

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-retardant 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



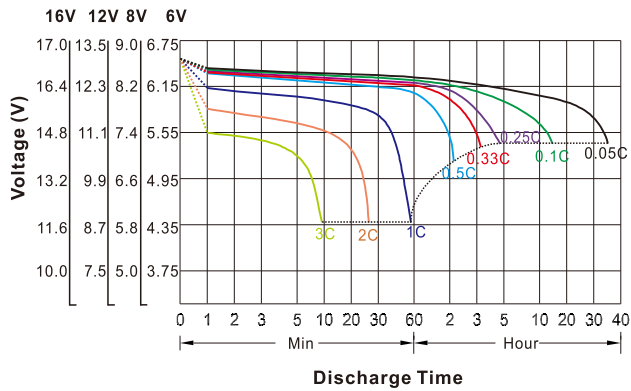
Product Specification

Model	Nominal Voltage (V)	Nominal Capacity C ₁ (Ah) 1.75Vpc/25°C	Nominal Capacity C ₁₀ (Ah) 1.80Vpc/25°C	Nominal Capacity C ₂₀ (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	160	170	187	260	180	247	252	28.0	10.24	7.09	9.72	9.92	61.7	I7
TNE6-230	6	197	210	225	306	168	220	226	30.5	12.05	6.61	8.66	8.90	67.2	I7
TNE6-240	6	206	219	240	243	188	275	275	34.0	9.57	7.40	10.83	10.83	75.0	I7
TNE6-250	6	220	230	245	260	180	270	275	34.0	10.24	7.09	10.63	10.83	75.0	I7
TNE6-250B	6	220	230	250	330	180	222	222	35.0	12.99	7.09	8.74	8.74	77.2	I7
TNE6-270	6	244	260	270	330	180	222	222	36.5	12.99	7.09	8.74	8.74	80.5	I7
TNE8-180	8	160	170	180	262	182	280	280	33.5	10.31	7.17	11.02	11.02	73.9	I7
TNE8-180B	8	160	170	180	330	180	222	222	35.0	12.99	7.09	8.74	8.74	77.2	I7
TNE8-180C	8	160	170	180	262	182	280	280	36.0	10.31	7.17	11.02	11.02	79.4	I7
TNE8-220	8	197	210	220	330	180	222	222	37.0	12.99	7.09	8.74	8.74	81.6	I7
TNE8-250	8	216	230	250	330	190	250	250	45.5	12.99	7.48	9.84	9.84	100.3	I7
TNE12-15	12	13	14	15	151	99	98	103	4.3	5.94	3.90	3.86	4.06	9.5	T2
TNE12-25	12	22	24	25	182	77	170	170	6.9	7.13	3.03	6.69	6.69	15.2	I10
TNE12-26	12	23	25	26	189	100	130	130	7.0	7.44	3.94	5.12	5.12	15.4	I9
TNE12-28	12	25	27	28	185	105	128	129.5	7.7	7.28	4.13	5.04	5.10	17.0	I9
TNE12-35B	12	31	33	35	175	166	125	125	9.7	6.89	6.54	4.92	4.92	21.4	I10
TNE12-38	12	34	36	38	267	77	170	170	10.0	10.51	3.03	6.69	6.69	22.0	I10
TNE12-40	12	34	36	40	195	130	157.5	162	11.1	7.68	5.12	6.20	6.38	24.5	I1
TNE12-45L	12	40	43	45	222	106	172	172	11.6	8.74	4.17	6.77	6.77	25.6	I10
TNE12-47	12	42	45	47	220	166	130	130	12.4	8.66	6.54	5.12	5.12	27.3	I10
TNE12-55	12	48	50	53	224	120	175	175	13.3	8.82	4.72	6.89	6.89	29.3	I1
TNE12-60	12	53	56	59	224	135	178	178	15.1	8.82	5.31	7.01	7.01	33.3	I1
TNE12-60B	12	54	57	60	229	138.5	211	216	16.5	8.82	5.31	7.01	7.01	36.4	I3
TNE12-75	12	64	68	75	262	165	170	170	20.0	10.31	6.50	6.69	6.69	44.1	I3
TNE12-85	12	71	76	85	260	168	215	215	24.0	10.24	6.61	8.46	8.46	52.9	I3
TNE12-100	12	85	90	100	260	168	215	215	26.0	10.24	6.61	8.46	8.46	57.3	I3
TNE12-125	12	107	114	125.4	330	171	214	214	33.5	12.99	6.73	8.43	8.43	73.9	I7
TNE12-125L	12	107	114	125.4	453	222	146	152	36.5	17.83	8.74	5.75	5.98	80.5	I7
TNE12-140	12	118	125.4	137.9	339	172	280	282	42.0	13.35	6.77	11.02	11.10	92.6	I7
TNE12-150	12	128	136	150	407	171	240	240	41.0	16.02	6.73	9.45	9.45	90.4	I7
TNE12-170	12	144	153	168.3	339	172	280	282	45.0	13.35	6.77	11.02	11.10	99.2	I7
TNE12-170	12	144	153	168.3	341	172	279	283	45.0	13.43	6.77	10.98	11.14	99.2	I7
TNE12-190	12	160	170	187	480	170	236	236	52.0	18.90	6.69	9.29	9.29	114.6	I7
TNE12-190S	12	160	170	187	453	300	146	152	52.5	17.83	11.81	5.75	5.98	115.8	I7
TNE12-190L	12	160	170	187	484	235	170	170	54.0	19.06	9.25	6.69	6.69	119.1	I7
TNE12-230	12	197	210	230	532	207	215	220	57.0	20.94	8.15	8.46	8.66	125.7	I7
TNE12-250B	12	216	230	253	532	207	215	220	62.2	20.94	8.15	8.46	8.66	137.2	I7
TNE16-25	16	22	24	25	250	100	128	128	9.5	9.84	3.94	5.04	5.04	20.9	I9
TNE8-190H	8	160	170	187	262	182	280	280	36.8	10.31	7.17	11.02	11.02	81.1	I7
TNE8-190HL	8	160	170	187	330	180	222	222	37.0	12.99	7.09	8.74	8.74	81.6	I7
TNE12-125H	12	107	114	125.4	330	171	214	214	35.0	12.99	6.73	8.43	8.43	77.2	I7

