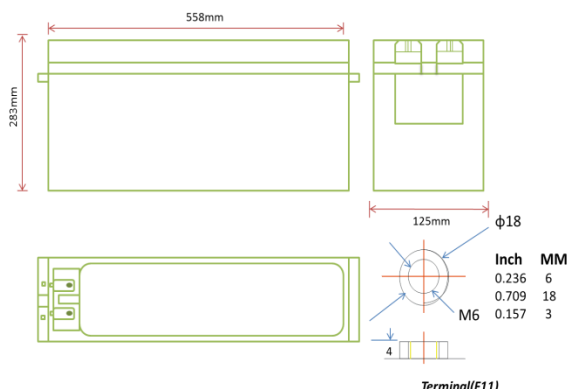


ECO-FRIENDLY ADVANCE TECHNOLOGY BATTERY



12- EFSM -168, 12V 168Ah@20HR

DIMENSION



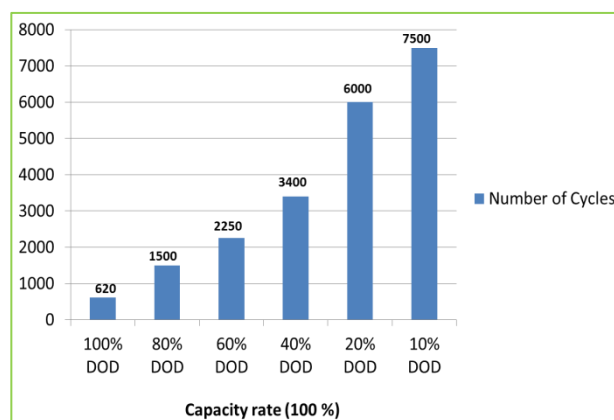
DISCHARGE CURRENT & END DISCHARGE VOLTAGE

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

SPECIFICATIONS

Nominal Voltage		12V
Rated Capacity (20 hour rate)		168AH
Dimension	Total Height (with terminals)	283 mm
	Height	283 mm
	Length	558 mm
	Width	125 mm
Weight	Approx.	50.Kg (110.13Lbs)
Capacity (77°F/25°C)	10 hour rate (15.5A)	155AH
	5 hour rate (26.4A)	132AH
Internal Resistance (77°F/25°C)	Full Charged Battery	4.5 mΩ
Self-Discharge (77°F/25°C)	After 3 months Storage	95%
	After 6 months storage	85%
	After 12 months storage	80%
Max Discharge Current (77°F/25°C)	1550A(5S)	
Terminal	Standard	F11
	Optional	
Charging (Constant Voltage)	Cycle	14.4V-14.7V (77°F/25°C)
	Float	13.5V-13.8V (77°F/25°C)

CYCLE LIFE GRAPH (25°C/77°F)



TEMPERATURE & FLOAT SERVICE LIFE



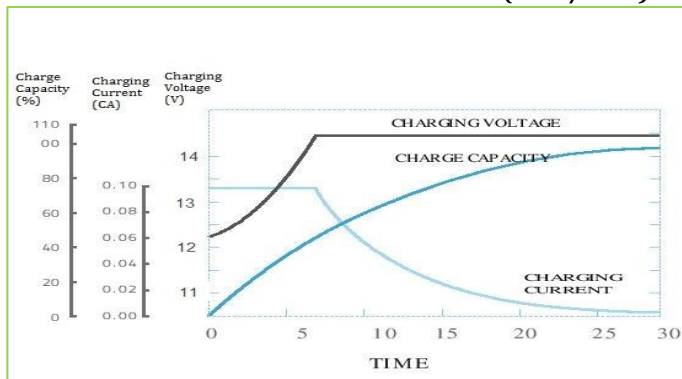
CONSTANT CURRENT DISCHARGE CHARACTERISTICS UNITS AMPERES (25°C/77°F)

End Voltage per cell (V)	Time (Mins)														
	5	15	30	45	60	120	180	240	300	360	480	600	720	1200	1440
1.60	568.79	301.01	181.88	132.60	106.80	61.19	44.44	34.85	29.73	25.27	19.26	16.04	13.46	8.76	7.16
1.67	528.61	291.15	179.18	131.69	106.61	60.93	43.63	34.67	29.30	25.09	19.24	15.86	13.44	8.74	7.13
1.70	523.22	286.69	177.38	129.91	105.73	60.39	43.36	34.49	28.85	24.82	19.17	15.86	13.40	8.71	7.12
1.75	479.32	277.70	175.62	129.02	103.93	59.22	43.18	34.06	28.58	24.64	19.08	15.68	13.33	8.67	7.11
1.80	430.03	259.78	168.42	125.43	101.24	58.33	43.01	33.96	28.22	24.37	18.99	15.50	13.26	8.38	7.10
1.83	411.06	238.33	165.76	120.96	96.77	57.79	41.30	32.52	27.60	23.47	18.59	14.87	12.72	8.29	7.00
1.85	385.21	231.14	155.00	116.48	94.07	55.46	40.23	32.07	26.88	22.70	18.37	14.69	12.54	8.20	6.94

