

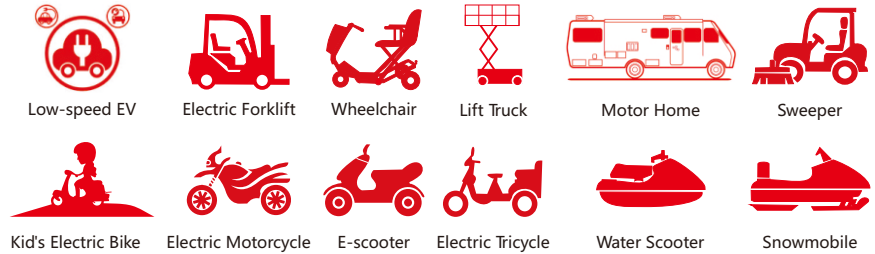
# TNE 12-140 [12V140Ah]



## 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
	Length	Width	Height	Total Height			
TNE12-140	339/13.3	172/6.77	281/11.1	281/11.1	41.5/91.5	I7	ABS UL94-HB (Optional: FR ABS UL94-V0)

## Product Specifications

Nominal Voltage	Rated Capacity <sup>25°C/77°C</sup>	Operating Temp. Range	Capacity Effected Temp	Capacity vs Storage Time
12V	140Ah 20hr Rate (1.80V/cell) 125Ah 10hr Rate (1.75V/cell) 117Ah 5hr Rate (1.75V/cell) 110Ah 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	150.1	107.0	85.7	49.0	34.1	27.02	22.12	18.86	14.57	11.95	6.77
1.80V/cell	155.4	110.1	88.3	50.7	35.3	27.80	22.98	19.55	14.98	12.25	7.00
1.75V/cell	159.6	114.2	91.6	53.9	36.7	28.80	23.49	19.95	15.41	12.49	7.13
1.70V/cell	163.5	117.2	94.8	54.7	37.5	29.83	24.49	20.96	15.77	12.81	7.29
1.67V/cell	166.9	121.0	98.1	55.4	38.0	30.10	25.07	21.06	16.13	13.04	7.36
1.60V/cell	171.4	124.5	100.1	57.2	39.3	31.00	25.62	21.70	16.54	13.49	7.41

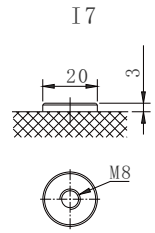
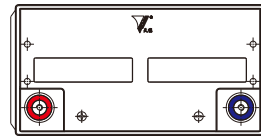
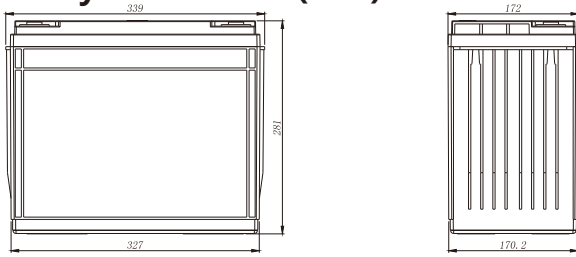
## Constant Power Discharge (W/cell)@25°C (77°F)

F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	293.1	210.4	169.4	97.7	68.3	54.4	44.6	38.1	29.51	24.24	13.78
1.80V/cell	302.3	215.8	174.0	100.7	70.6	55.7	46.1	39.4	30.22	24.76	14.19
1.75V/cell	309.3	223.3	180.0	106.7	73.0	57.5	47.0	40.0	30.97	25.16	14.41
1.70V/cell	315.3	227.5	185.1	107.8	74.2	59.2	48.7	41.8	31.55	25.67	14.67
1.67V/cell	319.2	233.0	190.5	108.3	74.6	59.4	49.6	41.7	32.00	25.94	14.71
1.60V/cell	325.0	238.2	192.5	110.9	76.5	60.7	50.2	42.6	32.58	26.62	14.79

