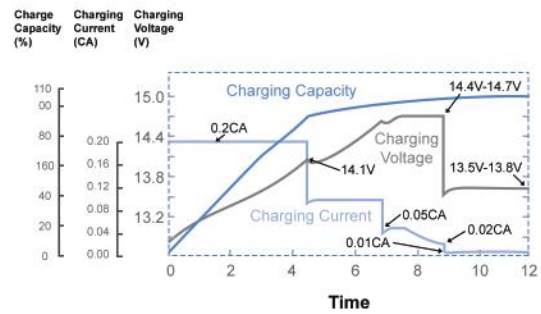
### FLOAT SERVICE LIFE CURVE GRAPH



### CYCLE LIFE GRAPH (25°C/77°F)



### CHARGE CHARACTERISTICS (25°C/77°F)



D.O.D.	100%	80%	60%	40%	20%	10%
Cycles	620	1500	2250	3400	6000	7500

### TEMPERATURE & FLOAT SERVICE LIFE

