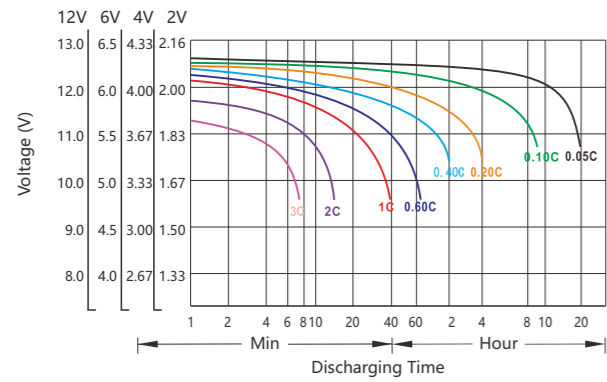
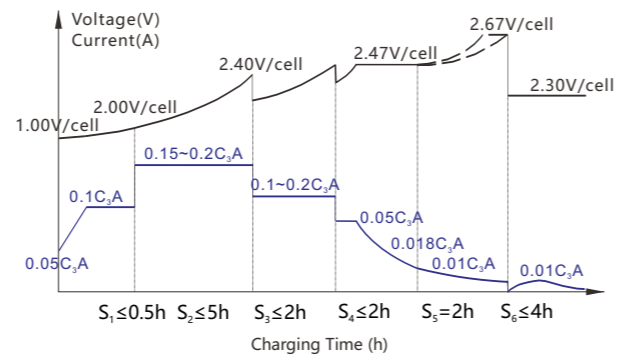


## Performance Curve

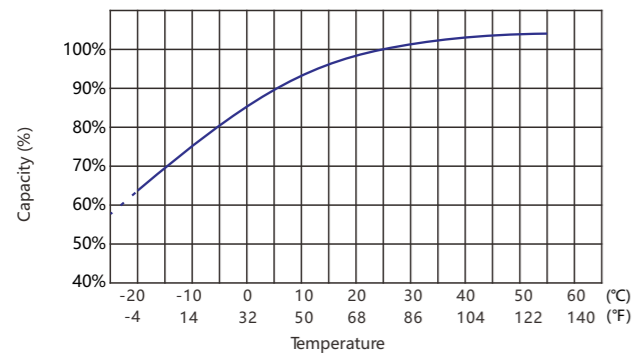
### Discharge Characteristics @25°C(77°F)



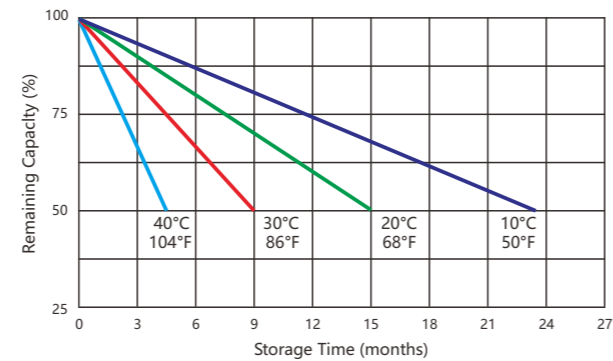
### Charge Characteristics @25°C(77°F)



