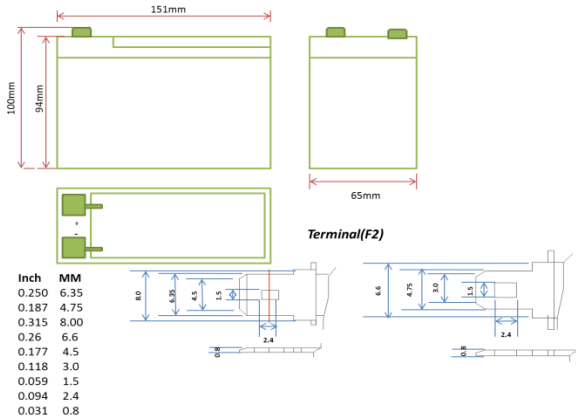


# ECO-FRIENDLY ADVANCE TECHNOLOGY BATTERY



## 12- EFSN -9, 12V 9Ah@20HR

### DIMENSION



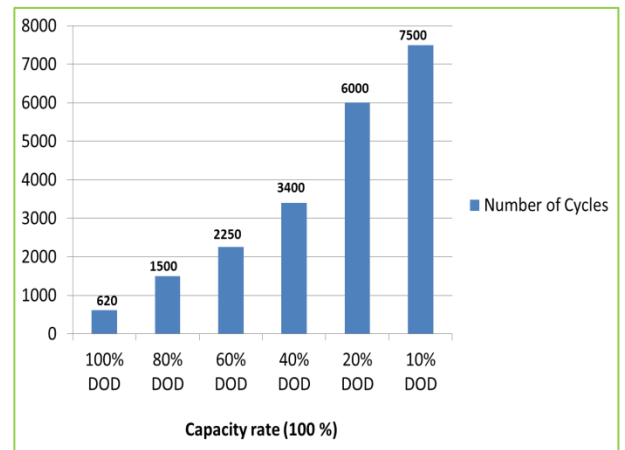
### SPECIFICATIONS

<b>Nominal Voltage</b>	<b>12V</b>	
<b>Rated Capacity (20 hour rate)</b>	<b>9.0AH</b>	
<b>Dimension</b>	Total Height (with terminals)	100 mm
	Height	94mm
	Length	151mm
	Width	65mm
<b>Weight</b>	Approx.2.55Kg(5.6Lbs)	
<b>Capacity (77°F/25°C)</b>	10 hour rate (0.82A)	8.2AH
	5 hour rate (1.44A)	7.2AH
<b>Internal Resistance (77°F/25°C)</b>	Full Charged Battery	30mΩ
<b>Self-Discharge (77°F/25°C)</b>	After 3 months Storage	95%
	After 6 months storage	85%
	After 12 months storage	80%
<b>Max Discharge Current (77°F/25°C)</b>	82A(5S)	
<b>Terminal</b>	Standard	F2
	Optional	F1
<b>Charging (Constant Voltage)</b>	Cycle	14.4V-14.7V (77°F/25°C)
	Float	13.5V-13.8V (77°F/25°C)

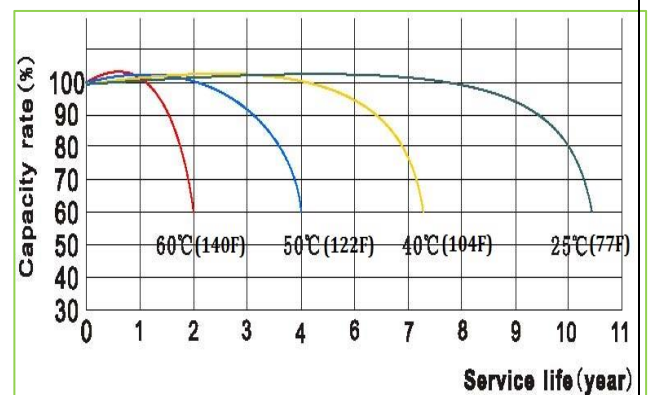
### DISCHARGE CURRENT & END DISCHARGE VOLTAGE

Discharge Current (A)	Final Discharge Voltage (V/Cell)
0.05C or below or intermittent discharge	11.4
0.05C of current close to it	11.1
0.1C of current close to it	10.8
0.2C of current close to it	10.5
0.2C-0.5C	10.2
0.5C-1C	9.6
1C-3C	9.0
>3C	7.8

