

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Energy Storage Battery-AGM-GEL Technology-TNG Series

TNG12-20

(12V 20Ah)

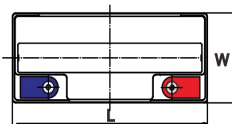
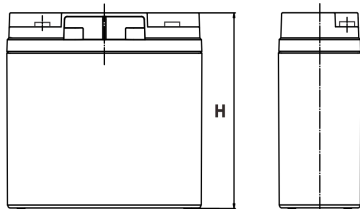
GENERAL FEATURES

- ◆ 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)

Dimension

Unit:mm

Length	181±2mm / 7.13inch
Width	77±2mm / 3.03inch
Container Height	169±3mm / 6.65inch
Total Height	169±3mm / 6.65inch



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

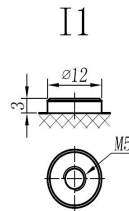
Terminal

Unit:mm

Terminal Type: I1

Weight

5.8kg 12.79lbs



This document is subject to change without prior notification

Motive Battery

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TNG12-20

Specificaion

Nominal Voltage	12V	
	20.42Ah	20hr Rate(1.80V/cell)
	18.62Ah	10hr Rate(1.80V/cell)
Rated Capacity(25°C)	17Ah	5hr Rate(1.75V/cell)
	15.72Ah	3hr Rate(1.70V/cell)
	12.6Ah	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 Voltage	Float Voltage	2.25 -2.30V/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	6A (0.3C)	
Max. Discharge Current (5S)	300A	
Internal Resistance	15mΩ	
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	37.4	28.6	23.7	20.5	15.9	11.8	10.10	5.95	4.65	3.78	3.09	2.68	2.16	1.80	1.011
1.80V/cell	50.1	36.7	28.7	24.3	18.7	13.8	11.30	6.49	5.01	4.04	3.31	2.87	2.29	1.86	1.021
1.75V/cell	56.5	40.3	31.4	26.1	19.4	14.3	11.80	6.73	5.10	4.13	3.40	2.95	2.33	1.91	1.031
1.70V/cell	62.3	43.9	33.5	27.5	20.3	14.9	12.20	6.90	5.24	4.24	3.49	3.01	2.36	1.95	1.052
1.65V/cell	68.7	47.4	35.6	29.1	21.4	15.3	12.40	7.00	5.47	4.39	3.58	3.08	2.40	1.99	1.062
1.60V/cell	75.7	51.4	38.1	31.1	22.6	15.9	12.60	7.30	5.63	4.52	3.70	3.14	2.42	2.01	1.072

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	37.4	28.6	23.7	20.5	15.9	11.8	10.10	5.95	4.65	3.78	3.09	2.68	2.16	1.80	0.990
1.80V/cell	50.1	36.7	28.7	24.3	18.7	13.8	11.30	6.49	5.01	4.04	3.31	2.87	2.29	1.86	1.000
1.75V/cell	56.5	40.3	31.4	26.1	19.4	14.3	11.80	6.73	5.10	4.13	3.40	2.95	2.33	1.91	1.010
1.70V/cell	62.3	43.9	33.5	27.5	20.3	14.9	12.20	6.90	5.24	4.24	3.49	3.01	2.36	1.95	1.030
1.65V/cell	68.7	47.4	35.6	29.1	21.4	15.3	12.40	7.00	5.47	4.39	3.58	3.08	2.40	1.99	1.040
1.60V/cell	75.7	51.4	38.1	31.1	22.6	15.9	12.60	7.30	5.63	4.52	3.70	3.14	2.42	2.01	1.050

□ 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

TNG12-20

(12V 20Ah)

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）



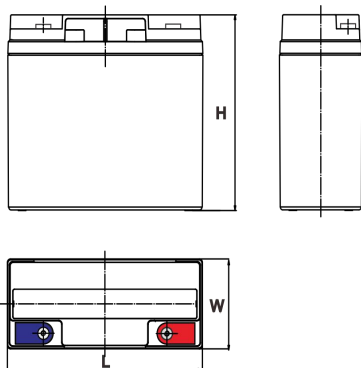
产品应用

- ◆ 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	169±3mm / 6.65inch
总高	169±3mm / 6.65inch



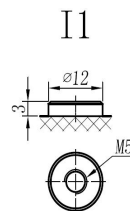
端子类型

单位:mm

端子类型 I1

重量

5.8kg 12.79lbs



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

TNG12-20

额定电压	12V
容量(25°C)	20.42Ah 20hr Rate(1.80V/cell)
	18.62Ah 10hr Rate(1.80V/cell)
	17Ah 5hr Rate(1.75V/cell)
	15.72Ah 3hr Rate(1.70V/cell)
	12.6Ah 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	6A (0.3C)
最大放电电流(5S)	300A
电阻	15mΩ
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	37.4	28.6	23.7	20.5	15.9	11.8	10.10	5.95	4.65	3.78	3.09	2.68	2.16	1.80	1.011
1.80V/cell	50.1	36.7	28.7	24.3	18.7	13.8	11.30	6.49	5.01	4.04	3.31	2.87	2.29	1.86	1.021
1.75V/cell	56.5	40.3	31.4	26.1	19.4	14.3	11.80	6.73	5.10	4.13	3.40	2.95	2.33	1.91	1.031
1.70V/cell	62.3	43.9	33.5	27.5	20.3	14.9	12.20	6.90	5.24	4.24	3.49	3.01	2.36	1.95	1.052
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1.60V/cell	75.7	51.4	38.1	31.1	22.6	15.9	12.60	7.30	5.63	4.52	3.70	3.14	2.42	2.01	1.072

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	37.4	28.6	23.7	20.5	15.9	11.8	10.10	5.95	4.65	3.78	3.09	2.68	2.16	1.80	0.990
1.80V/cell	50.1	36.7	28.7	24.3	18.7	13.8	11.30	6.49	5.01	4.04	3.31	2.87	2.29	1.86	1.000
1.75V/cell	56.5	40.3	31.4	26.1	19.4	14.3	11.80	6.73	5.10	4.13	3.40	2.95	2.33	1.91	1.010
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1.60V/cell	75.7	51.4	38.1	31.1	22.6	15.9	12.60	7.30	5.63	4.52	3.70	3.14	2.42	2.01	1.050