

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



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

# TNG12-17

## (12V 17Ah)

### 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

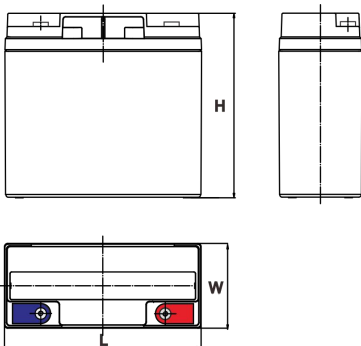
Unit:mm

Length 181±2mm / 7.13inch

Width 77±2mm / 3.03inch

Container Height 167±3mm / 6.57inch

Total Height 167±3mm / 6.57inch



### Terminal

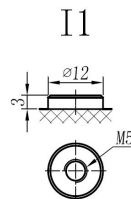
Unit:mm

Terminal Type: I1

### Weight

5.4kg

11.9lbs



This document is subject to change without prior notification

Motive Battery

 Energy Storage Battery

 Reserve Battery

 Motorcycle Battery


## TNG12-17

### Specificaion

|   |   |   |
|---|---|---|
| <b>Nominal Voltage</b>                  | 12V   |   |
|   | 17.35Ah 20hr Rate(1.80V/cell)   |   |
|   | 15.83Ah 10hr Rate(1.80V/cell)   |   |
| <b>Rated Capacity(25°C)</b>             | 14.44Ah 5hr Rate(1.75V/cell)  |   |
|   | 13.36Ah 3hr Rate(1.70V/cell)  |   |
|   | 10.67Ah 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>             | 5.1A (0.3C)   |   |
| <b>Max. Discharge Current (5S)</b>      | 232.5A  |   |
| <b>Internal Resistance</b>              | 17mΩ  |   |
| <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   | 31.8 | 24.3  | 20.2  | 17.4  | 13.4  | 10.1  | 8.54  | 5.05 | 3.95 | 3.22 | 2.62 | 2.28 | 1.84 | 1.53 | 0.856 |
| 1.80V/cell   | 42.6 | 31.1  | 24.5  | 20.7  | 15.9  | 11.7  | 9.57  | 5.52 | 4.26 | 3.43 | 2.81 | 2.44 | 1.95 | 1.58 | 0.868 |
| 1.75V/cell   | 48.0 | 34.2  | 26.7  | 22.2  | 16.6  | 12.2  | 10.01 | 5.72 | 4.34 | 3.51 | 2.89 | 2.50 | 1.98 | 1.62 | 0.879 |
| 1.70V/cell   | 52.9 | 37.3  | 28.5  | 23.3  | 17.2  | 12.6  | 10.33 | 5.87 | 4.45 | 3.60 | 2.96 | 2.56 | 2.01 | 1.65 | 0.891 |
| 1.65V/cell   | 58.4 | 40.2  | 30.2  | 24.8  | 18.1  | 13.0  | 10.57 | 5.95 | 4.64 | 3.73 | 3.05 | 2.62 | 2.04 | 1.68 | 0.902 |
| 1.60V/cell   | 64.4 | 43.7  | 32.3  | 26.5  | 19.2  | 13.5  | 10.67 | 6.21 | 4.78 | 3.84 | 3.15 | 2.67 | 2.06 | 1.71 | 0.914 |

| 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   | 58.0  | 45.0  | 37.7  | 32.9  | 25.8  | 19.1  | 16.31 | 9.67  | 7.60 | 6.20 | 5.07 | 4.44 | 3.59 | 3.04 | 1.666 |
| 1.80V/cell   | 77.1  | 56.9  | 44.9  | 38.3  | 29.9  | 22.1  | 18.10 | 10.49 | 8.13 | 6.58 | 5.42 | 4.74 | 3.80 | 3.13 | 1.677 |
| 1.75V/cell   | 85.0  | 61.5  | 48.5  | 40.9  | 30.8  | 22.7  | 18.88 | 10.84 | 8.24 | 6.70 | 5.54 | 4.85 | 3.85 | 3.21 | 1.699 |
| 1.70V/cell   | 91.0  | 65.5  | 51.0  | 42.6  | 31.9  | 23.5  | 19.44 | 11.08 | 8.47 | 6.87 | 5.67 | 4.94 | 3.91 | 3.27 | 1.722 |
| 1.65V/cell   | 99.0  | 70.0  | 53.8  | 44.9  | 33.3  | 23.9  | 19.66 | 11.17 | 8.79 | 7.08 | 5.81 | 5.04 | 3.95 | 3.33 | 1.745 |
| 1.60V/cell   | 106.7 | 74.4  | 56.6  | 47.3  | 34.9  | 24.8  | 19.77 | 11.62 | 9.02 | 7.28 | 5.98 | 5.13 | 3.99 | 3.36 | 1.756 |