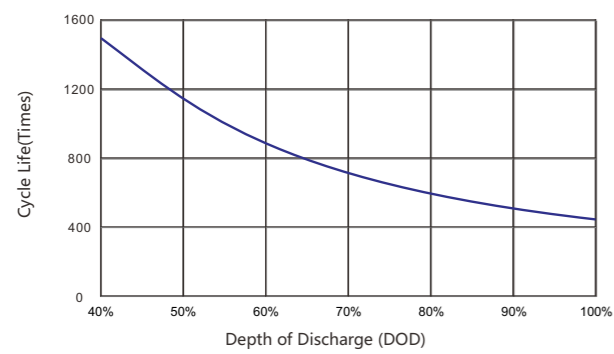
### Capacity VS Temperature



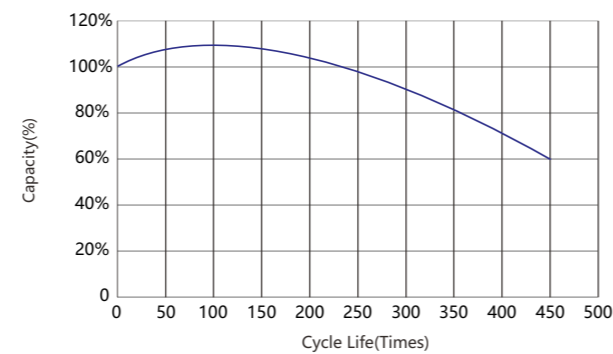
### Self Charge Characteristics



### Cycle Life vs Depth of Discharge @25°C(77°F)



### Cycle Life vs Remaining Capacity @25°C(77°F)

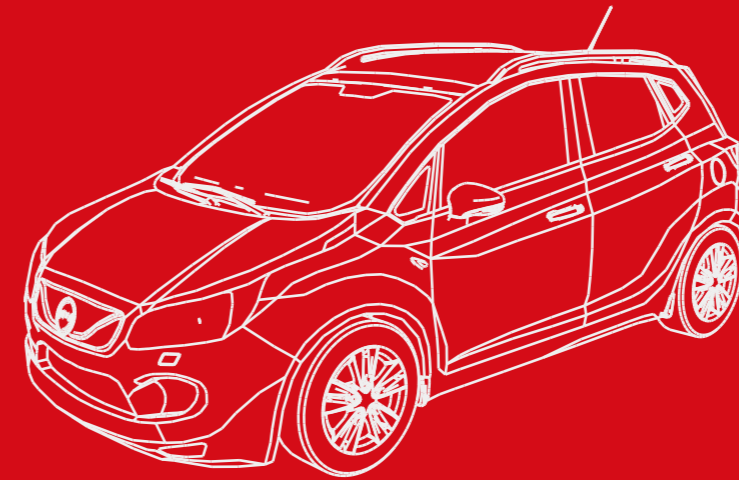


**Tianneng Battery Group Co., Ltd. (HQ)**  
 18 Baoqiao Road, Huaxi Industrial Function Zone,  
 Zhejiang, China 313100  
 Tel: +86-572-6058015  
 www.tiannenggroup.com  
 Email: [export@tiannenggroup.com](mailto:export@tiannenggroup.com)

**Hong Kong Branch:**  
 Suite 3202, Central Plaza,  
 18 Harbour Road, Wanchai, Hongkong



HKEx Code: 00819



# TNE Series

**Maintenance Free VRLA Battery  
 Deep Cycle Type**



## Motive Battery-TNE Series (Deep Cycle Type)

The TNE Deep Cycle Sealed Lead Acid Battery Series are specifically designed and developed for deep cycle application. This series with a number of national patent technologies and the cycle life can reach 400~600 cycles at 100% DOD, it is highly suitable to cyclic application such as electrical bicycle/tricycle, Golf trolleys and golf cart, EV/HEV etc. TN Power's deep cycle motive batteries take more than 45% market share in China domestic motive battery market.



- ☑ Oxygen recombination technology: Maintenance Free VRLA battery, no need to add water or acid during application.
- ☑ Long cycle life. The cycle life can reach 400~600 cycles at 100%DOD.
- ☑ high capacity: Patented structure design with high utilization of active material, maximum improve the utilization rate of active material and the utilization ratio of battery internal space, 5%-10% higher capacity than similar products
- ☑ High performance for large current discharge. New structure for plate grid, greatly reduced resistance of the battery, uniform internal electrochemical reaction under large current discharge, excellent capacity recovery from deep discharge
- ☑ Good corrosion resistance of grid. Unique patent alloy with rare earth material, the grid have super corrosion resistance and creep resistance
- ☑ High performance under low temperature. With added conductive material and cryogenic expansion agent of high activity to the plate, the product is of strong accept ability under low temperature.
- ☑ Safety & reliability. Independent designed automatic anti-dry and removable safety valve for convenient common check as well as the sealing function to reduce water loss in the process of charge and discharge and to improve reaction efficiency of sealing.

### CONSTRUCTION

- ✦ **Positive plate** – Patent rare earth alloy grid with special paste to slow down the positive active material softening during deep discharge cycle application.
- ✦ **Negative plate** – Balanced Pb-Ca grid for improved recombination efficiency, reduce water loss.
- ✦ **Separator** – Advanced AGM separator for high pressure cell design, prevent micro short circuit.
- ✦ **Electrolyte** – Dilute high purity sulphuric acid with patent Nano silica gel electrolytes, extend cycle life and improve the deep discharge performance
- ✦ **Battery container and cover** – ABS UL94-HB (Flame-retant ABS UL94-V0 is optional)

### APPLICATION

- Electric tools or toys
- Electric Bicycle/Tricycle,
- Golf trolleys and golf cart
- Patrol car,
- Electric Sight-seeing Tour Bus,
- Sweeper,
- Wheelchairs
- Lawn mowers



