

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Industry Battery-General Purpose AGM Battery-TN Series

TN12-14

(12V 14Ah)

GENERAL FEATURES

- ◆ Oxygen recombination technology: maintenance-free, no need to add water or acid
- ◆ The patent grid alloy: less gassing, low self-discharge, excellent corrosion resistance
- ◆ Design life is 3~5 years at 25°C under standby application, deep discharge recoverability
- ◆ High quality AGM separator: extend cycle life and prevent micro short circuit
- ◆ ABS container: increase the strength of battery (Flame-retardant ABS UL94-V0 is optional)

Dimension

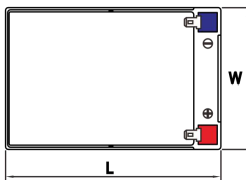
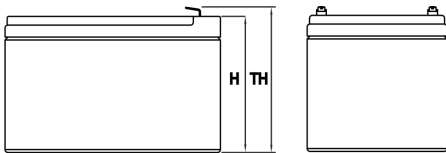
Unit:mm

Length 151±2mm / 5.94inch

Width 98±2mm / 3.86inch

Container Height 95±3mm / 3.74inch

Total Height 101±3mm / 3.98inch



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

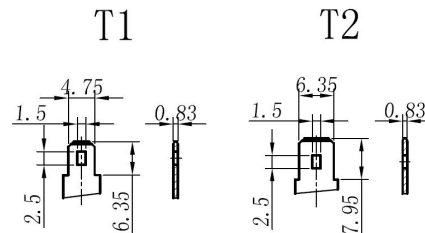
Unit:mm

Terminal Type: T1/T2

Weight

4.05kg

8.93lbs



ISO9001 ISO14001 OHSAS18001

This document is subject to change without prior notification

Motive Battery Energy Storage Battery Reserve Battery Motorcycle Battery

TN12-14

Specificaion

Nominal Voltage	12V	
Rated Capacity(25°C)	14Ah	20hr Rate(1.80V/cell)
	13Ah	10hr Rate(1.80V/cell)
	11.9Ah	5hr Rate(1.75V/cell)
	11.01Ah	3hr Rate(1.70V/cell)
	8.79Ah	1hr Rate(1.60V/cell)
Container Material	ABS (Flame-retardant ABS UL94-V0 is optional)	
Operating Temperature Range	Discharge	-20 ~ +50°C
	Charge	0 ~ +40°C
	Storage	-15 ~ +40°C
Capacity Effected by Temperature	40°C / 104°F	106%
	25°C / 77°F	100%
	0°C / 32°F	86%
	-10°C / 14°F	65%
Charge	Float Voltage	2.23 -2.27V/cell@25°C, Tem.Coefficient : -3mV/cell/°C
	Equalize Voltage	2.35 -2.40V/cell@25°C, Tem.Coefficient : -3mV/cell/°C
	Cycle Voltage	2.40 -2.50V/cell@25°C, Tem.Coefficient : -5mV/cell/°C
Max. Charging Current	4.2A (0.3C)	
Max. Discharge Current (5S)	210A	
Internal Resistance	14mΩ	
Self-Discharge	<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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	26.7	20.5	17.0	14.7	11.3	8.4	7.04	4.16	3.26	2.65	2.16	1.87	1.51	1.260	0.693
1.80V/cell	35.8	26.2	20.5	17.3	13.4	9.7	7.89	4.54	3.51	2.83	2.32	2.01	1.60	1.300	0.700
1.75V/cell	40.3	28.7	22.4	18.6	13.9	10.1	8.25	4.71	3.57	2.89	2.38	2.07	1.63	1.340	0.707
1.70V/cell	44.4	31.3	23.9	19.6	14.5	10.5	8.51	4.83	3.67	2.97	2.44	2.11	1.65	1.360	0.720
1.67V/cell	49.0	33.8	25.4	20.8	15.3	10.7	8.71	4.90	3.83	3.07	2.51	2.15	1.68	1.390	0.729
1.60V/cell	54.0	36.7	27.2	22.2	16.1	11.2	8.79	5.11	3.94	3.17	2.59	2.20	1.70	1.410	0.734

Constant Power Discharge Table (25°C/77°F) Unit: W

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	48.7	37.8	31.6	27.6	21.6	16.1	13.61	8.10	6.36	5.19	4.24	3.69	2.98	2.503	1.371
1.80V/cell	64.8	47.8	37.7	32.2	25.1	18.5	15.12	8.78	6.80	5.51	4.52	3.94	3.16	2.573	1.381
1.75V/cell	71.5	51.7	40.7	34.3	25.9	19.0	15.82	9.07	6.90	5.61	4.63	4.03	3.20	2.643	1.401
1.70V/cell	76.6	55.1	42.8	35.8	26.8	19.7	16.22	9.27	7.08	5.75	4.74	4.11	3.24	2.693	1.421
1.67V/cell	83.2	58.9	45.2	37.7	28.0	20.0	16.52	9.35	7.35	5.93	4.85	4.19	3.29	2.743	1.441
1.60V/cell	89.7	62.5	47.5	39.7	29.4	20.8	16.52	9.71	7.54	6.09	4.99	4.26	3.31	2.773	1.451

