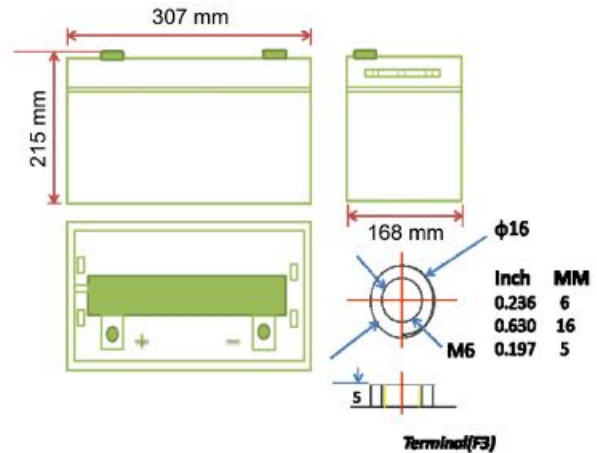




Azimuth Solar Products Inc.

Ultra Long Life 12V 100Ah Battery BULL12100N



Specifications

Ultra Long Life Battery 12V 100Ah

Battery Type	SiO ₂ Composite Electrolyte Battery
Nominal Capacity (25°C/77°F)	100 Ah (1200 Wh) @ 20 Hour
Nominal Voltage	12V
Max Charge Current	25A
Max Charge Voltage	14.7V
Max Discharge Current (25°C/77°F)	900A(5S)
Internal Resistance (25°C/77°F)	=< 6.8 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	30.7 x 16.8 x 21.5 cm (12.08 x 6.61 x 8.46")
Weight	27 kg (59.5 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	330.26	174.78	105.61	76.99	62.01	35.53	25.8	20.24	17.26	14.67	11.18	9.31	7.82	5.09	4.16
1.67	306.94	169.06	104.04	76.46	61.9	35.38	25.34	20.13	17.01	14.57	11.17	9.21	7.8	5.07	4.14
1.7	303.8	166.46	103	75.43	61.39	35.06	25.18	20.03	16.75	14.41	11.13	9.21	7.78	5.06	4.14
1.75	278.32	161.24	101.97	74.92	60.35	34.39	25.07	19.78	16.6	14.31	11.08	9.1	7.74	5.04	4.13
1.8	249.7	150.84	97.79	72.83	58.79	33.87	24.97	19.72	16.39	14.15	11.03	9	7.7	4.86	4.12
1.83	238.68	138.38	96.25	70.24	56.19	33.55	23.98	18.88	16.02	13.63	10.79	8.64	7.39	4.81	4.07
1.85	223.67	134.21	90	67.63	54.62	32.2	23.36	18.62	15.61	13.18	10.67	8.53	7.28	4.76	4.03

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

Time (Minutes)

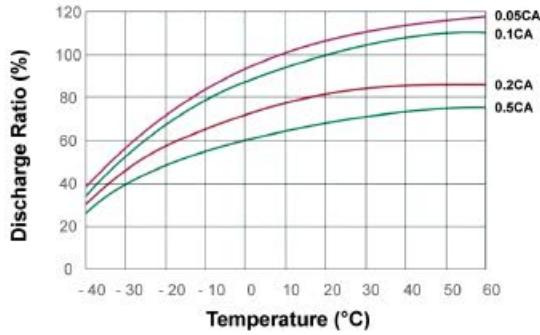
End Voltage per Cell (V)	5	15	30	45	60	120	180	240	300	360	480	600	720	1200	1440
1.6	551.88	306.9	197.66	144.08	115.91	67.1	49.05	38.86	32.82	28.19	21.74	18	15.14	10.09	8.27
1.67	525.36	302.21	189.67	143.05	115.52	67.1	48.43	38.8	32.82	28.14	21.74	17.95	15.14	10.09	8.27
1.7	522.23	300.13	189.23	143.05	114.95	66.58	48.15	38.66	32.3	27.93	21.59	17.79	14.98	10.04	8.27
1.75	486.35	296.49	188.73	143.04	114.44	66.06	47.63	38.6	32.2	27.72	21.48	17.67	14.98	10.04	8.22
1.8	446.3	281.4	185.7	140.44	113.92	66.06	46.99	38.49	31.99	27.72	21.43	17.58	14.98	9.78	8.22
1.83	430.69	258.52	184.14	136.28	109.23	65.54	46.23	37.19	31.63	26.84	21.43	17.06	14.72	9.68	8.17
1.85	398.96	252.79	171.13	131.09	106.11	63.98	45.51	36.72	30.74	26.32	20.6	16.91	14.46	9.57	8.11



