

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



## Industry Battery-General Purpose AGM Battery-TN Series

# TN12-50

(12V 50Ah)

### 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 7~9 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

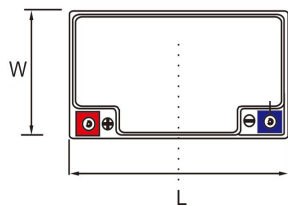
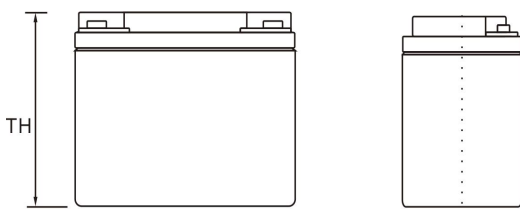
Unit:mm

Length 257±2mm / 10.12inch

Width 133±2mm / 5.24inch

Container Height 200±3mm / 7.87inch

Total Height 200±3mm / 7.87inch



### Application

- ♦ Uninterrupted Power Supply ( UPS )
- ♦ Communications and electric equipment
- ♦ Emergency lighting equipment
- ♦ Fire alarm and security system
- ♦ 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

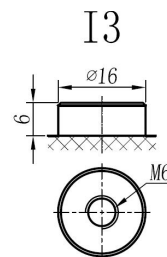
### Terminal

Unit:mm

Terminal Type: I3

### Weight

16.5kg 36.48lbs



ISO9001 ISO14001 OHSAS18001

This document is subject to change without prior notification

- Motive Battery
- Energy Storage Battery
- Reserve Battery
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## TN12-50

### Specificaion

<b>Nominal Voltage</b>	12V	
<b>Rated Capacity(25°C)</b>	52Ah	20hr Rate (1.80V/cell)
	50Ah	10hr Rate (1.80V/cell)
	44Ah	5hr Rate (1.75V/cell)
	41Ah	3hr Rate (1.70V/cell)
	31Ah	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>	15A ( 0.3C)	
<b>Max. Discharge Current (5S)</b>	600A	
<b>Internal Resistance</b>	8mΩ	
<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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	85.7	67.4	57.3	47.9	38.0	29.2	23.95	15.23	12.08	9.85	7.94	6.88	5.59	4.725	2.583
1.80V/cell	115.0	86.1	69.2	56.7	44.9	34.0	26.80	16.65	12.99	10.56	8.53	7.37	5.92	5.005	2.603
1.75V/cell	129.6	94.6	75.6	61.0	46.6	35.2	28.01	17.26	13.20	10.76	8.73	7.58	6.02	5.055	2.633
1.70V/cell	142.7	103.1	80.7	64.1	48.5	36.6	28.93	17.97	13.60	11.06	8.96	7.74	6.11	5.105	2.683
1.67V/cell	157.5	111.2	85.8	68.0	51.3	37.6	29.94	18.47	14.11	11.37	9.22	7.91	6.20	5.215	2.713
1.60V/cell	173.7	120.7	91.8	72.5	54.1	39.2	30.96	19.08	14.62	11.77	9.52	8.08	6.26	5.265	2.733

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	156.7	124.4	106.9	90.3	72.6	55.4	45.55	29.23	23.12	19.02	15.32	13.41	10.91	9.349	5.105
1.80V/cell	208.0	157.1	127.4	105.2	84.3	64.0	50.75	31.63	24.82	20.12	16.42	14.31	11.51	9.890	5.145
1.75V/cell	229.5	169.9	137.4	112.0	86.8	65.7	52.85	32.73	25.13	20.52	16.72	14.61	11.71	9.980	5.195
1.70V/cell	245.7	180.9	144.6	116.9	89.9	68.1	54.25	33.93	25.83	21.02	17.12	14.91	11.91	10.110	5.285
1.67V/cell	267.2	193.5	152.7	123.2	94.0	69.2	55.76	34.63	26.73	21.72	17.62	15.22	12.01	10.210	5.345
1.60V/cell	287.8	205.2	160.6	129.8	98.6	71.7	57.36	35.64	27.43	22.32	18.12	15.52	12.11	10.310	5.375

□ 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

# TN12-50

(12V 50Ah)

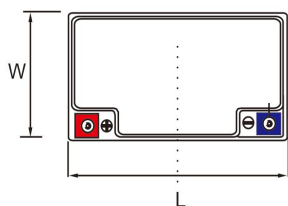
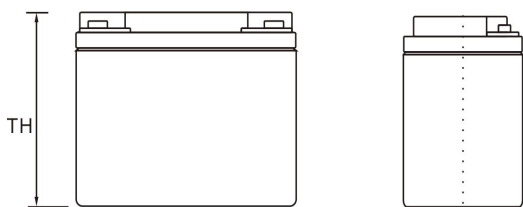
### 产品特点

- ◆ 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，抗腐蚀能力出众
- ◆ 在25°C下，产品浮充设计寿命为7~9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	257±2mm
宽	133±2mm
高	200±3mm
总高	200±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
- ◆ 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

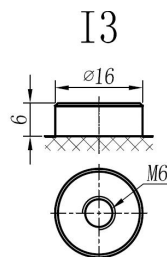
### 端子类型

单位:mm

端子类型 I3

### 重量

16.5kg 36.48lbs



ISO9001 ISO14001 OHSAS18001

内容如有改动，恕不另行通知

动力电池

储能电池

备用电池

摩托车电池



## TN12-50

### 规格书

额定电压	12V	
容量(25°C)	52Ah	20hr Rate (1.80V/cell)
	50Ah	10hr Rate (1.80V/cell)
	44Ah	5hr Rate (1.75V/cell)
	41Ah	3hr Rate (1.70V/cell)
	31Ah	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	15A (0.3C)	
最大放电电流 (5S)	600A	
电阻	8mΩ	
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	85.7	67.4	57.3	47.9	38.0	29.2	23.95	15.23	12.08	9.85	7.94	6.88	5.59	4.725	2.583
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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	156.7	124.4	106.9	90.3	72.6	55.4	45.55	29.23	23.12	19.02	15.32	13.41	10.91	9.349	5.105
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