☐ 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

# TNG12-17

## (12V 17Ah)

### 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）



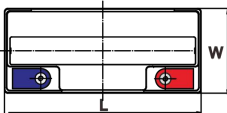
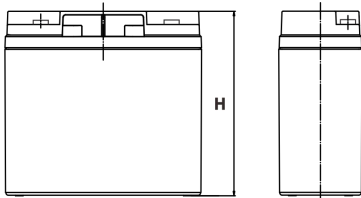
### 产品应用

- ◆ 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  | 181±2mm / 7.13inch |
| 宽  | 77±2mm / 3.03inch  |
| 高  | 167±3mm / 6.57inch |
| 总高 | 167±3mm / 6.57inch |



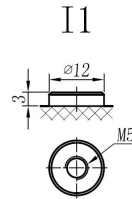
### 端子类型

单位:mm

端子类型 I1

### 重量

5.4kg 11.9lbs



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



## TNG12-17

### 规格书

|                 |   |   |
|-----------------|---|---|
| 额定电压            | 12V   |   |
| 容量(25°C)        | 17.35Ah 20hr Rate(1.80V/cell)                     |   |
|                 | 15.83Ah 10hr Rate(1.80V/cell)                     |   |
|                 | 14.44Ah 5hr Rate(1.75V/cell)                      |   |
|                 | 13.36Ah 3hr Rate(1.70V/cell)                      |   |
|                 | 10.67Ah 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<br>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          | 5.1A (0.3C)                                       |   |
| 最大放电电流(5S)      | 232.5A  |   |
| 电阻              | 17mΩ  |   |
| 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               | 31.8 | 24.3  | 20.2  | 17.4  | 13.4  | 10.1  | 8.54  | 5.05 | 3.95 | 3.22 | 2.62 | 2.28 | 1.84 | 1.53 | 0.856 |
| 1.80V/cell               | 42.6 | 31.1  | 24.5  | 20.7  | 15.9  | 11.7  | 9.57  | 5.52 | 4.26 | 3.43 | 2.81 | 2.44 | 1.95 | 1.58 | 0.868 |
| 1.75V/cell               | 48.0 | 34.2  | 26.7  | 22.2  | 16.6  | 12.2  | 10.01 | 5.72 | 4.34 | 3.51 | 2.89 | 2.50 | 1.98 | 1.62 | 0.879 |
| 1.70V/cell               | 52.9 | 37.3  | 28.5  | 23.3  | 17.2  | 12.6  | 10.33 | 5.87 | 4.45 | 3.60 | 2.96 | 2.56 | 2.01 | 1.65 | 0.891 |
| 1.65V/cell               | 58.4 | 40.2  | 30.2  | 24.8  | 18.1  | 13.0  | 10.57 | 5.95 | 4.64 | 3.73 | 3.05 | 2.62 | 2.04 | 1.68 | 0.902 |
| 1.60V/cell               | 64.4 | 43.7  | 32.3  | 26.5  | 19.2  | 13.5  | 10.67 | 6.21 | 4.78 | 3.84 | 3.15 | 2.67 | 2.06 | 1.71 | 0.914 |

| 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               | 58.0  | 45.0  | 37.7  | 32.9  | 25.8  | 19.1  | 16.31 | 9.67  | 7.60 | 6.20 | 5.07 | 4.44 | 3.59 | 3.04 | 1.666 |
| 1.80V/cell               | 77.1  | 56.9  | 44.9  | 38.3  | 29.9  | 22.1  | 18.10 | 10.49 | 8.13 | 6.58 | 5.42 | 4.74 | 3.80 | 3.13 | 1.677 |
| 1.75V/cell               | 85.0  | 61.5  | 48.5  | 40.9  | 30.8  | 22.7  | 18.88 | 10.84 | 8.24 | 6.70 | 5.54 | 4.85 | 3.85 | 3.21 | 1.699 |
| 1.70V/cell               | 91.0  | 65.5  | 51.0  | 42.6  | 31.9  | 23.5  | 19.44 | 11.08 | 8.47 | 6.87 | 5.67 | 4.94 | 3.91 | 3.27 | 1.722 |
| 1.65V/cell               | 99.0  | 70.0  | 53.8  | 44.9  | 33.3  | 23.9  | 19.66 | 11.17 | 8.79 | 7.08 | 5.81 | 5.04 | 3.95 | 3.33 | 1.745 |
| 1.60V/cell               | 106.7 | 74.4  | 56.6  | 47.3  | 34.9  | 24.8  | 19.77 | 11.62 | 9.02 | 7.28 | 5.98 | 5.13 | 3.99 | 3.36 | 1.756 |