

Deep Cycle Long Life Series 400~600 Cycle Times @100%DOD

↑10% Capacity Improve the content and utilization of active substances, Direct Bar-welding	Carbon Fiber	Rare-earth alloy
	↑15% Discharge Power Positive Carbon Fiber	↓50% Grid Corrosion Rare-earth patent alloy

Product Applications



Physical Specification

Model	Dimensions (mm/inch)				Weight (kg/lbs)	Terminal	Container
SPG42-12	Length	Width	Height	Total Height	11/23.8	11	ABS UL94-HB (Optional: FR ABS UL94-V0)
	195/7.68	130/5.12	157.5/6.20	162/6.38			

Product Specifications

Nominal Voltage	Rated Capacity 25°C/77°F	Operating Temp. Range	Capacity Effected Temp	Capacity vs Storage Time
12V	42Ah 20hr Rate (1.80V/cell) 40Ah 10hr Rate (1.75V/cell) 37Ah 5hr Rate (1.75V/cell) 34Ah 3hr Rate (1.75V/cell)	Discharge: -15~50°C (5~122°F) Charge: 0~40°C (32~104°F) Storage: -15~40°C (5~104°F) Optimum: 25±3°C (77±5°F)	40°C (104°F): 106% 25°C (77°F): 100% 0°C (32°F): 85% -15°C (5°F): 72%	Three months : 90% Six months : 80% Nine months : 60%

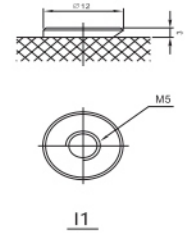
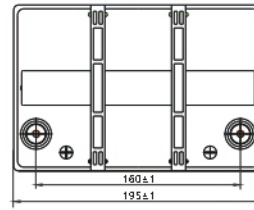
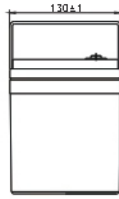
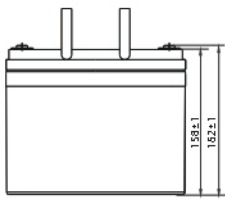
Constant Current Discharge (A)@25°C (77°F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	44.0	31.3	25.1	14.4	10.5	8.67	6.96	5.92	4.57	3.73	1.98
1.80V/cell	45.5	32.3	25.9	14.8	11.0	8.92	7.23	6.14	4.70	3.82	2.10
1.75V/cell	46.7	33.5	26.8	15.8	11.3	9.24	7.40	6.27	4.83	4.00	2.12
1.70V/cell	47.9	34.3	27.8	16.0	12.3	9.56	7.70	6.58	4.95	4.03	2.14
1.68V/cell	48.9	35.4	28.7	16.2	12.4	9.65	7.88	6.61	5.06	4.07	2.15
1.60V/cell	50.2	36.5	29.3	16.7	12.9	9.94	8.05	6.81	5.18	4.20	2.17

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

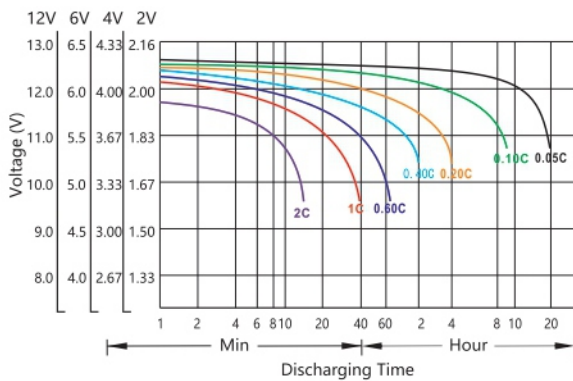
F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	85.8	61.6	49.6	28.6	21.1	17.5	14.0	12.0	9.25	7.56	4.04
1.80V/cell	88.5	63.2	51.0	29.5	22.0	17.9	14.5	12.4	9.48	7.73	4.26
1.75V/cell	90.6	65.4	52.7	31.3	22.5	18.5	14.8	12.6	9.72	8.06	4.28
1.70V/cell	92.3	66.6	54.2	31.6	24.3	19.0	15.3	13.1	9.90	8.07	4.30
1.68V/cell	93.5	68.2	55.8	31.7	24.4	19.0	15.6	13.1	10.03	8.09	4.30
1.60V/cell	95.2	69.7	56.4	32.5	25.1	19.5	15.8	13.4	10.21	8.30	4.30

Battery Dimensions(mm)

