

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



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

# TNG12-180

## (12V 180Ah)

### 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

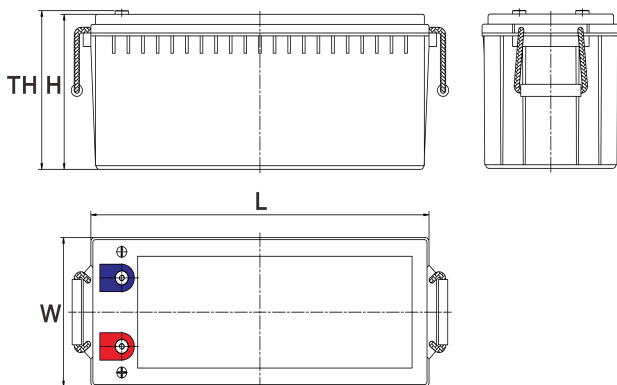
Unit:mm

Length 532±2mm / 20.94inch

Width 207±2mm / 8.15inch

Container Height 214±3mm / 8.43inch

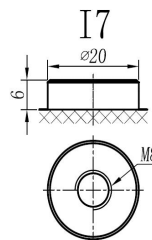
Total Height 220±3mm / 8.66inch



### Terminal

Unit:mm

Terminal Type: I7



### Weight

54.5kg 120.15lbs



ISO9001 ISO14001 OHSAS18001

This document is subject to change without prior notification

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## TNG12-180

### Specification

<b>Nominal Voltage</b>	12V	
<b>Rated Capacity(25°C)</b>	191Ah	20hr Rate(1.80V/cell)
	180Ah	10hr Rate(1.80V/cell)
	155Ah	5hr Rate(1.75V/cell)
<b>Rated Capacity(25°C)</b>	145Ah	3hr Rate(1.70V/cell)
	110Ah	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>	54A (0.3C)	
<b>Max. Discharge Current (5S)</b>	1800A	
<b>Internal Resistance</b>	3mΩ	
<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	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	237.6	202.1	169.0	134.3	103.1	84.88	54.09	42.7	34.9	28.1	24.5	19.90	17.0	9.5
1.80V/cell	303.6	244.2	199.8	158.5	119.9	95.08	58.99	46.0	37.3	30.2	26.3	21.10	18.0	9.6
1.75V/cell	333.6	266.6	214.9	164.5	124.4	99.48	61.19	46.8	38.1	31.0	27.0	21.50	18.2	9.6
1.70V/cell	363.6	284.7	225.8	171.3	129.4	102.58	63.59	48.2	39.1	31.8	27.6	21.80	18.4	9.8
1.65V/cell	392.4	302.7	239.9	180.7	132.6	105.98	65.39	50.2	40.5	32.7	28.2	22.10	18.7	10.0
1.60V/cell	426.0	323.7	255.6	190.7	138.3	109.78	67.58	51.7	41.7	33.8	28.8	22.30	18.9	10.0

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	237.6	202.1	169.0	134.3	103.1	84.88	54.1	42.69	34.89	28.09	24.50	19.90	17.02	9.270
1.80V/cell	303.6	244.2	199.8	158.5	119.9	95.08	59.0	45.99	37.29	30.19	26.30	21.10	18.02	9.360
1.75V/cell	333.6	266.6	214.9	164.5	124.4	99.48	61.2	46.79	38.09	30.99	27.00	21.50	18.22	9.450
1.70V/cell	363.6	284.7	225.8	171.3	129.4	102.58	63.6	48.19	39.09	31.79	27.60	21.80	18.42	9.630
1.65V/cell	392.4	302.7	239.9	180.7	132.6	105.98	65.4	50.19	40.49	32.69	28.20	22.10	18.72	9.760
1.60V/cell	426.0	323.7	255.6	190.7	138.3	109.78	67.6	51.69	41.69	33.79	28.80	22.30	18.92	9.810

□ 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

# TNG12-180

## (12V 180Ah)

### 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）



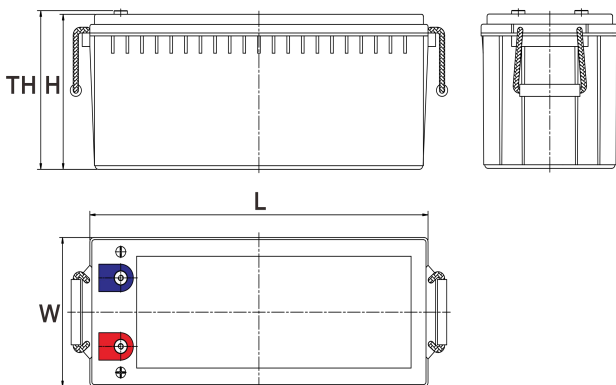
### 产品应用

- ◆ 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	532±2mm / 20.94inch
宽	207±2mm / 8.15inch
高	214±3mm / 8.43inch
总高	220±3mm / 8.66inch



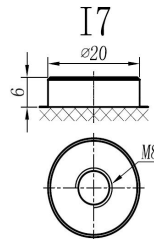
### 端子类型

单位:mm

端子类型 I7

### 重量

54.5kg 120.15lbs



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



### 规格书

## TNG12-180

额定电压	12V	
容量(25°C)	191Ah	20hr Rate(1.80V/cell)
	180Ah	10hr Rate(1.80V/cell)
	155Ah	5hr Rate(1.75V/cell)
	145Ah	3hr Rate(1.70V/cell)
	110Ah	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	54A (0.3C)	
最大放电电流(5S)	1800A	
电阻	3mΩ	
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	237.6	202.1	169.0	134.3	103.1	84.88	54.09	42.69	34.89	28.09	24.50	19.90	17.02	9.465
1.80V/cell	303.6	244.2	199.8	158.5	119.9	95.08	58.99	45.99	37.29	30.19	26.30	21.10	18.02	9.557
1.75V/cell	333.6	266.6	214.9	164.5	124.4	99.48	61.19	46.79	38.09	30.99	27.00	21.50	18.22	9.649
1.70V/cell	363.6	284.7	225.8	171.3	129.4	102.58	63.59	48.19	39.09	31.79	27.60	21.80	18.42	9.832
1.65V/cell	392.4	302.7	239.9	180.7	132.6	105.98	65.39	50.19	40.49	32.69	28.20	22.10	18.72	9.965
1.60V/cell	426.0	323.7	255.6	190.7	138.3	109.78	67.58	51.69	41.69	33.79	28.80	22.30	18.92	10.016

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	237.6	202.1	169.0	134.3	103.1	84.88	54.09	42.69	34.89	28.09	24.50	19.90	17.02	9.270
1.80V/cell	303.6	244.2	199.8	158.5	119.9	95.08	58.99	45.99	37.29	30.19	26.30	21.10	18.02	9.360
1.75V/cell	333.6	266.6	214.9	164.5	124.4	99.48	61.19	46.79	38.09	30.99	27.00	21.50	18.22	9.450
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1.65V/cell	392.4	302.7	239.9	180.7	132.6	105.98	65.39	50.19	40.49	32.69	28.20	22.10	18.72	9.760
1.60V/cell	426.0	323.7	255.6	190.7	138.3	109.78	67.58	51.69	41.69	33.79	28.80	22.30	18.92	9.810