# TNE 12-140 [12V140Ah]

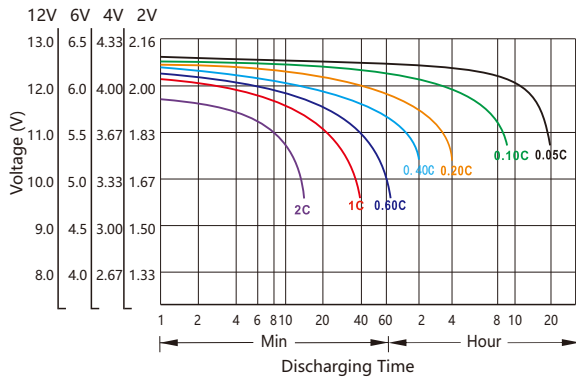


## Battery Dimensions(mm)

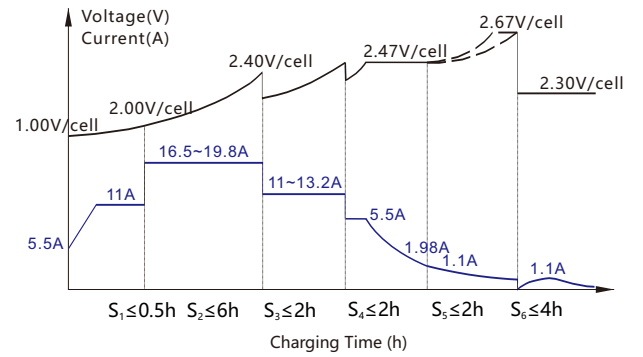


## Electrical Characteristics

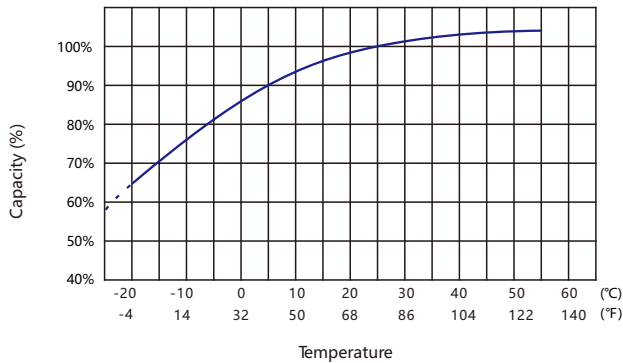
### Discharging Characteristics@25°C(77°F)



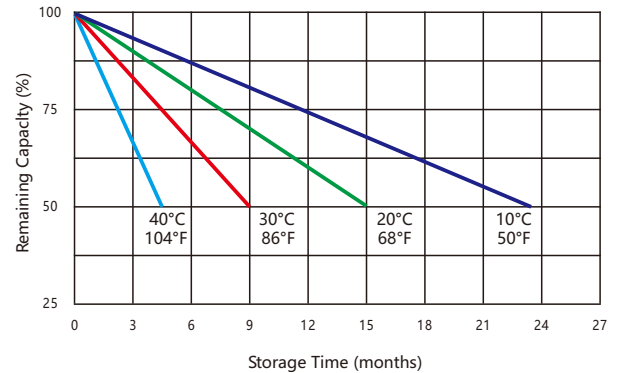
### Charging Characteristics@25°C(77°F)



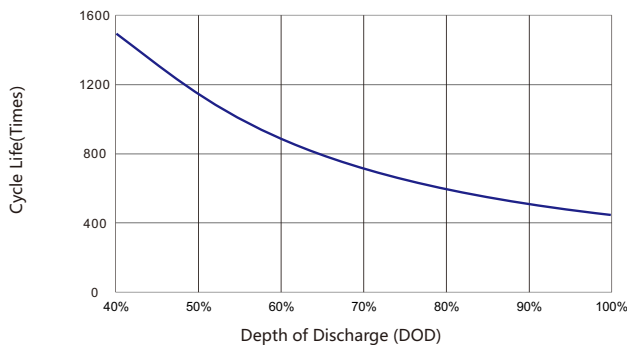
### Capacity vs Temperature



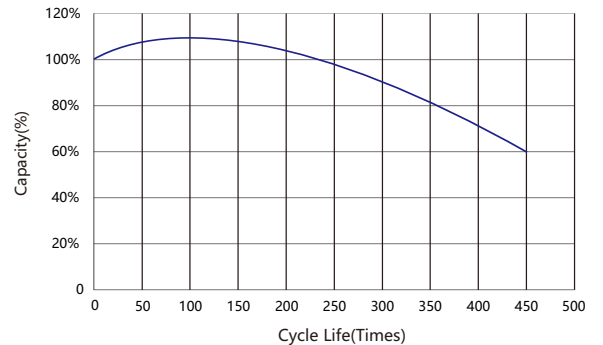
### Self-discharge vs Time



### 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: $\leq 0.2C_5A$	14.4V~14.8V@25°C(77°F) Temp.Coefficient:-24mV/°C	13.5V~13.8V@25°C(77°F) Temp.Coefficient:-18mV/°C