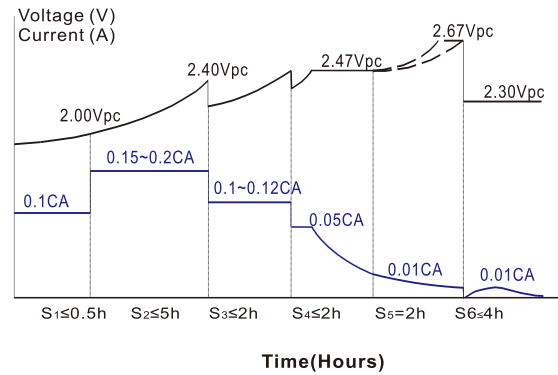


Performance Curve

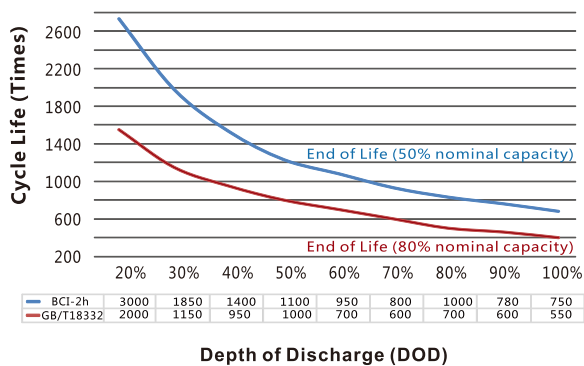
Discharge Characteristics (25°C)



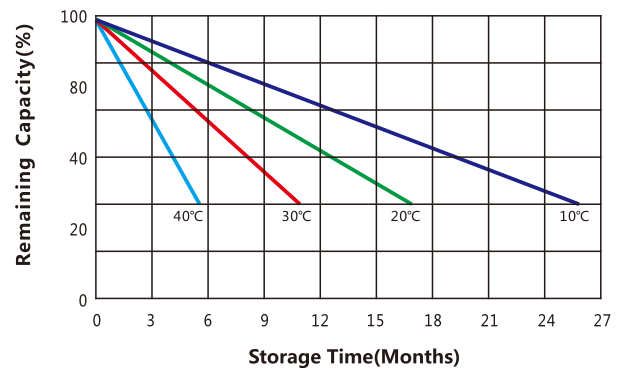
Charge Characteristics(25°C)



Cycle Life With Depth Of Discharge



Self Discharge Characteristics



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