

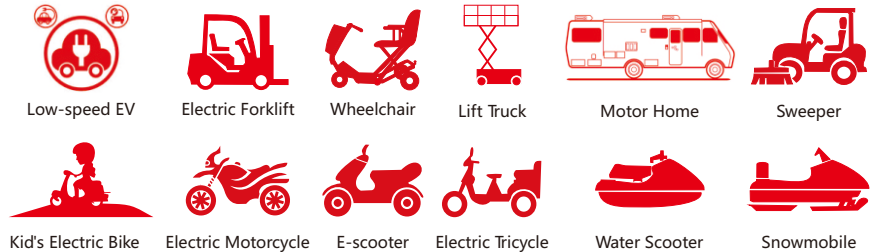
# TNE 12-100 [12V100Ah]



## 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
TNE12-100	Length	Width	Height	Total Height	26.0/57.3	13	ABS UL94-HB (Optional: FR ABS UL94-V0)
	260/10.2	168/6.61	210/8.27	210/8.27			

## Product Specifications

Nominal Voltage	Rated Capacity <sup>25°C/77°C</sup>	Operating Temp. Range	Capacity Effected Temp	Capacity vs Storage Time
12V	100Ah 20hr Rate (1.80V/cell) 90Ah 10hr Rate (1.75V/cell) 85Ah 5hr Rate (1.75V/cell) 80Ah 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	107.2	76.4	61.2	35.0	24.8	19.58	16.00	13.62	10.50	8.60	4.84
1.80V/cell	111.0	78.7	63.1	36.2	25.7	20.15	16.62	14.12	10.80	8.82	5.00
1.75V/cell	114.0	81.6	65.4	38.5	26.7	20.88	17.00	14.42	11.11	9.00	5.10
1.70V/cell	116.8	83.7	67.7	39.1	27.3	21.60	17.70	15.12	11.38	9.23	5.21
1.67V/cell	119.2	86.4	70.1	39.6	27.6	21.80	18.10	15.20	11.62	9.39	5.26
1.60V/cell	122.4	88.9	71.5	40.9	28.6	22.45	18.50	15.65	11.91	9.70	5.30

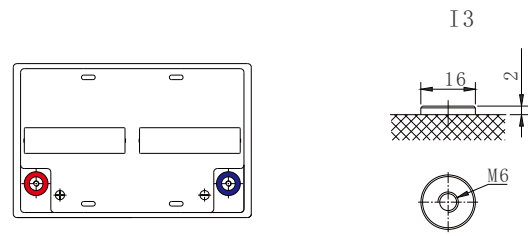
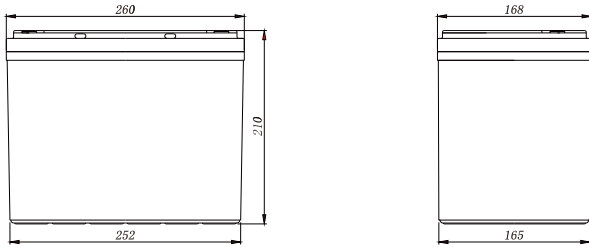
## Constant Power Discharge (W/cell)@25°C (77°F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	209.4	150.3	121.0	69.8	49.7	39.4	32.3	27.5	21.27	17.44	9.84
1.80V/cell	216.0	154.2	124.3	71.9	51.3	40.4	33.4	28.4	21.79	17.83	10.14
1.75V/cell	220.9	159.5	128.5	76.2	53.1	41.7	34.0	28.9	22.34	18.13	10.29
1.70V/cell	225.2	162.5	132.2	77.0	53.9	42.9	35.2	30.1	22.75	18.49	10.48
1.67V/cell	228.0	166.4	136.1	77.4	54.3	43.0	35.8	30.1	23.06	18.68	10.50
1.60V/cell	232.1	170.1	137.5	79.2	55.7	43.9	36.3	30.7	23.47	19.15	10.56

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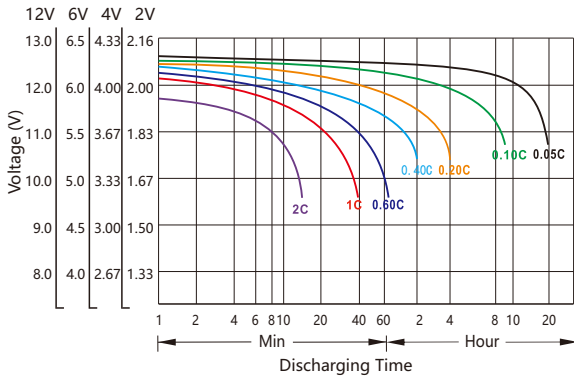