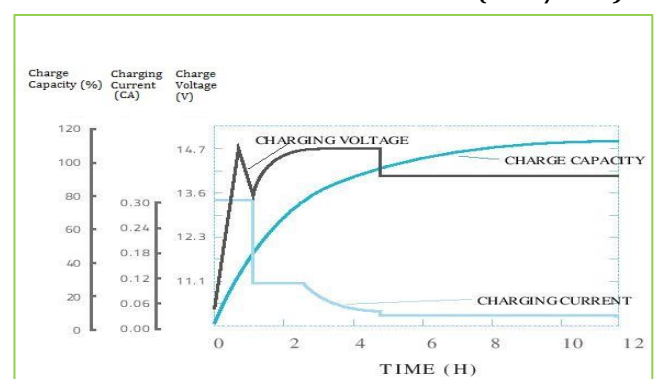
DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL (25°C/77°F)

End Voltage per cell (V)	Time (Mins)														
	5	15	30	45	60	120	180	240	300	360	480	600	720	1200	1440
1.60	950.45	528.54	340.42	248.14	199.62	115.56	84.48	66.92	56.53	48.55	37.45	31.00	26.07	17.38	14.24
1.67	904.78	520.48	326.65	246.36	198.95	115.56	83.40	66.83	56.53	48.46	37.45	30.91	26.07	17.38	14.24
1.70	899.40	516.89	325.89	246.36	197.97	114.67	82.92	66.58	55.63	48.11	37.18	30.64	25.80	17.29	14.24
1.75	837.60	510.62	325.04	246.35	197.08	113.77	82.04	66.47	55.45	47.75	37.00	30.43	25.80	17.29	14.15
1.80	768.63	484.64	319.81	241.87	196.19	113.77	80.94	66.29	55.09	47.75	36.91	30.28	25.80	16.84	14.15
1.83	741.74	445.23	317.13	234.71	188.12	112.87	79.61	64.05	54.47	46.23	36.91	29.38	25.35	16.66	14.06
1.85	687.10	435.37	294.73	225.76	182.75	110.19	78.39	63.25	52.94	45.33	35.48	29.11	24.90	16.48	13.98

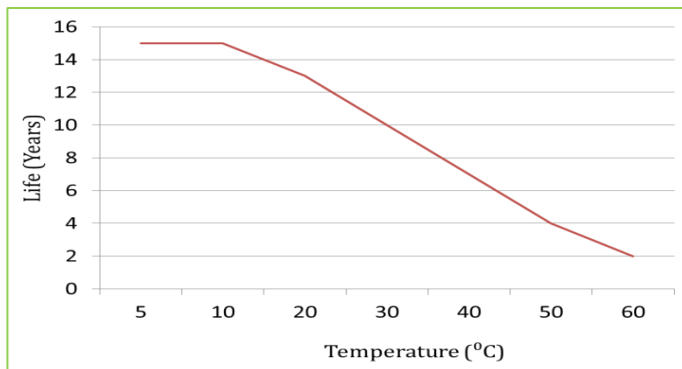
FLOATING CHARGE CHARACTERISTICS (25°C/77°F)



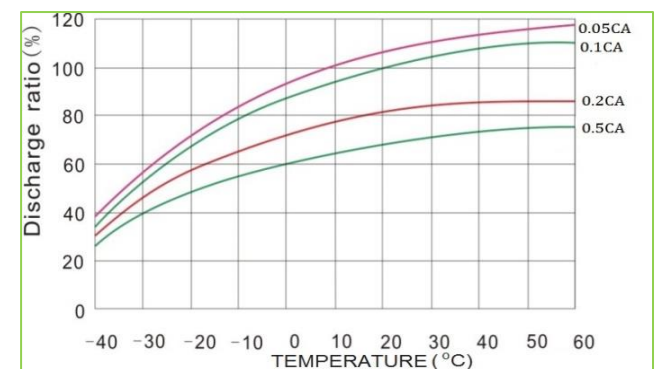
CYCLE CHARGE CHARACTERISTIC (25°C/77°F)



Float Service Life Curve Graph



Soneil Chargers Recommended TEMPERATURE AND DISCHARGE CAPACITY



"Specifications subject to change without notice"

Domestic & International Sales: Tel: +1 905 565 0360, Fax: +1 905 799 6821, Email: info@soneil.com

Corporate Office: 180 Advance Blvd, Unit 3, Brampton, Ontario, Canada L6T 4J4



www.soneil.com