

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



## Energy Storage Battery-AGM-GEL Technology-TNG Series

# TNG12-12

## (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
- ◆ Special paste formula: additives for deep discharge, long cycle life
- ◆ High quality AGM separator: extend cycle life and prevent micro short circuit
- ◆ The patent Nano silica electrolytes, extend cycle life and improve the deep discharge performance
- ◆ ABS container: increase the strength of battery (Flame-retardant ABS UL94-V0 is optional)



### Application

- ◆ Renewable energy system
- ◆ Hybrid solar power system
- ◆ Uninterrupted Power Supply ( UPS )
- ◆ Communications and electric equipment
- ◆ Emergency lighting equipment
- ◆ Fire alarm and security systems
- ◆ Robots, control equipment, and other factory automation equipment
- ◆ Emergency power supply ( EPS )
- ◆ Various power toy and hobby equipment
- ◆ Lighting equipment

### Dimension

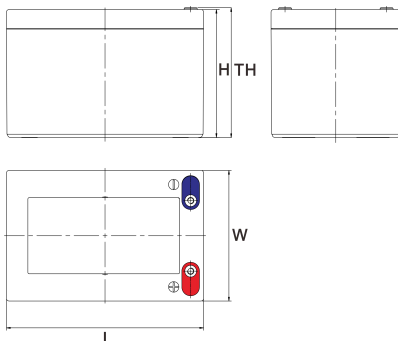
Unit:mm

Length 151±2mm / 5.94inch

Width 100±2mm / 3.94inch

Container Height 97±3mm / 3.82inch

Total Height 100±3mm / 3.94inch



### Terminal

Unit:mm

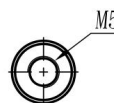
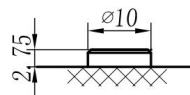
Terminal Type: I10

### Weight

4kg

8.82lbs

I10



This document is subject to change without prior notification

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## TNG12-12

### Specificaion

<b>Nominal Voltage</b>	12V	
	12.25Ah 20hr Rate(1.80V/cell)	
	11.21Ah 10hr Rate(1.80V/cell)	
<b>Rated Capacity(25°C)</b>	10.15Ah 5hr Rate(1.75V/cell)	
	9.15Ah 3hr Rate(1.70V/cell)	
	7.49Ah 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 Voltage</b>	<b>Float Voltage</b>	2.25 -2.30V/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>	3.6A (0.3C)	
<b>Max. Discharge Current (5S)</b>	180A	
<b>Internal Resistance</b>	14mΩ	
<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	22.5	14.9	12.3	10.8	8.8	7.0	5.83	3.58	2.70	2.22	1.88	1.63	1.30	1.08	0.606
1.80V/cell	26.9	17.9	14.4	12.4	9.9	7.7	6.31	3.84	2.88	2.36	1.98	1.70	1.34	1.12	0.613
1.75V/cell	32.2	20.5	16.1	13.6	10.6	8.2	6.67	4.00	2.98	2.42	2.03	1.75	1.38	1.14	0.619
1.70V/cell	37.4	22.9	17.7	14.8	11.3	8.6	6.96	4.14	3.05	2.47	2.08	1.79	1.40	1.16	0.630
1.65V/cell	41.2	24.8	18.9	15.9	11.9	9.0	7.20	4.27	3.14	2.54	2.12	1.82	1.42	1.18	0.638
1.60V/cell	45.4	26.9	20.4	16.8	12.6	9.4	7.49	4.38	3.21	2.60	2.17	1.86	1.45	1.20	0.642

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	41.8	27.9	23.2	20.4	16.8	13.2	11.14	6.86	5.19	4.27	3.64	3.17	2.54	2.14	1.180
1.80V/cell	48.6	32.8	26.7	23.2	18.6	14.4	11.93	7.31	5.50	4.53	3.81	3.30	2.63	2.21	1.190
1.75V/cell	57.7	37.2	29.4	25.3	19.8	15.4	12.52	7.58	5.67	4.61	3.89	3.39	2.69	2.26	1.200
1.70V/cell	66.0	40.9	32.1	27.3	21.0	16.0	13.02	7.83	5.80	4.71	3.98	3.45	2.73	2.29	1.220
1.65V/cell	71.7	43.8	34.0	28.9	22.0	16.6	13.41	8.06	5.94	4.81	4.05	3.51	2.76	2.32	1.230
1.60V/cell	77.7	46.6	35.9	30.0	22.9	17.2	13.90	8.21	6.04	4.92	4.12	3.58	2.81	2.35	1.240