## Battery Dimensions(mm)

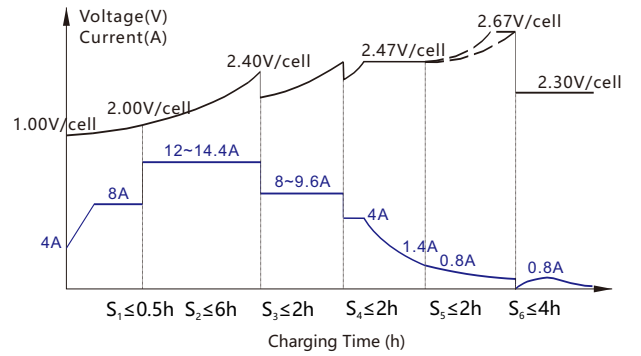


## Electrical Characteristics

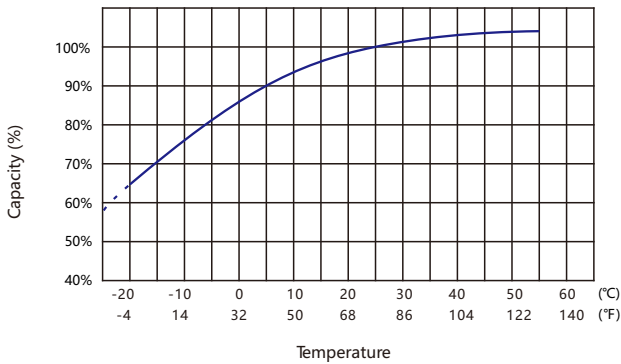
### Discharging Characteristics@25°C(77°F)



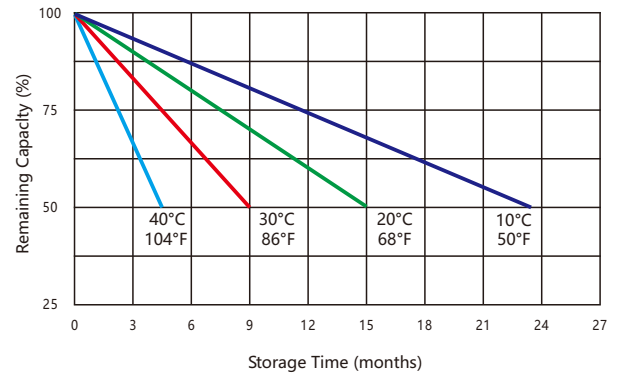
### Charging Characteristics@25°C(77°F)



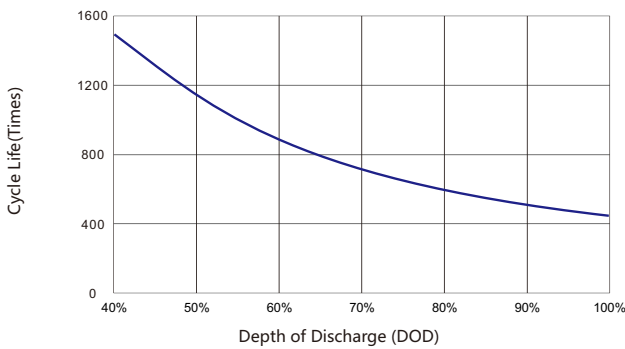
### Capacity vs Temperature



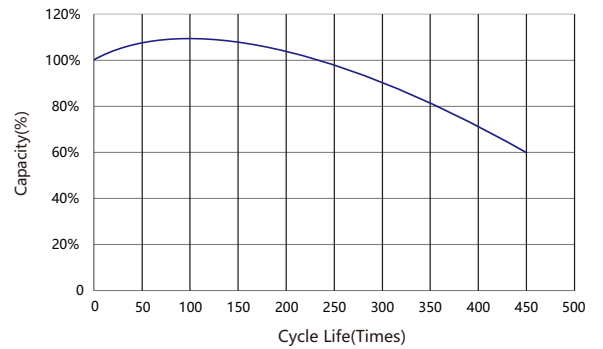
### Self-discharge vs Time



### 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 current:  $\leq 0.2C_3A$

### Limited Voltage

14.4V~14.8V@25°C(77°F)  
Temp.Coefficient:-24mV/°C

### Floating Voltage

13.5V~13.8V@25°C(77°F)  
Temp.Coefficient:-18mV/°C