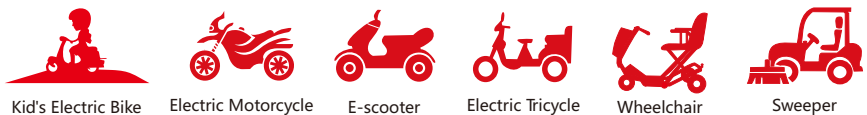




Product Features

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
TNEP12-28	Length	Width	Height	Total Height	6.8/14.99	I10	ABS UL94-HB (Optional: FR ABS UL94-V0)
	181/7.13	77/3.03	170/6.69	175/6.89			

Product Specifications

Nominal Voltage	Rated Capacity 25°C/77°C	Operating Temp. Range	Capacity Effected Temp	Capacity vs Storage Time
12V	28Ah 20hr Rate (1.80V/cell) 26Ah 10hr Rate (1.75V/cell) 24Ah 5hr Rate (1.75V/cell) 23Ah 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% 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	31.5	22.5	17.8	10.5	7.18	5.43	4.40	3.81	3.01	2.49	1.35
1.80V/cell	32.6	23.1	18.4	10.8	7.34	5.60	4.58	3.95	3.09	2.55	1.40
1.75V/cell	33.5	24.0	19.1	11.5	7.73	5.86	4.87	4.15	3.19	2.60	1.43
1.70V/cell	34.4	24.6	19.7	11.7	7.89	6.00	4.91	4.23	3.26	2.67	1.46
1.68V/cell	35.1	25.5	20.4	11.8	8.00	6.16	5.06	4.32	3.34	2.72	1.47
1.60V/cell	36.1	26.1	20.8	12.2	8.29	6.33	5.13	4.43	3.42	2.81	1.48

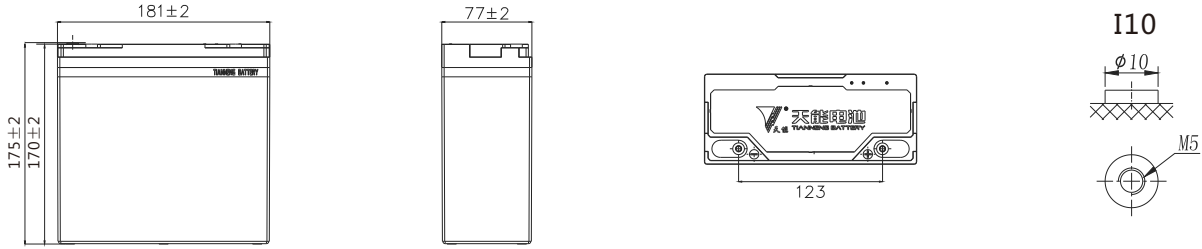
Constant Power Discharge (W/cell)@25°C (77°F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	60.5	43.5	34.6	20.9	14.3	10.9	8.82	7.59	5.98	4.92	2.66
1.80V/cell	62.3	44.5	35.5	21.5	14.6	11.2	9.12	7.85	6.12	5.03	2.74
1.75V/cell	63.8	46.2	36.8	22.8	15.4	11.7	9.65	8.20	6.29	5.13	2.78
1.70V/cell	65.1	47.0	37.8	23.0	15.6	11.9	9.70	8.31	6.40	5.23	2.83
1.68V/cell	66.0	48.2	38.9	23.1	15.7	12.1	9.9	8.42	6.48	5.28	2.84
1.60V/cell	67.2	49.1	39.3	23.7	16.1	12.3	10.0	8.56	6.59	5.40	2.85

TNEP 12-28 [12V28Ah]

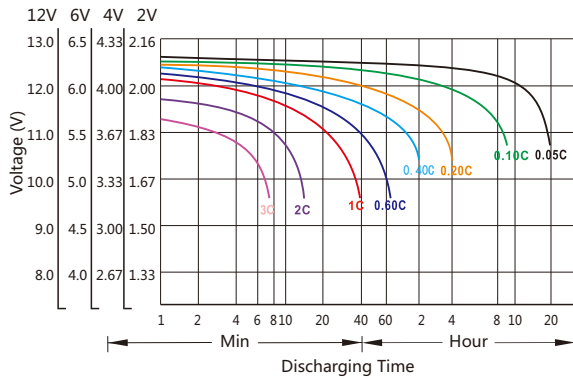


Battery Dimensions(mm)

