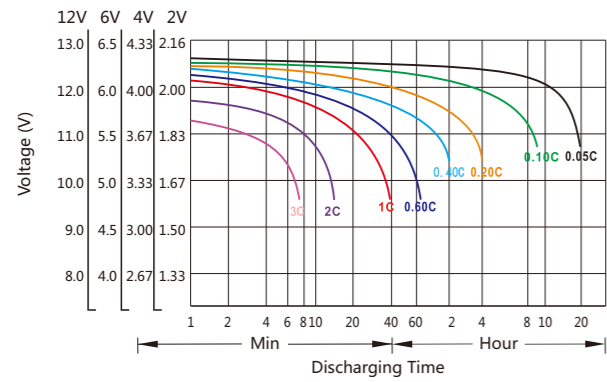
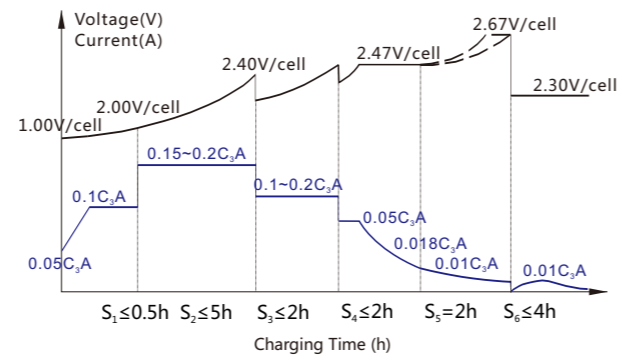


## Performance Curve

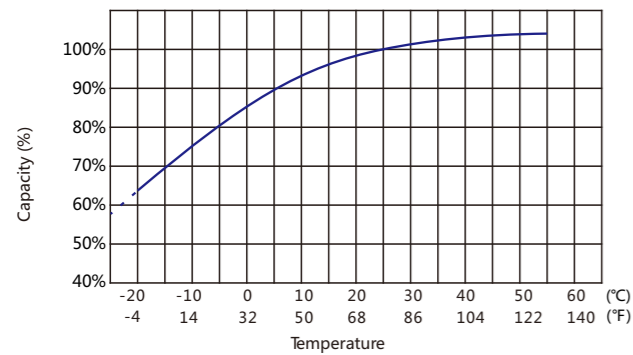
Discharge Characteristics @25°C(77°F)



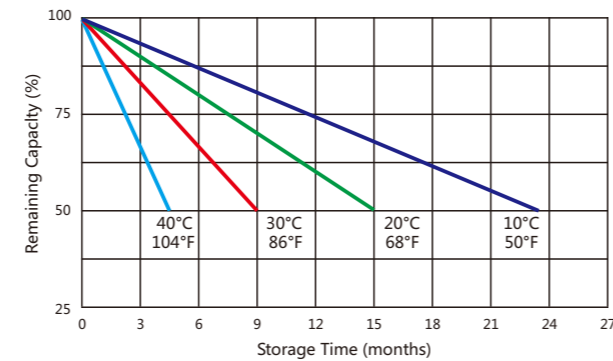
Charge Characteristics @25°C(77°F)