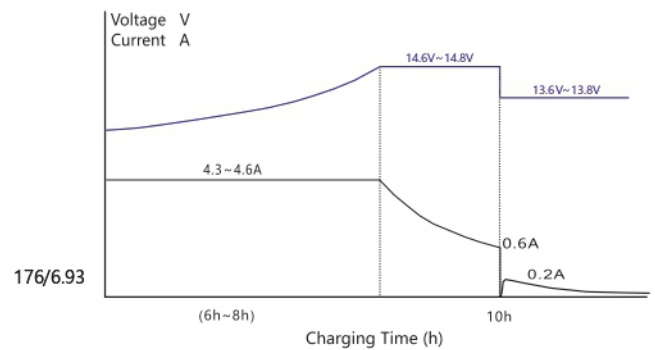


Electrical Characteristics

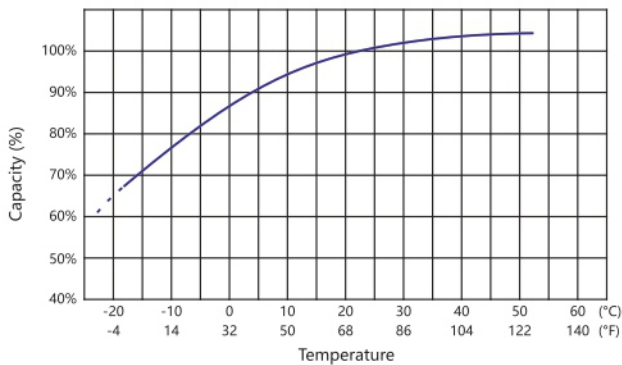
Discharging Characteristics@25°C(77°F)



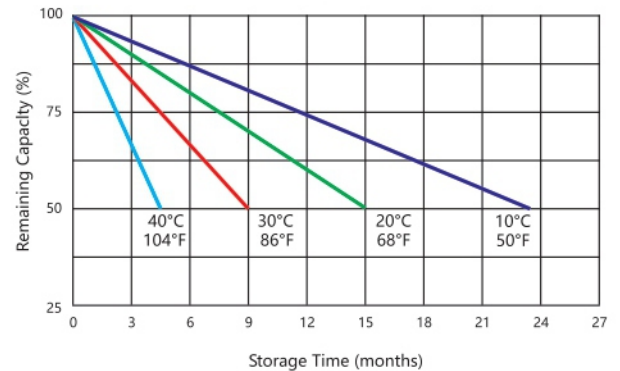
Charging Characteristics (25°C)



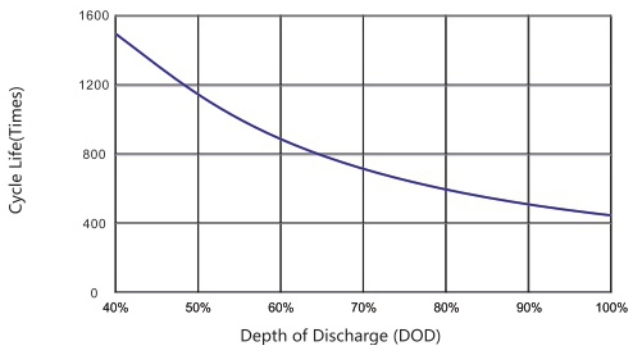
Capacity vs Temperature



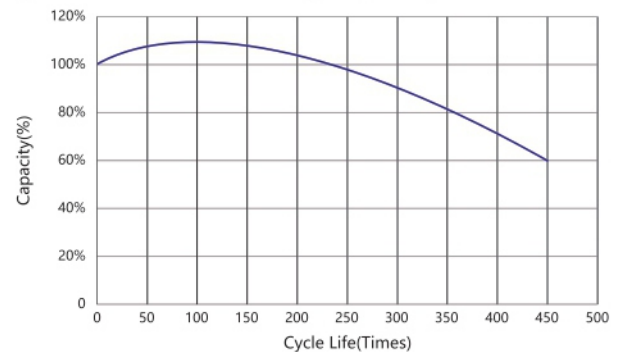
Self-discharge vs Time



Cycle Life vs Depth of Discharge@25°C(77°F)



Cycle Life vs Remaining Capacity@25°C(77°F)



Usage and Maintenance

Limited Current

Limited current: $\leq 0.15C_A$

Limited Voltage

14.6V~14.8V@25°C(77°F)
Temp.Coefficient: -24mV/°C

Floating Voltage

13.6V~13.8V@25°C(77°F)
Temp.Coefficient: -18mV/°C