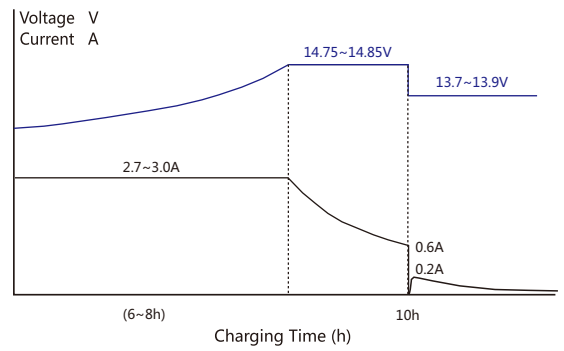


Electrical Characteristics

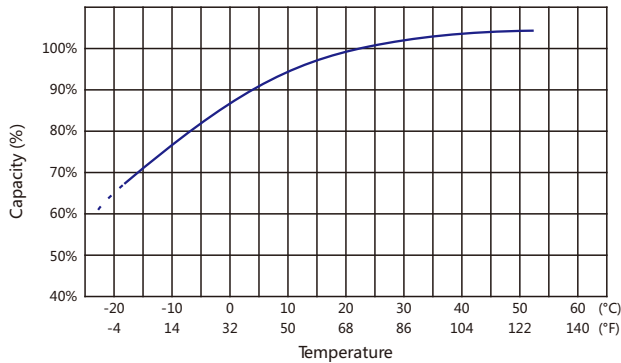
Discharging Characteristics@25°C(77°F)



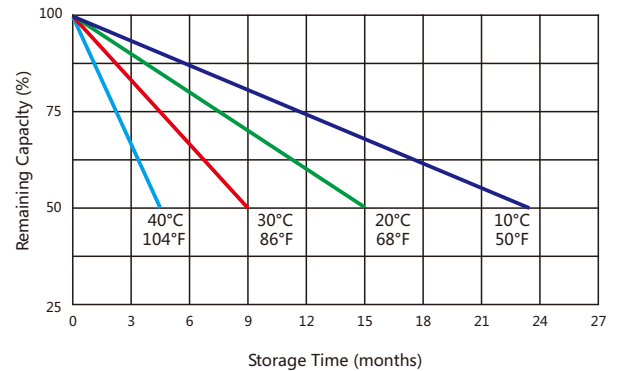
Charging Characteristics@25°C(77°F)



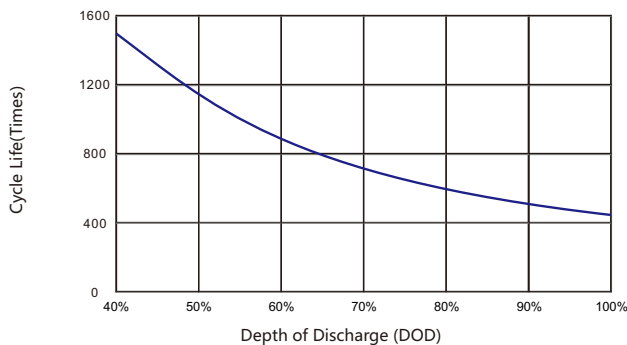
Capacity vs Temperature



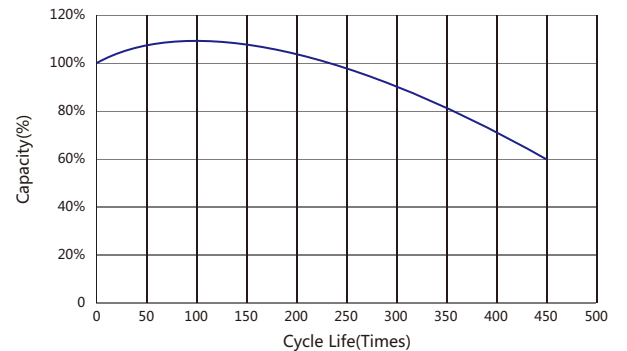
Self-discharge vs Time



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	Limited Voltage
Limited current : $\leq 0.2C_2A$	14.75~14.85V@25°C(77°F) Temp.Coefficient: -24mV/°C	13.7~13.9V@25°C(77°F) Temp.Coefficient: -18mV/°C