

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Industry Battery-General Purpose AGM Battery-TN Series

TN12-1.9

(12V 1.9Ah)

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

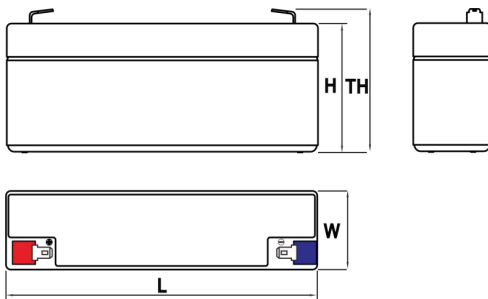
Unit:mm

Length 178±2mm / 7.01inch

Width 35±2mm / 1.38inch

Container Height 60±3mm / 2.36inch

Total Height 66±3mm / 2.6inch



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

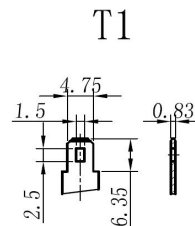
Unit:mm

Terminal Type: T1

Weight

0.88kg

1.94lbs



This document is subject to change without prior notification

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TN12-1.9

Specificaion

Nominal Voltage	12V	
Rated Capacity(25°C)	1.9Ah	20hr Rate(1.80V/cell)
	1.77Ah	10hr Rate(1.80V/cell)
	1.62Ah	5hr Rate(1.75V/cell)
	1.46Ah	3hr Rate(1.70V/cell)
	1.17Ah	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	0.57A (0.3C)	
Max. Discharge Current (5S)	28.5A	
Internal Resistance	80mΩ	
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	3.7	2.5	2.1	1.8	1.5	1.1	0.93	0.57	0.43	0.36	0.30	0.26	0.21	0.171	0.094
1.80V/cell	4.5	3.0	2.4	2.1	1.6	1.2	1.00	0.60	0.46	0.37	0.32	0.27	0.22	0.177	0.095
1.75V/cell	5.3	3.4	2.7	2.2	1.7	1.3	1.06	0.63	0.47	0.39	0.32	0.28	0.22	0.180	0.096
1.70V/cell	6.0	3.8	2.9	2.4	1.8	1.4	1.10	0.66	0.49	0.40	0.33	0.29	0.22	0.183	0.098
1.67V/cell	6.7	4.1	3.1	2.5	1.9	1.4	1.15	0.68	0.50	0.40	0.34	0.29	0.23	0.186	0.099
1.60V/cell	7.0	4.2	3.2	2.6	1.9	1.5	1.17	0.70	0.51	0.41	0.35	0.30	0.23	0.189	0.100

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	6.9	4.8	4.0	3.5	2.9	2.2	1.81	1.11	0.85	0.70	0.60	0.52	0.41	0.344	0.190
1.80V/cell	8.4	5.7	4.6	4.0	3.1	2.4	1.94	1.17	0.89	0.73	0.62	0.54	0.43	0.354	0.191
1.75V/cell	9.8	6.4	5.1	4.3	3.3	2.5	2.03	1.22	0.91	0.75	0.63	0.55	0.43	0.359	0.191
1.70V/cell	11.0	7.0	5.4	4.6	3.5	2.6	2.10	1.26	0.94	0.76	0.64	0.56	0.44	0.362	0.194
1.67V/cell	12.0	7.4	5.7	4.7	3.6	2.7	2.17	1.29	0.96	0.78	0.65	0.57	0.44	0.366	0.196
1.60V/cell	12.4	7.6	5.9	4.8	3.6	2.7	2.20	1.32	0.97	0.79	0.66	0.57	0.45	0.370	0.196

□ 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

TN12-1.9

(12V 1.9Ah)

产品特点

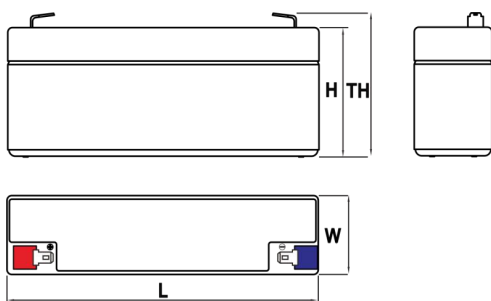
- ◆ 阀控式免维护设计，寿命期间无需加水或加酸
- ◆ 专利稀土合金板栅，减少气体产生，自放电率低，抗腐蚀能力出众
- ◆ 在25°C下，产品浮充设计寿命为3~5年，优良的深放电恢复能力
- ◆ 高质量AGM隔板：防止微短路，延长循环寿命
- ◆ ABS壳盖：电池外壳强度高（阻燃壳体UL94-V0可选）



尺寸

单个尺寸

长	178±2mm
宽	35±2mm
高	60±3mm
总高	66±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

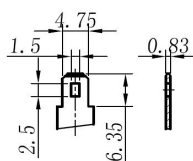
单位:mm

端子类型 T1

重量

0.88kg 1.94lbs

T1



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



TN12-1.9

规格书

额定电压	12V	
容量(25°C)	1.9Ah	20hr Rate(1.80V/cell)
	1.77Ah	10hr Rate(1.80V/cell)
	1.62Ah	5hr Rate(1.75V/cell)
	1.46Ah	3hr Rate(1.70V/cell)
	1.17Ah	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	0.57A (0.3C)	
最大放电电流 (5S)	28.5A	
电阻	80mΩ	
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	3.7	2.5	2.1	1.8	1.5	1.1	0.93	0.57	0.43	0.36	0.30	0.26	0.21	0.171	0.094
1.80V/cell	4.5	3.0	2.4	2.1	1.6	1.2	1.00	0.60	0.46	0.37	0.32	0.27	0.22	0.177	0.095
1.75V/cell	5.3	3.4	2.7	2.2	1.7	1.3	1.06	0.63	0.47	0.39	0.32	0.28	0.22	0.180	0.096
1.70V/cell	6.0	3.8	2.9	2.4	1.8	1.4	1.10	0.66	0.49	0.40	0.33	0.29	0.22	0.183	0.098
1.67V/cell	6.7	4.1	3.1	2.5	1.9	1.4	1.15	0.68	0.50	0.40	0.34	0.29	0.23	0.186	0.099
1.60V/cell	7.0	4.2	3.2	2.6	1.9	1.5	1.17	0.70	0.51	0.41	0.35	0.30	0.23	0.189	0.100

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	6.9	4.8	4.0	3.5	2.9	2.2	1.81	1.11	0.85	0.70	0.60	0.52	0.41	0.344	0.190
1.80V/cell	8.4	5.7	4.6	4.0	3.1	2.4	1.94	1.17	0.89	0.73	0.62	0.54	0.43	0.354	0.191
1.75V/cell	9.8	6.4	5.1	4.3	3.3	2.5	2.03	1.22	0.91	0.75	0.63	0.55	0.43	0.359	0.191
1.70V/cell	11.0	7.0	5.4	4.6	3.5	2.6	2.10	1.26	0.94	0.76	0.64	0.56	0.44	0.362	0.194
1.67V/cell	12.0	7.4	5.7	4.7	3.6	2.7	2.17	1.29	0.96	0.78	0.65	0.57	0.44	0.366	0.196
1.60V/cell	12.4	7.6	5.9	4.8	3.6	2.7	2.20	1.32	0.97	0.79	0.66	0.57	0.45	0.370	0.196