动力电池

储能电池

备用电池

摩托车电池



阀控式免维护铅酸蓄电池-通用型

TN12-14

(12V 14Ah)

产品特点

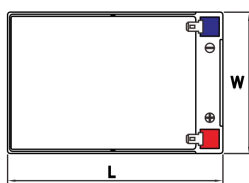
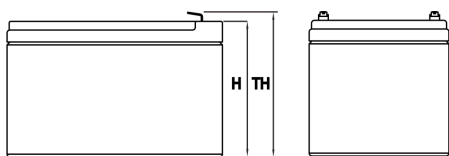
- ◆ 阀控式免维护设计，寿命期间无需加水或加酸
- ◆ 专利稀土合金板栅，减少气体产生，自放电率低，抗腐蚀性能力出众
- ◆ 在25℃下，产品浮充设计寿命为3~5年，优良的深放电恢复能力
- ◆ 高质量AGM隔板：防止微短路，延长循环寿命
- ◆ ABS壳盖：电池外壳强度高（阻燃壳体UL94-V0可选）



尺寸

单个尺寸

长	151±2mm
宽	98±2mm
高	95±3mm
总高	101±3mm



产品应用

- ◆ 不间断电源(UPS)
- ◆ 通信和电力设备
- ◆ 紧急照明设备
- ◆ 火灾报警及安防系统
- ◆ 机器人、控制设备及其他机械自动化设备
- ◆ 应急电源系统
- ◆ 便携式音频设备
- ◆ 电动工具，割草机，真空吸尘器
- ◆ 照相设备
- ◆ 便携式测量工具
- ◆ 便携式通话设备
- ◆ 各式电动玩具及娱乐设施
- ◆ 照明设备

端子类型

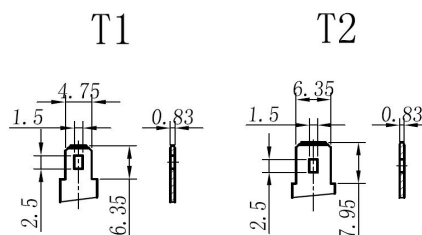
单位:mm

端子类型 T1/T2

重量

4.05kg

8.93lbs



ISO9001 ISO14001 OHSAS18001

内容如有改动，恕不另行通知

天能电池集团有限公司

长兴天能进出口有限公司

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动力电池

储能电池

备用电池

摩托车电池



TN12-14

规格书

额定电压	12V	
容量(25°C)	14Ah	20hr Rate(1.80V/cell)
	13Ah	10hr Rate(1.80V/cell)
	11.9Ah	5hr Rate(1.75V/cell)
	11.01Ah	3hr Rate(1.70V/cell)
	8.79Ah	1hr Rate(1.60V/cell)
壳体材料	ABS (阻燃ABS壳体可选)	
使用温度范围	放电	-20 ~ +50°C
	充电	0 ~ +40°C
	储存	-15 ~ +40°C
不同温度下 电池容量系数	40°C / 104°F	106%
	25°C / 77°F	100%
	0°C / 32°F	86%
	-10°C / 14°F	65%
充电	浮充电压	2.23 -2.27V/单格@25°C, 温度补偿系数: -3mV/单格/°C
	均充电压	2.35 -2.40V/单格@25°C, 温度补偿系数: -3mV/单格/°C
	循环使用电压	2.40 -2.50V/单格@25°C, 温度补偿系数: -5mV/单格/°C
最大充电电流	4.2A (0.3C)	
最大放电电流 (5S)	210A	
电阻	14mΩ	
自放电	<3%, TN系列储存在25°C 时需每6个月进行一次补充充电, 环境温度更高时则充电间隔时间越短	

放电性能

恒电流放电表 (25°C/77°F) 单位: A															
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	26.7	20.5	17.0	14.7	11.3	8.4	7.04	4.16	3.26	2.65	2.16	1.87	1.51	1.260	0.693
1.80V/cell	35.8	26.2	20.5	17.3	13.4	9.7	7.89	4.54	3.51	2.83	2.32	2.01	1.60	1.300	0.700
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恒功率放电表 (25°C/77°F) 单位: W															
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	48.7	37.8	31.6	27.6	21.6	16.1	13.61	8.10	6.36	5.19	4.24	3.69	2.98	2.503	1.371
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1.60V/cell	89.7	62.5	47.5	39.7	29.4	20.8	16.52	9.71	7.54	6.09	4.99	4.26	3.31	2.773	1.451