

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



## Maintenance Free VRLA AGM Battery - Long Life Type

# TNL2-500

(2V 500Ah)

### GENERAL FEATURES

- ◆ Cycle or standby (or float) application
- ◆ Design life is 12~16 years at 25°C under standby application, deep discharge recoverability
- ◆ It has safety, low resistance so recharge is easy and energy output is more remarkable
- ◆ Deep discharge recoverability
- ◆ Strictly manufacture process control and high consistency
- ◆ ISO9001, ISO14001 certified
- ◆ UL, IEC60896-21&22, TLC, CE and European council Directive 2006/66/EC and its amendment (2008/12/EC) certification

### Dimension

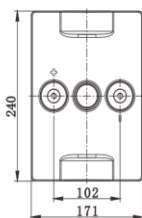
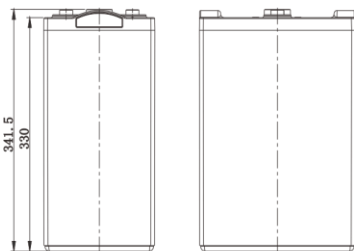
Unit:mm

Length 240±2mm / 9.45inch

Width 170±2mm / 6.69inch

Container Height 330±3mm / 12.99inch

Total Height 341.5±3mm / 13.44inch



### Application

- ◆ Uninterrupted Power Supply ( UPS )
- ◆ Communications and electric equipment
- ◆ Emergency lighting equipment
- ◆ Fire alarm and security system
- ◆ Robots, control equipment, and other factory automation equipment
- ◆ Emergency power supply ( EPS )
- ◆ Portable VTR/TV, radio and so on
- ◆ Power tools, lawn mowers, vacuum cleaners
- ◆ Cameras and photographic equipment
- ◆ Portable measuring equipment
- ◆ Portable telephone sets
- ◆ Various power toys and hobby equipment
- ◆ Lighting equipment

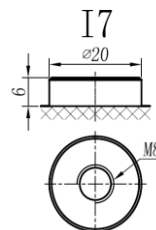
### Terminal

Unit:mm

Terminal Type I7

### Weight

30.5kg 67.24lbs



ISO9001 ISO14001 OHSAS18001

This document is subject to change without prior notification

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## TNL2-500

### Specificaion

<b>Nominal Voltage</b>	2V	
<b>Rated Capacity(25°C)</b>	535Ah	20hr Rate(1.80V/cell )
	500Ah	10hr Rate(1.80V/cell )
	450Ah	5hr Rate(1.75V/cell )
	404Ah	3hr Rate(1.70V/cell )
	305Ah	1hr Rate(1.60V/cell )
<b>Container Material</b>	ABS ( Flame-retardant ABS UL94-V0 is optional )	
<b>Operating Temperature Range</b>	<b>Discharge</b>	-20 ~ +50°C
	<b>Charge</b>	0 ~ +40°C
	<b>Storage</b>	-15 ~ +40°C
<b>Capacity Effected by Temperature</b>	<b>40°C / 104°F</b>	106%
	<b>25°C / 77°F</b>	100%
	<b>0°C / 32°F</b>	86%
	<b>-10°C / 14°F</b>	65%
<b>Charge</b>	<b>Float Voltage</b>	2.23 -2.27V/cell@25°C, Tem.Coefficient : -3mV/cell/°C
	<b>Equalize Voltage</b>	2.35 -2.40V/cell@25°C, Tem.Coefficient : -3mV/cell/°C
	<b>Cycle Voltage</b>	2.40 -2.50V/cell@25°C, Tem.Coefficient : -5mV/cell°C
<b>Max. Charging Current</b>	150A ( 0.3C )	
<b>Max. Discharge Current (5S)</b>	4000A	
<b>Internal Resistance</b>	0.6mΩ	
<b>Self-Discharge</b>	<3%, TN series stored at 25 °C require a supplementary charge every six months, the charging interval would shrink when the ambient temperature went higher	

### Discharge Performance

Constant Current Discharge Table (25°C/77°F) Unit: A											
F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	375.6	305.3	254.56	157.83	120.48	98.46	83.84	72.92	58.38	48.248	25.826
1.80V/cell	403.0	321.2	266.23	164.94	126.37	102.92	87.39	76.15	60.90	50.000	26.727
1.75V/cell	426.7	337.8	277.70	171.54	130.63	106.37	90.03	77.97	62.01	50.751	26.827
1.70V/cell	447.7	350.4	287.45	178.44	134.69	108.71	91.65	79.29	63.13	51.351	27.127
1.67V/cell	469.7	365.7	297.80	184.22	137.74	111.04	93.58	80.70	64.03	51.952	27.427
1.60V/cell	/	375.6	304.80	187.78	140.07	112.56	94.90	81.81	65.04	52.653	27.628

Constant Power Discharge Table (25°C/77°F) Unit: W											
F.V/Time	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	717.7	578.9	485.59	302.80	232.13	190.49	162.96	142.74	114.71	95.896	51.351
1.80V/cell	763.9	605.1	505.00	314.91	242.44	198.30	168.97	148.55	119.32	99.399	53.053
1.75V/cell	8.2	632.4	524.52	326.13	249.85	204.40	173.67	151.55	121.42	100.601	53.253
1.70V/cell	835.2	651.8	540.04	337.74	256.66	208.01	176.08	154.05	123.42	101.702	53.854
1.67V/cell	869.7	676.3	556.36	347.35	261.26	211.71	179.28	156.16	124.92	102.703	54.354
1.60V/cell	/	688.0	565.46	351.45	264.46	213.71	181.08	157.86	126.53	104.004	54.655