



Product Features

Deep Cycle Long Life Series 500~600 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 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
TNEP12-16	Length	Width	Height	Total Height	4.3/9.48	19	ABS UL94-HB (Optional: FR ABS UL94-V0)
	151/5.94	99/3.90	98/3.86	99/3.90			

Product Specifications

Nominal Voltage	Rated Capacity 25°C/77°F	Operating Temp. Range	Capacity Effected Temp	Capacity vs Storage Time (25°C/77°F)
12V	16Ah 20hr Rate (1.80V/cell) 15.3Ah 10hr Rate (1.75V/cell) 14.5Ah 5hr Rate (1.75V/cell) 14Ah 2hr 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%

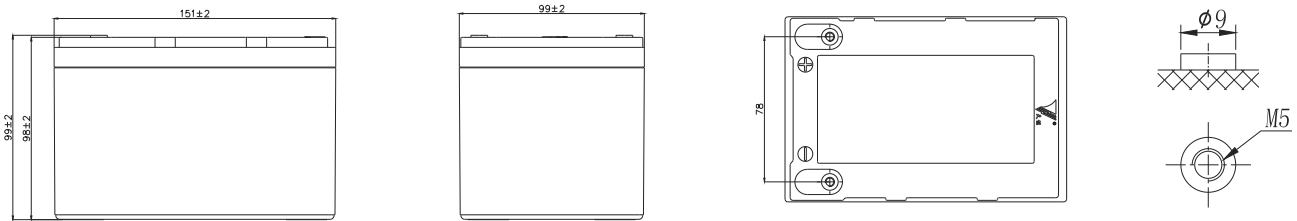
Constant Current Discharge (A)@25°C (77°F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	18.0	12.9	10.2	6.4	4.34	3.27	2.65	2.27	1.77	1.45	0.77
1.80V/cell	18.6	13.2	10.5	6.6	4.45	3.38	2.75	2.35	1.82	1.49	0.80
1.75V/cell	19.2	13.7	10.9	7.0	4.69	3.55	2.91	2.47	1.88	1.53	0.82
1.70V/cell	19.6	14.1	11.2	7.1	4.79	3.63	2.95	2.51	1.92	1.56	0.83
1.68V/cell	20.1	14.5	11.7	7.2	4.85	3.70	3.02	2.56	1.96	1.59	0.84
1.60V/cell	20.6	14.9	11.9	7.4	5.01	3.81	3.07	2.62	2.00	1.63	0.85

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

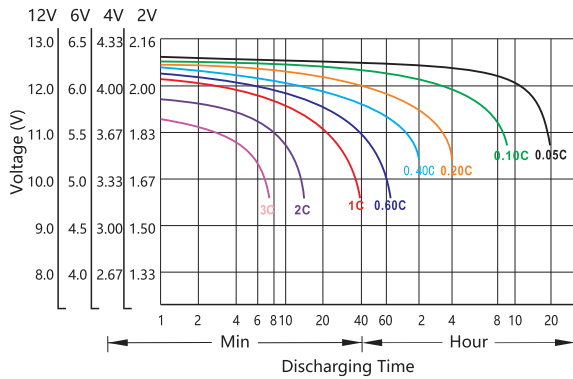
F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	35.2	25.3	20.2	12.7	8.7	6.6	5.34	4.58	3.58	2.94	1.58
1.80V/cell	36.2	25.9	20.7	13.1	8.9	6.8	5.52	4.73	3.67	3.01	1.62
1.75V/cell	37.1	26.9	21.4	13.9	9.3	7.1	5.83	4.94	3.78	3.08	1.65
1.70V/cell	37.9	27.3	22.0	14.0	9.5	7.2	5.86	5.01	3.84	3.13	1.68
1.68V/cell	38.4	28.0	22.6	14.1	9.5	7.3	6.0	5.07	3.88	3.16	1.68
1.60V/cell	39.1	28.6	22.9	14.4	9.8	7.4	6.0	5.15	3.95	3.22	1.69

Battery Dimensions(mm)