## Product Specification

Model	Nominal Voltage (V)	Nominal Capacity C5 (Ah) 1.75Vpc/25 °C	Nominal Capacity C10 (Ah) 1.80Vpc/25 °C	Nominal Capacity C20 (Ah) 1.80Vpc/25 °C	Dimension (±3mm)				Weight (Kg) ±5%	Dimension (inch)				Weight (lbs)	Terminal
					L	W	H	TH		L	W	H	TH		
TNE6-190	6	159	169	187	260	180	247	252	28.5	10.24	7.09	9.72	9.92	62.8	I7
TNE6-250	8	213	225	250	260	180	270	274	34.0	10.24	7.09	10.63	10.79	75.0	I7
TNE6-250L	8	213	225	250	330	180	222	222	35.0	12.99	7.09	8.74	8.74	77.2	I7
TNE6-270	8	233	245	270	260	180	270	274	36.0	10.24	7.09	10.63	10.79	79.4	I7
TNE8-180	8	158	165	180	262	182	280	280	33.5	10.31	7.17	11.02	11.02	73.9	I7
TNE8-180B	8	158	165	180	330	180	222	222	34.0	12.99	7.09	8.74	8.74	75.0	I7
TNE8-190	8	163	167	185	262	182	280	280	36.0	10.31	7.17	11.02	11.02	79.4	I7
TNE8-220	12	190	200	220	330	180	222	222	36.5	12.99	7.09	8.74	8.74	80.5	I7
TNE12-15	12	13.6	13.9	15.0	151	99	98	104	4.10	5.94	3.90	3.86	4.09	9.04	T2-1
TNE12-18	12	16.3	16.7	18.0	151	99	107	110	4.80	5.94	3.90	4.21	4.33	10.6	I9
TNE12-25	12	22.6	23.2	25.0	181	77	170	170	6.50	7.13	3.03	6.69	6.69	14.3	I10
TNE12-26	12	23.5	24.1	26.0	189	100	130	130	6.70	7.44	3.94	5.12	5.12	14.8	I9
TNE12-35B	12	31.7	32.4	35.0	175	166	125	125	9.40	6.89	6.54	4.92	4.92	20.7	I10
TNE12-38	12	34.3	35.2	38.0	267	77	171	171	9.20	10.51	3.03	6.73	6.73	20.3	I10
TNE12-45	12	40.7	41.7	45.0	222	106	173	173	11.2	8.74	4.17	6.81	6.81	24.7	I10
TNE12-52	12	47.0	48.2	52.0	224	120	175	175	12.7	8.82	4.72	6.89	6.89	28.0	I1
TNE12-58	12	53.0	54.0	58.0	224	135	175	175	14.1	8.82	5.31	6.89	6.89	31.1	I1
TNE12-65	12	59.0	60.0	65.0	224	145	175	175	14.9	8.82	5.71	6.89	6.89	32.8	I1
TNE12-75	12	64.0	68.0	75.0	262	165	170	170	20.0	10.31	6.50	6.69	6.69	44.1	I3
TNE12-90	12	76.0	81.0	90.0	260	168	210	210	23.5	10.24	6.61	8.27	8.27	51.8	I3
TNE12-100	12	85.0	90.0	100	260	168	210	210	26.0	10.24	6.61	8.27	8.27	57.3	I3
TNE12-100L	12	85.0	90.0	100	448	168	146	146	27.3	17.64	6.61	5.75	5.75	60.2	I7
TNE12-125	12	106	113	125	330	171	214	214	32.5	12.99	6.73	8.43	8.43	71.7	I7
TNE12-125L	12	106	113	125	453	222	146	152	36.0	17.83	8.74	5.75	5.98	79.4	I11
TNE12-150	12	128	135	150	407	171	240	240	41.0	16.02	6.73	9.45	9.45	90.4	I7
TNE12-175	12	149	154	175	339	172	281	281	45.0	13.35	6.77	11.06	11.06	99.2	I7
TNE12-190	12	159	169	187	480	170	236	236	51.5	18.90	6.69	9.29	9.29	113.5	I7
TNE12-190S	12	159	169	187	453	300	146	152	52.5	17.83	11.81	5.75	5.98	115.7	I11
TNE12-200	12	170	180	200	484	235	170	170	55.5	19.06	9.25	6.69	6.69	122.4	I7
TNE12-230	12	192	205	230	532	207	220	226	59.0	20.94	8.15	8.66	8.90	130.1	I7
TNE16-12	16	10.9	11.1	12.0	151	101	109	115	4.65	5.94	3.98	4.29	4.53	10.3	I10
TNE16-17	16	15.4	15.8	17.0	201	113	100	105	6.35	7.91	4.45	3.94	4.13	14.0	I9
TNE16-25	16	22.6	23.2	25.0	250	100	128	132	9.00	9.84	3.94	5.04	5.20	75.0	I10