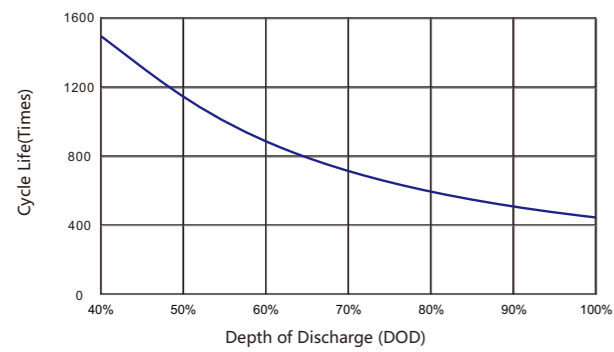
Capacity VS Temperature



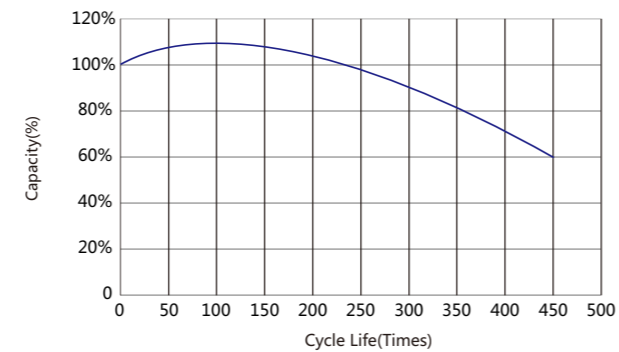
Self Charge Characteristics



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



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

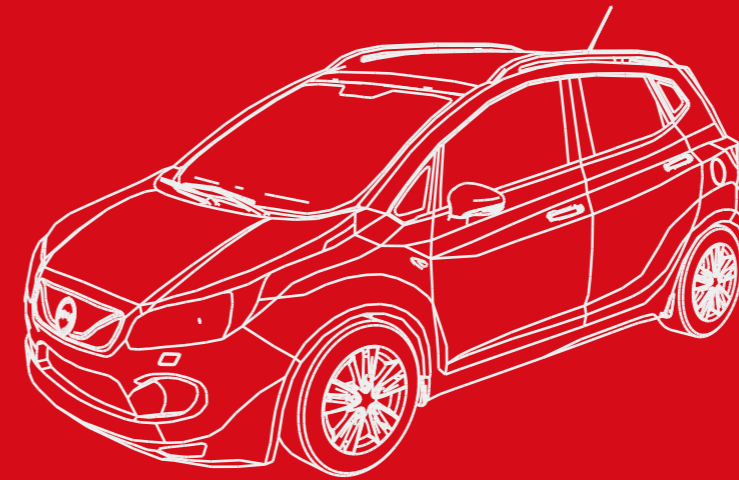


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# TNE Series

**Maintenance Free VRLA Battery  
 Deep Cycle Type**



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

The TNE 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 C <sub>5</sub> (Ah) 1.75Vpc/25°C	Nominal Capacity C <sub>10</sub> (Ah) 1.80Vpc/25°C	Nominal Capacity C <sub>20</sub> (Ah) 1.80Vpc/25°C	Dimension (mm)				Weight (kg)	Dimension (inch)				Weight (lbs)	Terminal
					L	W	H	TH		L	W	H	TH		
TNE6-190	6	159	169	187	260	180	247	252	28.50	10.24	7.09	9.72	9.92	62.83	I7
TNE6-230	6	192	205	230	306	168	220	224	31.00	12.05	6.61	8.66	8.82	68.34	I7
TNE6-235	6	194	208	235	260	180	270	274	32.00	10.24	7.09	10.63	10.79	70.55	I7
TNE6-245	6	204	217	245	243	188	275	275	32.50	9.57	7.40	10.83	10.83	71.65	I7
TNE6-250	6	213	225	250	260	180	270	274	34.00	10.24	7.09	10.63	10.79	74.96	I7
TNE6-250L	6	213	225	250	330	180	222	222	35.00	12.99	7.09	8.74	8.74	77.16	I7
TNE6-270	6	233	245	270	260	180	270	274	36.00	10.24	7.09	10.63	10.79	79.37	I7
TNE8-180B	8	158	165	180	330	180	222	222	34.00	12.99	7.09	8.74	8.74	74.96	I7
TNE8-180C	8	158	165	180	262	182	280	280	36.00	10.31	7.17	11.02	11.02	79.37	I7
TNE8-220	8	190	200	220	330	180	222	222	36.50	12.99	7.09	8.74	8.74	80.47	I7
TNE8-250	8	213	225	250	330	190	250	250	45.50	12.99	7.48	9.84	9.84	100.31	I7
TNE12-15	12	13.6	13.9	15	151	99	98	103	4.10	5.94	3.90	3.86	4.06	9.26	T2
TNE12-18	12	16.3	16.7	18	151	99	107	108	4.75	5.94	3.90	4.21	4.25	10.80	I9
TNE12-25	12	22.6	23.2	25	181	77	169	170	6.45	7.13	3.03	6.65	6.69	14.77	I10
TNE12-26	12	23.5	24.1	26	189	100	127	130	6.80	7.44	3.94	5.00	5.12	15.43	I9
