

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Maintenance Free VRLA AGM Battery - Long Life Type

TNL12-12

(12V 12Ah)

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
- Long life, low self-discharge rate and high reliability, 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

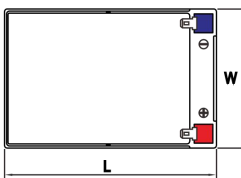
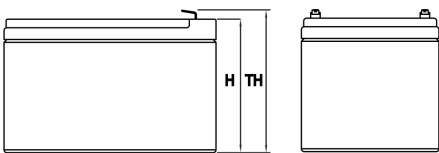
Unit:mm

Length 151±2mm / 5.94inch

Width 99.5±2mm / 3.92inch

Container Height 95.5±3mm / 3.76inch

Total Height 101.5±3mm / 4inch



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

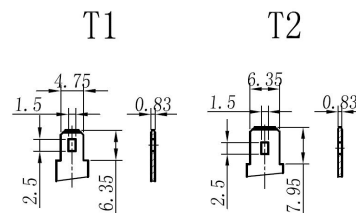
Unit:mm

Terminal Type: T1/T2

Weight

4.05kg

8.95lbs



ISO9001 ISO14001 OHSAS18001

This document is subject to change without prior notification

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TNL12-12

Specificaion

Nominal Voltage	12V	
Rated Capacity(25°C)	13Ah	20hr Rate(1.80V/cell)
	12Ah	10hr Rate(1.80V/cell)
	11Ah	5hr Rate(1.75V/cell)
	10Ah	3hr Rate(1.70V/cell)
	7Ah	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	3.6A (0.3C)	
Max. Discharge Current (5'	180A	
Internal Resistance	18mΩ	
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	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	15.5	12.9	11.0	9.0	6.9	5.79	3.69	2.93	2.38	1.92	1.68	1.34	1.131	0.631
1.80V/cell	19.8	15.6	13.0	10.6	8.0	6.49	4.03	3.15	2.53	2.06	1.80	1.42	1.201	0.637
1.75V/cell	21.7	17.0	14.0	11.0	8.3	6.78	4.18	3.21	2.60	2.11	1.85	1.44	1.211	0.643
1.70V/cell	23.7	18.2	14.7	11.5	8.7	7.00	4.34	3.30	2.66	2.16	1.88	1.46	1.221	0.655
1.67V/cell	25.6	19.4	15.6	12.1	8.9	7.24	4.47	3.44	2.75	2.22	1.93	1.48	1.251	0.663
1.60V/cell	27.8	20.7	16.7	12.8	9.3	7.49	4.62	3.54	2.83	2.30	1.97	1.50	1.261	0.667

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	29.1	24.6	21.1	17.5	13.3	11.21	7.21	5.73	4.65	3.77	3.32	2.66	2.282	1.271
1.80V/cell	36.8	29.3	24.6	20.3	15.4	12.51	7.81	6.13	4.94	4.03	3.54	2.82	2.412	1.281
1.75V/cell	39.8	31.6	26.2	20.9	15.8	13.01	8.07	6.22	5.05	4.12	3.63	2.86	2.432	1.292
1.70V/cell	42.4	33.3	27.4	21.6	16.4	13.41	8.37	6.38	5.17	4.22	3.70	2.90	2.462	1.315
1.67V/cell	45.4	35.1	28.9	22.6	16.6	13.71	8.56	6.63	5.32	4.32	3.77	2.94	2.503	1.330
1.60V/cell	48.1	36.9	30.4	23.7	17.2	14.11	8.80	6.80	5.47	4.45	3.84	2.96	2.533	1.336

☐ 动力电池

■ 储能电池

■ 备用电池

☐ 摩托车电池



阀控式免维护AGM电池-长寿命系列

TNL12-12

(12V 12Ah)

产品特点

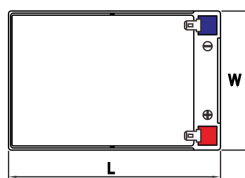
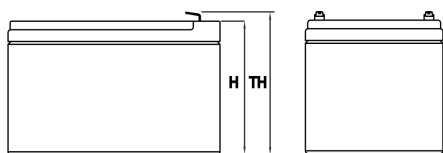
- ◆ 阀控式免维护设计，寿命期间无需加水或加酸
- ◆ 专利稀土合金板栅，减少气体产生，自放电率低，抗腐蚀能力出众
- ◆ 电池寿命长，自放电率低具有高可靠性，深放电恢复能力出色
- ◆ 高质量AGM隔板：防止微短路，延长循环寿命
- ◆ ABS壳盖：电池外壳强度高（阻燃壳体UL94-V0可选）



尺寸

单个尺寸

长	151±2mm
宽	99.5±2mm
高	95.5±3mm
总高	101.5±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

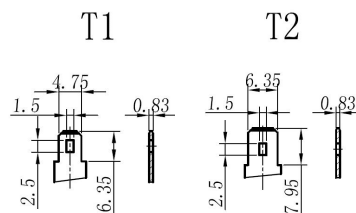
单位:mm

端子类型 T1/T2

重量

4.05kg

8.95lbs



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



TNL12-12

规格书

额定电压	12V	
容量(25°C)	13Ah	20hr Rate(1.80V/cell)
	12Ah	10hr Rate(1.80V/cell)
	11Ah	5hr Rate(1.75V/cell)
	10Ah	3hr Rate(1.70V/cell)
	7Ah	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	3.6A (0.3C)	
最大放电电流 (5S)	180A	
电阻	18mΩ	
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	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	15.5	12.9	11.0	9.0	6.9	5.79	3.69	2.93	2.38	1.92	1.68	1.34	1.131	0.631
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1.60V/cell	27.8	20.7	16.7	12.8	9.3	7.49	4.62	3.54	2.83	2.30	1.97	1.50	1.261	0.667

恒功率放电表 (25°C/77°F) 单位: W														
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	29.1	24.6	21.1	17.5	13.3	11.21	7.21	5.73	4.65	3.77	3.32	2.66	2.282	1.271
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