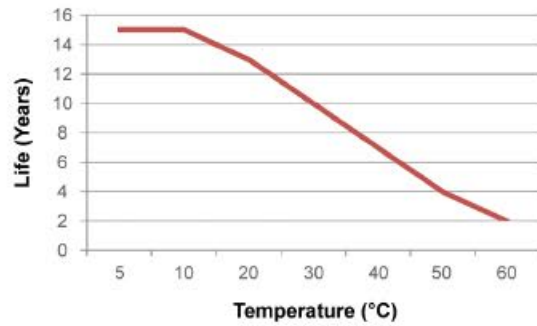
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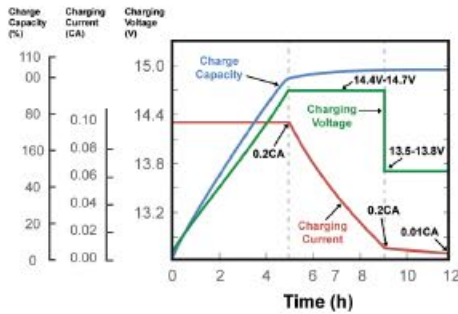
TEMPERATURE AND DISCHARGE CAPACITY



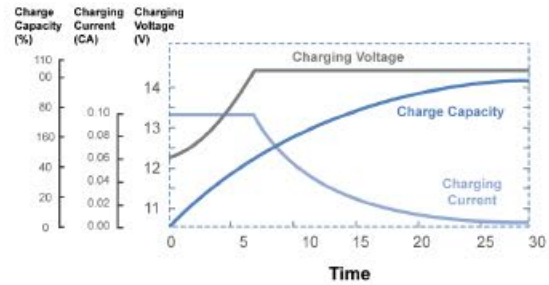
FLOAT SERVICE LIFE CURVE GRAPH



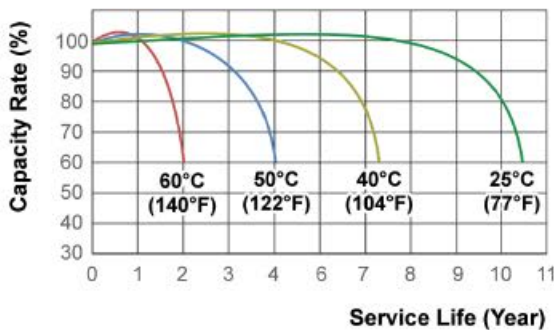
CYCLE CHARGE CHARACTERISTICS (25°C/77°F)



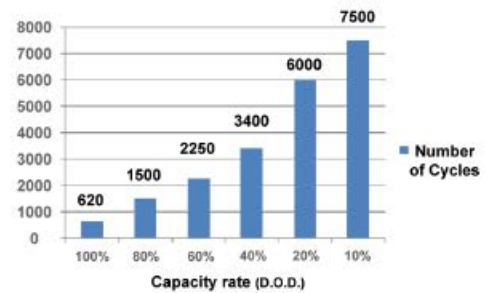
FLOATING CHARGE CHARACTERISTICS (25°C/77°F)



TEMPERATURE & FLOAT SERVICE LIFE



CYCLE LIFE GRAPH (25°C/77°F)



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