

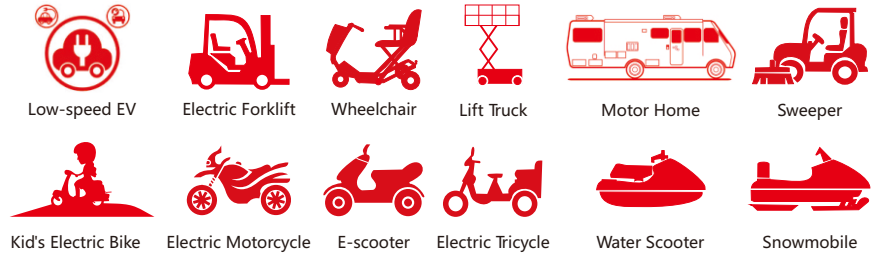
TNE 12-45L [12V45Ah]



Product Features

Deep Cycle Series		400~600 Cycle Times @100%DOD	
↑10% Energy Density Patent negative pasting formula	↓50% Grid Corrosion Rare-earth patent alloy	0% Acid stratification Nano silica gel technology	

Product Applications



Physical Specification

Model	Dimensions (mm/inch)				Weight (kg/lbs)	Terminal	Container
TNE12-45L	Length	Width	Height	Total Height	10.50/23.15	110	ABS UL94-HB (Optional: FR ABS UL94-V0)
	222/8.74	106/4.17	171/6.73	171/6.73			

Product Specifications

Nominal Voltage	Rated Capacity ^{25°C/77°C}	Operating Temp. Range	Capacity Effected Temp	Capacity vs Storage Time
12V	45Ah 20hr Rate (1.80V/cell) 42Ah 10hr Rate (1.75V/cell) 40Ah 5hr Rate (1.75V/cell) 38Ah 3hr Rate (1.75V/cell)	Discharge:-15°C~50°C (5°F~122°F) Charge:0°C~40°C (32°F~104°F) Storage:-15°C~40°C (5°F~104°F) Optimum:25°C±2°C (77°F±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	48.2	34.4	27.5	15.8	11.8	9.19	7.48	6.33	4.86	3.96	2.18
1.80V/cell	50.0	35.4	28.4	16.3	12.2	9.48	7.76	6.57	5.00	4.07	2.25
1.75V/cell	51.3	36.7	29.4	17.3	12.7	9.81	7.96	6.72	5.15	4.16	2.29
1.70V/cell	52.6	37.7	30.5	17.6	13.0	10.13	8.25	7.01	5.27	4.26	2.34
1.67V/cell	53.6	38.9	31.5	17.8	13.1	10.23	8.42	7.06	5.37	4.33	2.36
1.60V/cell	55.1	40.0	32.2	18.4	13.6	10.53	8.61	7.25	5.50	4.46	2.38

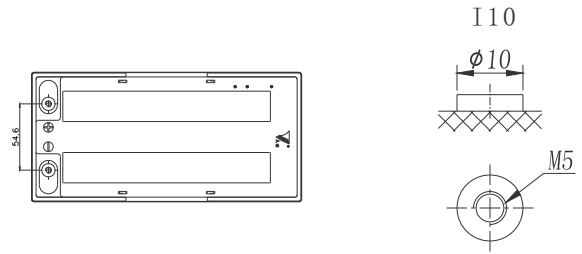
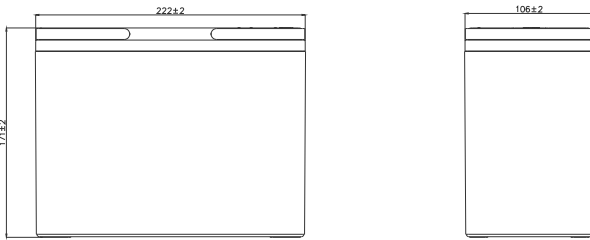
Constant Power Discharge (W/cell)@25°C (77°F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	94.2	67.6	54.5	31.4	23.6	18.5	15.1	12.8	9.84	8.03	4.43
1.80V/cell	97.2	69.4	55.9	32.4	24.4	19.0	15.6	13.2	10.10	8.23	4.56
1.75V/cell	99.4	71.8	57.8	34.3	25.2	19.6	15.9	13.5	10.35	8.38	4.63
1.70V/cell	101.3	73.1	59.5	34.6	25.6	20.1	16.4	14.0	10.54	8.54	4.71
1.67V/cell	102.6	74.9	61.2	34.8	25.8	20.2	16.6	14.0	10.65	8.61	4.73
1.60V/cell	104.5	76.6	61.9	35.7	26.4	20.6	16.9	14.2	10.84	8.80	4.75

TNE 12-45L [12V45Ah]