### CYCLE LIFE GRAPH (25°C/77°F)



### TEMPERATURE & FLOAT SERVICE LIFE



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

**Time (Mins)**

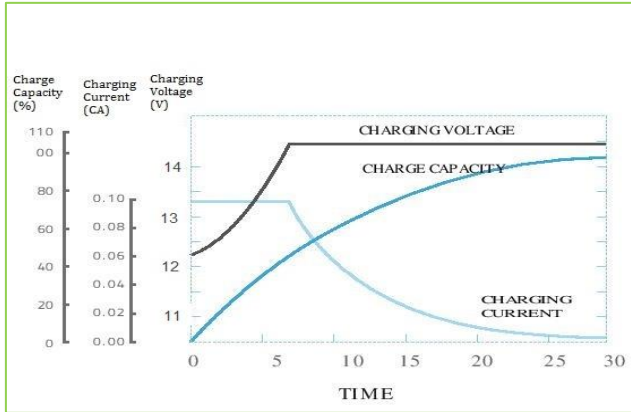
End Voltage per cell (V)	5	15	30	45	60	120	180	240	300	360	480	600	720	1200	1440
1.60	30.09	15.92	9.62	7.01	5.65	3.24	2.35	1.84	1.57	1.34	1.02	0.85	0.71	0.46	0.38
1.67	27.97	15.40	9.48	6.97	5.64	3.22	2.31	1.83	1.55	1.33	1.02	0.84	0.71	0.46	0.38
1.70	27.68	15.17	9.38	6.87	5.59	3.19	2.29	1.82	1.53	1.31	1.01	0.84	0.71	0.46	0.38
1.75	25.36	14.69	9.29	6.83	5.50	3.13	2.28	1.80	1.51	1.30	1.01	0.83	0.71	0.46	0.38
1.80	22.75	13.74	8.91	6.64	5.36	3.09	2.28	1.80	1.49	1.29	1.00	0.82	0.70	0.44	0.38
1.83	21.75	12.61	8.77	6.40	5.12	3.06	2.19	1.72	1.46	1.24	0.98	0.79	0.67	0.44	0.37
1.85	20.38	12.23	8.20	6.16	4.98	2.93	2.13	1.70	1.42	1.20	0.97	0.78	0.66	0.43	0.37

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

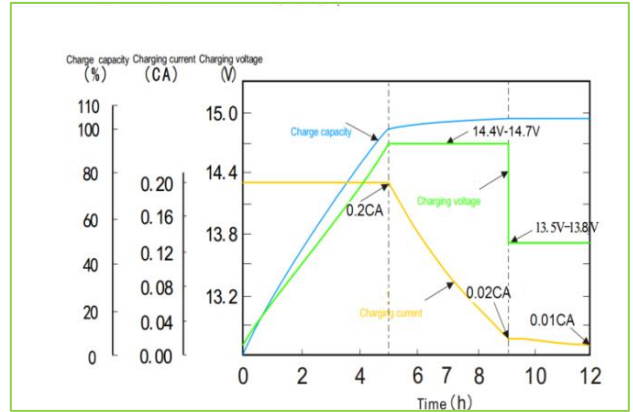
**Time (Mins)**

End Voltage per cell (V)	5	15	30	45	60	120	180	240	300	360	480	600	720	1200	1440
1.60	50.28	27.96	18.01	13.13	10.56	6.11	4.47	3.54	2.99	2.57	1.98	1.64	1.38	0.92	0.75
1.67	47.87	27.53	17.28	13.03	10.53	6.11	4.41	3.54	2.99	2.56	1.98	1.64	1.38	0.92	0.75
1.70	47.58	27.35	17.24	13.03	10.47	6.07	4.39	3.52	2.94	2.54	1.97	1.62	1.36	0.91	0.75
1.75	44.31	27.01	17.20	13.03	10.43	6.02	4.34	3.52	2.93	2.53	1.96	1.61	1.36	0.91	0.75
1.80	40.66	25.64	16.92	12.80	10.38	6.02	4.28	3.51	2.91	2.53	1.95	1.60	1.36	0.89	0.75
1.83	39.24	23.55	16.78	12.42	9.95	5.97	4.21	3.39	2.88	2.45	1.95	1.55	1.34	0.88	0.74
1.85	36.35	23.03	15.59	11.94	9.67	5.83	4.15	3.35	2.80	2.40	1.88	1.54	1.32	0.87	0.74

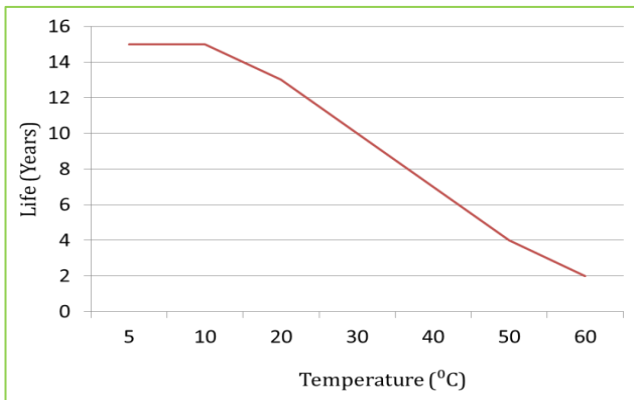
**FLOATING CHARGE CHARACTERISTICS (25°C/77°F)**



**CYCLE CHARGE CHARACTERISTIC (25°C/77°F)**

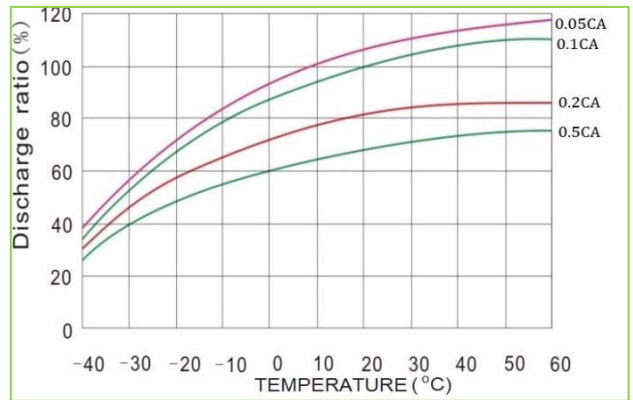


**FLOAT SERVICE LIFE CURVE GRAPH**



**Soneil Chargers Recommended**

**TEMPERATURE AND DISCHARGE CAPACITY**



“Specifications subject to change without notice “

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