

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Industry Battery-General Purpose AGM Battery-TN Series

TN12-4.5

(12V 4.5Ah)

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

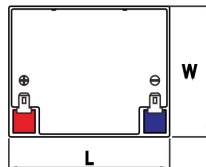
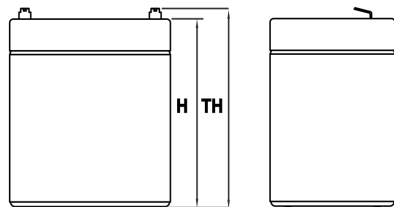
Unit:mm

Length 90±2mm / 3.54inch

Width 70±2mm / 2.76inch

Container Height 101±3mm / 3.98inch

Total Height 107±3mm / 4.21inch



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

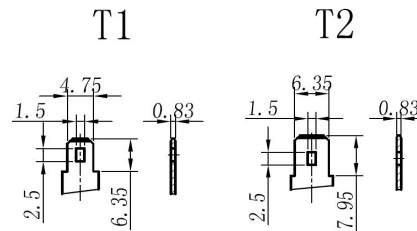
Unit:mm

Terminal Type: T1/T2

Weight

1.48kg

3.26lbs



ISO9001 ISO14001 OHSAS18001

This document is subject to change without prior notification

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



TN12-4.5

Specificaion

Nominal Voltage	12V	
Rated Capacity(25°C)	4.5Ah	20hr Rate(1.80V/cell)
	4.19Ah	10hr Rate(1.80V/cell)
	3.84Ah	5hr Rate(1.75V/cell)
	3.47Ah	3hr Rate(1.70V/cell)
	2.77Ah	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	1.35A (0.3C)	
Max. Discharge Current (5S)	67.5A	
Internal Resistance	40mΩ	
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	8.6	6.0	5.0	4.3	3.5	2.7	2.20	1.35	1.03	0.84	0.72	0.62	0.49	0.404	0.223
1.80V/cell	10.6	7.2	5.8	4.9	3.8	2.9	2.38	1.43	1.08	0.89	0.75	0.64	0.51	0.419	0.225
1.75V/cell	12.6	8.1	6.4	5.3	4.1	3.1	2.50	1.49	1.12	0.91	0.77	0.66	0.52	0.427	0.227
1.70V/cell	14.3	9.0	6.9	5.7	4.3	3.2	2.61	1.55	1.16	0.94	0.79	0.68	0.53	0.434	0.231
1.67V/cell	15.7	9.6	7.3	6.0	4.5	3.4	2.71	1.60	1.19	0.96	0.80	0.69	0.54	0.440	0.234
1.60V/cell	16.5	10.0	7.6	6.2	4.6	3.5	2.77	1.65	1.21	0.98	0.82	0.70	0.55	0.447	0.236

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	16.3	11.5	9.6	8.4	6.7	5.2	4.28	2.63	2.01	1.66	1.41	1.23	0.98	0.816	0.450
1.80V/cell	19.8	13.6	11.0	9.4	7.4	5.7	4.58	2.78	2.10	1.73	1.46	1.27	1.01	0.839	0.452
1.75V/cell	23.2	15.2	12.0	10.1	7.9	6.0	4.80	2.88	2.16	1.78	1.49	1.30	1.03	0.850	0.453
1.70V/cell	26.0	16.6	12.9	10.8	8.2	6.2	4.97	2.98	2.22	1.81	1.52	1.32	1.04	0.859	0.459
1.67V/cell	28.3	17.6	13.4	11.2	8.5	6.4	5.16	3.05	2.27	1.84	1.55	1.34	1.05	0.867	0.463
1.60V/cell	29.2	18.1	13.9	11.4	8.6	6.4	5.23	3.13	2.31	1.87	1.57	1.36	1.07	0.877	0.464

□ 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

TN12-4.5

(12V 4.5Ah)

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）



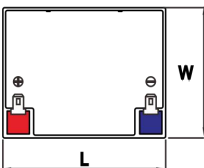
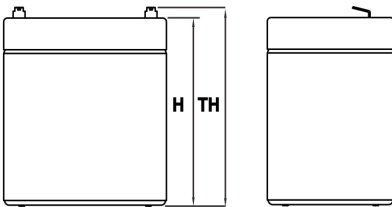
产品应用

- ◆ 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

尺寸

单个尺寸

长	90±2mm
宽	70±2mm
高	101±3mm
总高	107±3mm



端子类型

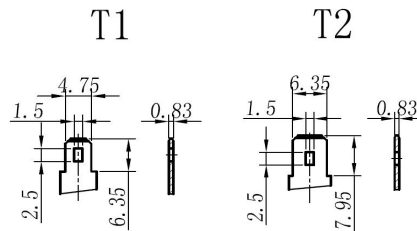
单位:mm

端子类型 T1/T2

重量

1.48kg

3.26lbs



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



TN12-4.5

规格书

额定电压	12V	
容量(25°C)	4.5Ah	20hr Rate(1.80V/cell)
	4.19Ah	10hr Rate(1.80V/cell)
	3.84Ah	5hr Rate(1.75V/cell)
	3.47Ah	3hr Rate(1.70V/cell)
	2.77Ah	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	1.35A (0.3C)	
最大放电电流 (5S)	67.5A	
电阻	40mΩ	
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	8.6	6.0	5.0	4.3	3.5	2.7	2.20	1.35	1.03	0.84	0.72	0.62	0.49	0.404	0.223
1.80V/cell	10.6	7.2	5.8	4.9	3.8	2.9	2.38	1.43	1.08	0.89	0.75	0.64	0.51	0.419	0.225
1.75V/cell	12.6	8.1	6.4	5.3	4.1	3.1	2.50	1.49	1.12	0.91	0.77	0.66	0.52	0.427	0.227
1.70V/cell	14.3	9.0	6.9	5.7	4.3	3.2	2.61	1.55	1.16	0.94	0.79	0.68	0.53	0.434	0.231
1.67V/cell	15.7	9.6	7.3	6.0	4.5	3.4	2.71	1.60	1.19	0.96	0.80	0.69	0.54	0.440	0.234
1.60V/cell	16.5	10.0	7.6	6.2	4.6	3.5	2.77	1.65	1.21	0.98	0.82	0.70	0.55	0.447	0.236

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	16.3	11.5	9.6	8.4	6.7	5.2	4.28	2.63	2.01	1.66	1.41	1.23	0.98	0.816	0.450
1.80V/cell	19.8	13.6	11.0	9.4	7.4	5.7	4.58	2.78	2.10	1.73	1.46	1.27	1.01	0.839	0.452
1.75V/cell	23.2	15.2	12.0	10.1	7.9	6.0	4.80	2.88	2.16	1.78	1.49	1.30	1.03	0.850	0.453
1.70V/cell	26.0	16.6	12.9	10.8	8.2	6.2	4.97	2.98	2.22	1.81	1.52	1.32	1.04	0.859	0.459
1.67V/cell	28.3	17.6	13.4	11.2	8.5	6.4	5.16	3.05	2.27	1.84	1.55	1.34	1.05	0.867	0.463
1.60V/cell	29.2	18.1	13.9	11.4	8.6	6.4	5.23	3.13	2.31	1.87	1.57	1.36	1.07	0.877	0.464