TNE12-35B	12	31.7	32.4	35	175	166	121	125	9.45	6.89	6.54	4.76	4.92	20.94	I10
TNE12-38	12	34.3	35.2	38	267	77	170	170	9.50	10.51	3.03	6.69	6.69	21.61	I10
TNE12-40	12	33.0	34.0	40	195	130	157.5	162	11.10	7.68	5.12	6.20	6.38	24.47	I11
TNE12-45	12	40.7	41.7	45	198.5	166	169.5	169.5	13.20	7.81	6.54	6.67	6.67	29.10	I3
TNE12-45L	12	40.7	41.7	45	222	106	171	171	11.00	8.74	4.17	6.73	6.73	24.91	I10
TNE12-52	12	47.0	48.2	52	224	120	175	175	12.60	8.82	4.72	6.89	6.89	28.66	I11
TNE12-58	12	53	54	58	224	135	178	178	14.15	8.82	5.31	7.01	7.01	32.19	I11
TNE12-60B	12	48	51	58	229	138.5	211	216	16.50	9.02	5.45	8.31	8.50	36.38	I3
TNE12-65	12	59	60	65	224	150	178	178	15.75	8.82	5.91	7.01	7.01	35.93	I11
TNE12-75	12	64	68	75	262	165	170	170	20.00	10.31	6.50	6.69	6.69	44.09	I3
TNE12-90	12	76	81	90	260	168	210	210	23.50	10.24	6.61	8.27	8.27	51.81	I3
TNE12-100	12	85	90	100.0	260	168	210	210	26.00	10.24	6.61	8.27	8.27	57.32	I3
TNE12-125	12	106	113	125	330	171	214	214	32.50	12.99	6.73	8.43	8.43	71.65	I7
TNE12-125L	12	106	113	125	453	222	146	152	36.00	17.83	8.74	5.75	5.98	79.37	I7
TNE12-140	12	117	125	140	339	172	281	281	41.50	13.35	6.77	11.06	11.06	91.49	I7
TNE12-150	12	128	135	150	407	171	240	240	41.00	16.02	6.73	9.45	9.45	90.39	I7
TNE12-170	12	144	153	170	339	172	281	281	45.00	13.35	6.77	11.06	11.06	99.21	I7
TNE12-190	12	159	169	187	480	170	236	236	51.50	18.90	6.69	9.29	9.29	113.54	I7
TNE12-190S	12	159	169	187	453	300	146	152	52.50	17.83	11.81	5.75	5.98	115.74	I7
TNE12-200	12	170	180	200	484	235	170	170	55.50	19.06	9.25	6.69	6.69	122.36	I7
TNE12-230	12	192	205	230	532	207	215	220	59.00	20.94	8.15	8.46	8.66	130.07	I7
TNE12-250	12	213	225	250	532	207	215	220	62.20	20.94	8.15	8.46	8.66	137.13	I7
TNE16-12	16	10.9	11.1	12	151	101	109	109	4.65	5.94	3.98	4.29	4.29	10.80	T2
TNE16-17	16	15.4	15.8	17	201	113	100	101	6.35	7.91	4.45	3.94	3.98	14.33	I9
TNE16-25	16	22.6	23.2	25	250	100	128	128	9.00	9.84	3.94	5.04	5.04	20.50	I9