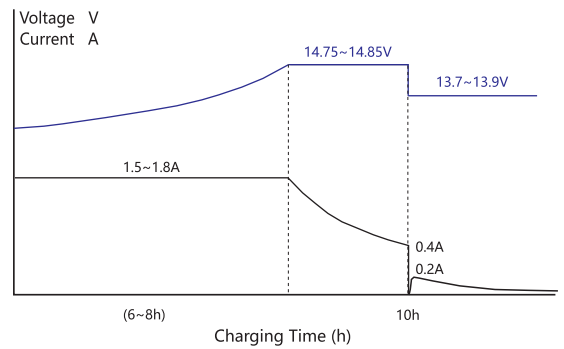


Electrical Characteristics

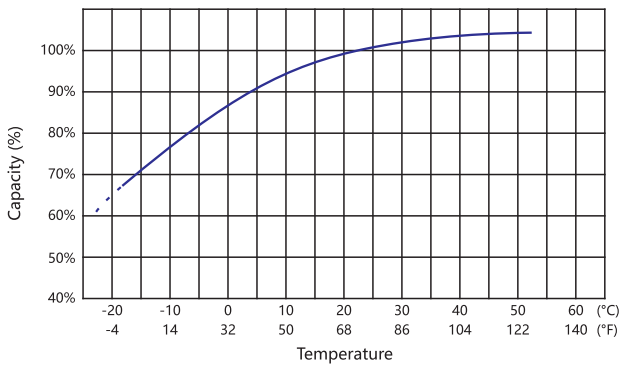
Discharging Characteristics@25°C(77°F)



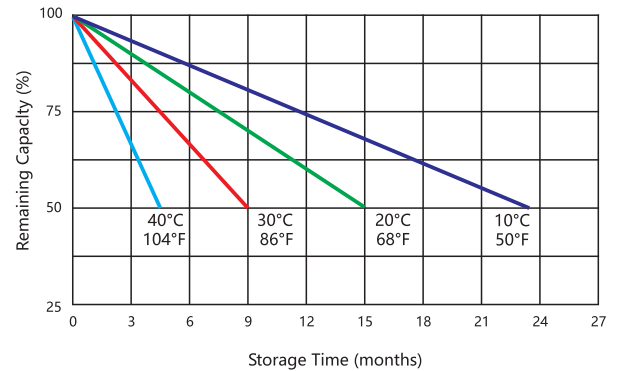
Charging Characteristics@25°C(77°F)



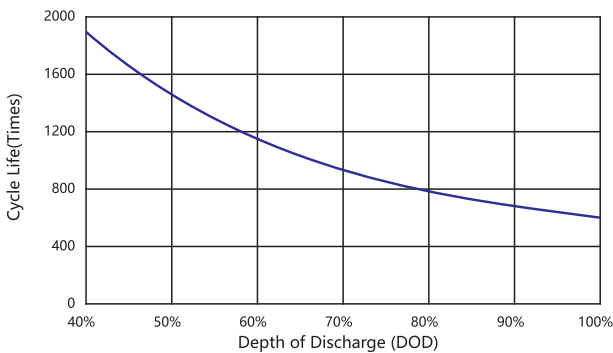
Capacity vs Temperature



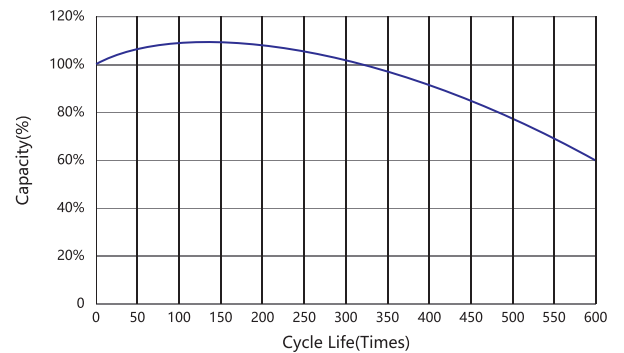
Self-discharge vs Time



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 Voltage	Floating Voltage
Limited current: $\leq 0.15C_A$	14.6V~14.8V @25°C(77°F) Temp.Coefficient: -24mV/°C	13.6V~13.8V @25°C(77°F) Temp.Coefficient: -18mV/°C