

Product Features

Deep Cycle High Power Series 600 Cycles @ 80%DOD / 400 @ 100%

↑10%W/2hr
Discharging Power
High Rate Formula

>40Wh/kg
Energy Density
Special Paste Formula

↑40%
Power Output Area
High Density Grouping

↓50%
Grid Corrosion
Rare-earth patent alloy



Product Applications



Solar



Golf Buggy



Golf Trolley



Caravan



Motorhome



Mower



Motor Boat



Sail Boat



Mobility Scooter



Floor Cleaner



Palet Truck

Physical Specifications

Model	Dimensions (±2mm/inch)				Weight (±2%kg/lbs)	Terminal	Container
ADC12-15EV	Length	Width	Height	Total Height	4.10/9.04	T2-1	ABS UL94-HB (Optional: FR ABS UL94-V0)
	151/5.94	99/3.89	98/3.85	104/4.09			

Product Specifications

Nominal Voltage	Rated Capacity _{25 °C} /77 °F	Operating Temp.Range	Capacity Effected Temp	Capacity vs Storage Time
12V	15.0Ah 20hr Rate (1.80V/cell)	Discharge: -15 °C~50 °C (5 °F~122 °F)	40 °C (104 °F):106%	Three months : 90% Six months : 80% Nine months : 60%
	14.3Ah 10hr Rate (1.80V/cell)	Charge: 0 °C~40 °C (32 °F~104 °F)	25 °C (77 °F):100%	
	13.9Ah 5hr Rate (1.75V/cell)	Storage: -15 °C~40 °C (5 °F~104 °F)	0 °C (32 °F):85%	
	12.4Ah 3hr Rate (1.75V/cell)	Optimum: 25 °C ± 2 °C (77 °F±5 °F)	-15 °C (5 °F):72%	

Constant Current Discharge (A) @ 25 °C (77 °F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	17.7	14.5	10.6	6.05	4.38	3.38	2.74	2.29	1.74	1.40	0.74
1.80V/cell	18.1	14.8	10.8	6.14	4.44	3.42	2.76	2.32	1.76	1.43	0.75
1.75V/cell	18.5	15.0	10.9	6.20	4.49	3.44	2.78	2.33	1.77	1.43	0.75
1.70V/cell	18.8	15.2	11.1	6.27	4.52	3.46	2.80	2.35	1.78	1.44	0.76
1.67V/cell	19.2	15.5	11.2	6.32	4.54	3.47	2.80	2.35	1.78	1.44	0.76
1.60V/cell	19.7	15.7	11.3	6.41	4.57	3.49	2.81	2.36	1.79	1.44	0.76

Constant Power Discharge (W/cell) @ 25 °C (77 °F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	28.7	21.0	12.1	8.76	6.77	5.48	4.59	3.48	2.81	2.81	1.47
1.80V/cell	29.2	21.4	12.3	8.87	6.84	5.53	4.64	3.52	2.85	2.85	1.50
1.75V/cell	29.8	21.7	12.4	8.96	6.88	5.56	4.66	3.53	2.86	2.86	1.50
1.70V/cell	30.2	22.0	12.5	9.02	6.91	5.58	4.68	3.55	2.87	2.87	1.51
1.67V/cell	30.6	22.2	12.6	9.05	6.93	5.59	4.69	3.55	2.87	2.87	1.51
1.60V/cell	38.5	31.0	22.4	12.8	9.09	6.95	5.60	4.70	3.56	2.88	1.51

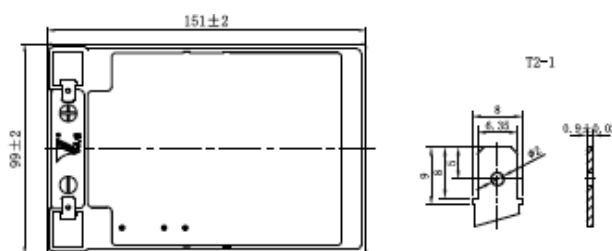
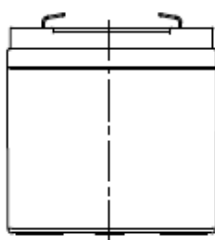


Figure 1 is a graph showing the typical load regulation characteristics of the device. The Y-axis represents Voltage (V) from 8.0 to 13.0. The X-axis represents Time, with a scale from 1 to 20 minutes and 1 to 20 hours. The graph plots Voltage (V) versus Time for various load currents (0.05C, 0.10C, 0.20C, 0.40C, 1C, 2C, 3C) and temperatures (0.40C, 0.60C, 1C, 2C, 3C). The curves show that the voltage decreases over time, with higher temperatures and higher load currents resulting in a faster voltage drop.

Temperature: 25°C/77°F

Voltage V

Current A

14.75V-14.90V

13.7V-13.9V

1.5-1.8A

0.4A

0.2A

(6h-8h)

10h

Charging Time (h)

Depth of Discharge (DOD)	Cycle Life (Times)
40%	1500
50%	1200
60%	950
70%	750
80%	600
90%	500
100%	450

Cycle Life (Times)	Capacity (%)
0	100
50	108
100	110
150	108
200	105
250	100
300	92
350	82
400	72
450	60

The graph shows the relationship between battery capacity and temperature. The y-axis represents Capacity (%) from 40 to 100. The x-axis represents Temperature in both °C (-20 to 60) and °F (-4 to 140). The capacity starts at about 60% at -20°C and rises steadily, exceeding 100% capacity at temperatures above 30°C.

Temperature (°C)	Temperature (°F)	Capacity (%)
-20	-4	60
-10	14	72
0	32	82
10	50	92
20	68	98
30	86	102
40	104	104
50	122	106

Storage Time (months)	40°C (104°F)	30°C (86°F)	20°C (68°F)	10°C (50°F)
0	100	100	100	100
4	50	-	-	-
9	-	50	-	-
15	-	-	50	-
24	-	-	-	50

Limited Current	Limited Voltage	Floating Voltage
Limited current: $\leq 0.12\text{CA}$	14.75V~14.85V @ 25 °C (77 °F) Temp.Coefficient: -24mV/°C	13.7V~13.9V @ 25 °C (77 °F) Temp.Coefficient: -18mV/°C