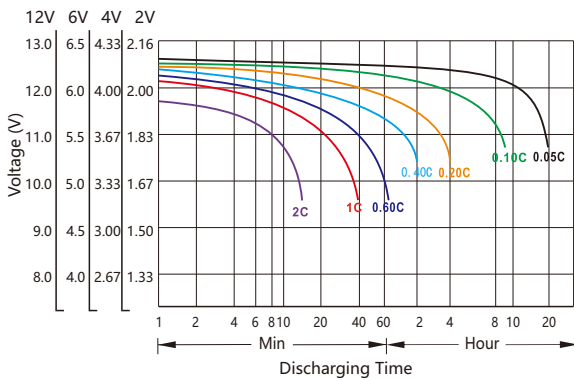


Battery Dimensions(mm)

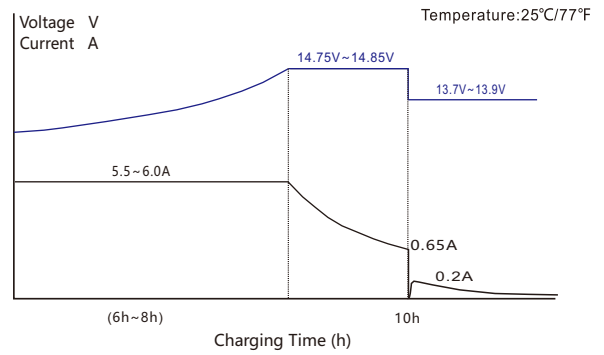


Electrical Characteristics

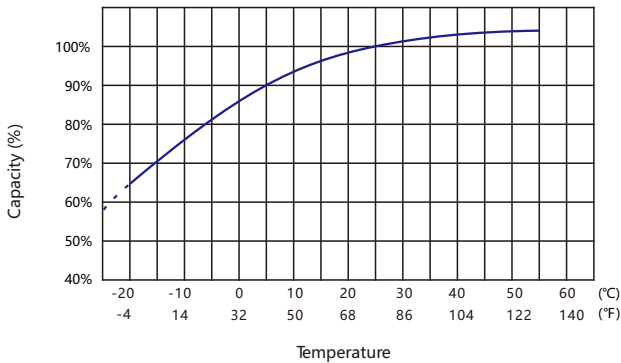
Discharging Characteristics@25°C(77°F)



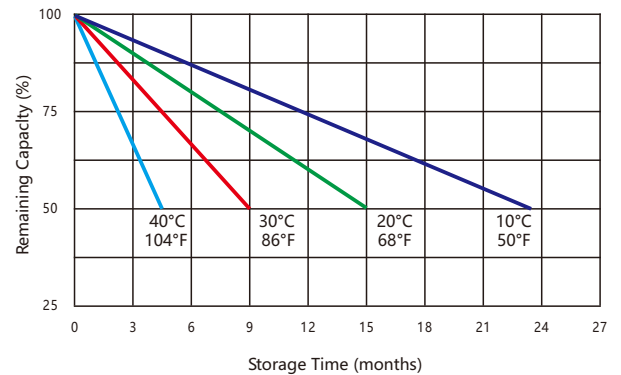
Charging Characteristics@25°C(77°F)



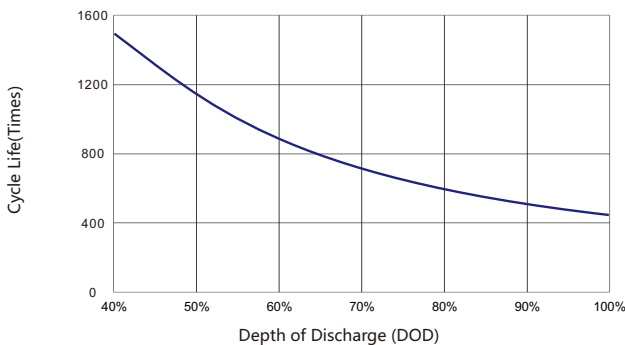
Capacity vs Temperature



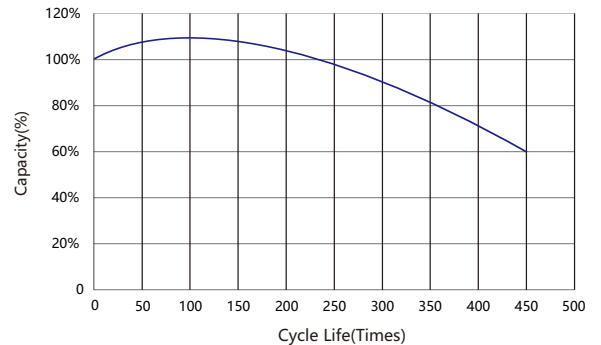
Self-discharge vs Time



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: $\leq 0.2C_5A$	14.75V~14.85V@25°C(77°F) Temp.Coefficient:-24mV/°C	13.7V~13.9V@25°C(77°F) Temp.Coefficient:-18mV/°C