☐ 动力电池

■ 储能电池

☐ 备用电池

☐ 摩托车电池



### 储能电池-AGM-凝胶技术-TNG系列

# TNG12-12

## (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
- ◆ 特制组成配方，添加特殊试剂，增进深放电性能，延长循环寿命
- ◆ 高质量AGM隔板：防止微短路，延长循环寿命
- ◆ 纳米硅胶专利电解质，延长循环寿命，增进深放电性能
- ◆ ABS壳盖：电池外壳强度高（阻燃壳体UL94-V0可选）



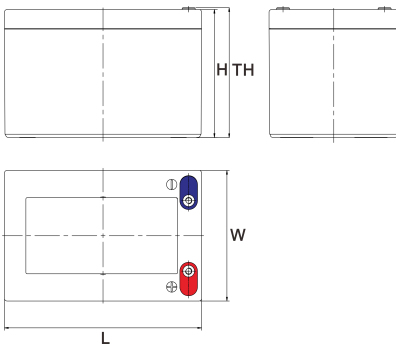
### 产品应用

- ◆ 可再生能源系统
- ◆ 太阳能混合动力系统
- ◆ 不间断电源 (UPS)
- ◆ 通信及电力设备
- ◆ 应急照明系统
- ◆ 安防及火灾报警系统
- ◆ 机械自动化控制设备
- ◆ 应急电源 (EPS)
- ◆ 各式电动玩具及娱乐设施
- ◆ 照明设备

### 尺寸

单个尺寸

长	151±2mm / 5.94inch
宽	100±2mm / 3.94inch
高	97±3mm / 3.82inch
总高	100±3mm / 3.94inch



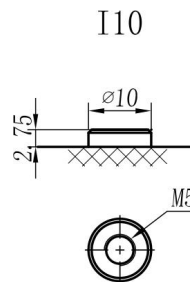
### 端子类型

单位:mm

端子类型 I10

### 重量

4kg 8.82lbs



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



## TNG12-12

### 规格书

额定电压	12V	
容量(25°C)	12.25Ah 20hr Rate(1.80V/cell)	
	11.21Ah 10hr Rate(1.80V/cell)	
	10.15Ah 5hr Rate(1.75V/cell)	
	9.15Ah 3hr Rate(1.70V/cell)	
	7.49Ah 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%
充电电压	浮充	2.25 -2.30V/单格@25°C, 温度补偿系数: -3mV/单格/°C
	均充	2.35 -2.40V/单格@25°C, 温度补偿系数: -3mV/单格/°C
	循环使用	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	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	22.5	14.9	12.3	10.8	8.8	7.0	5.83	3.58	2.70	2.22	1.88	1.63	1.30	1.08	0.606
1.80V/cell	26.9	17.9	14.4	12.4	9.9	7.7	6.31	3.84	2.88	2.36	1.98	1.70	1.34	1.12	0.613
1.75V/cell	32.2	20.5	16.1	13.6	10.6	8.2	6.67	4.00	2.98	2.42	2.03	1.75	1.38	1.14	0.619
1.70V/cell	37.4	22.9	17.7	14.8	11.3	8.6	6.96	4.14	3.05	2.47	2.08	1.79	1.40	1.16	0.630
1.65V/cell	41.2	24.8	18.9	15.9	11.9	9.0	7.20	4.27	3.14	2.54	2.12	1.82	1.42	1.18	0.638
1.60V/cell	45.4	26.9	20.4	16.8	12.6	9.4	7.49	4.38	3.21	2.60	2.17	1.86	1.45	1.20	0.642

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	41.8	27.9	23.2	20.4	16.8	13.2	11.14	6.86	5.19	4.27	3.64	3.17	2.54	2.14	1.180
1.80V/cell	48.6	32.8	26.7	23.2	18.6	14.4	11.93	7.31	5.50	4.53	3.81	3.30	2.63	2.21	1.190
1.75V/cell	57.7	37.2	29.4	25.3	19.8	15.4	12.52	7.58	5.67	4.61	3.89	3.39	2.69	2.26	1.200
1.70V/cell	66.0	40.9	32.1	27.3	21.0	16.0	13.02	7.83	5.80	4.71	3.98	3.45	2.73	2.29	1.220
1.65V/cell	71.7	43.8	34.0	28.9	22.0	16.6	13.41	8.06	5.94	4.81	4.05	3.51	2.76	2.32	1.230
1.60V/cell	77.7	46.6	35.9	30.0	22.9	17.2	13.90	8.21	6.04	4.92	4.12	3.58	2.81	2.35	1.240