

☐ Motive Battery

☒ Energy Storage Battery

☐ Reserve Battery

☐ Motorcycle Battery



Energy Storage Battery-AGM-GEL Technology-TNG Series

TNG12-38

(12V 38Ah)

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

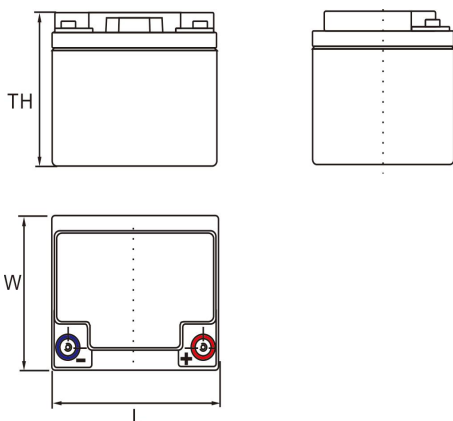
Unit:mm

Length 198±2mm / 7.8inch

Width 166±2mm / 6.54inch

Container Height 170±3mm / 6.69inch

Total Height 170±3mm / 6.69inch



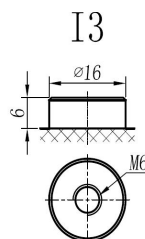
Application

- ◆ 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: I3



Weight

13.2kg 29.1lbs



This document is subject to change without prior notification

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TNG12-38

Specificaion

Nominal Voltage		12V
Rated Capacity(25°C)		41Ah 20hr Rate(1.80V/cell)
		38Ah 10hr Rate(1.80V/cell)
		33Ah 5hr Rate(1.75V/cell)
		31Ah 3hr Rate(1.70V/cell)
		23Ah 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		11.4A (0.3C)
Max. Discharge Current (5S)		456A
Internal Resistance		10mΩ
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	63.8	50.1	42.7	35.7	28.4	21.8	17.90	11.40	9.02	7.37	5.94	5.17	4.20	3.59	2.001
1.80V/cell	85.6	64.1	51.5	42.2	33.5	25.3	20.10	12.50	9.71	7.87	6.38	5.55	4.45	3.80	2.042
1.75V/cell	96.5	70.4	56.3	45.3	34.7	26.3	21.00	12.90	9.89	8.04	6.54	5.70	4.53	3.84	2.062
1.70V/cell	106.3	76.7	60.1	47.7	36.2	27.4	21.70	13.40	10.20	8.26	6.71	5.82	4.59	3.88	2.073
1.65V/cell	117.2	82.8	63.9	50.6	38.2	28.0	22.39	13.80	10.60	8.54	6.90	5.95	4.67	3.96	2.103
1.60V/cell	129.3	90.0	68.4	54.0	40.2	29.1	23.19	14.30	10.90	8.81	7.13	6.08	4.71	4.00	2.114

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	63.8	50.1	42.7	35.7	28.4	21.8	17.90	11.40	9.02	7.37	5.94	5.17	4.20	3.59	1.960
1.80V/cell	85.6	64.1	51.5	42.2	33.5	25.3	20.10	12.50	9.71	7.87	6.38	5.55	4.45	3.80	2.000
1.75V/cell	96.5	70.4	56.3	45.3	34.7	26.3	21.00	12.90	9.89	8.04	6.54	5.70	4.53	3.84	2.020
1.70V/cell	106.3	76.7	60.1	47.7	36.2	27.4	21.70	13.40	10.20	8.26	6.71	5.82	4.59	3.88	2.030
1.65V/cell	117.2	82.8	63.9	50.6	38.2	28.0	22.39	13.80	10.60	8.54	6.90	5.95	4.67	3.96	2.060
1.60V/cell	129.3	90.0	68.4	54.0	40.2	29.1	23.19	14.30	10.90	8.81	7.13	6.08	4.71	4.00	2.070

☐ 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

TNG12-38

(12V 38Ah)

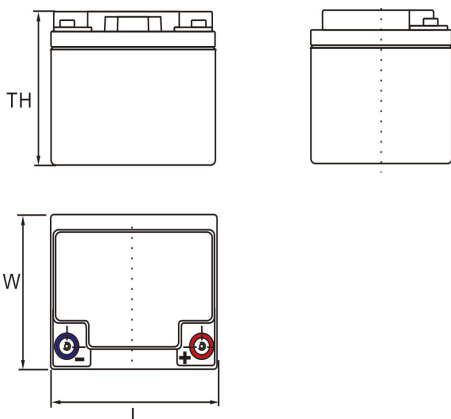
产品特点

- ◆ 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）

尺寸

单个尺寸

长	198±2mm / 7.8inch
宽	166±2mm / 6.54inch
高	170±3mm / 6.69inch
总高	170±3mm / 6.69inch



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



端子类型

单位:mm

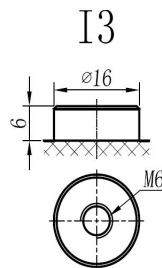
端子类型

I3

重量

13.2kg

29.1lbs



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

TNG12-38

额定电压	12V
容量(25°C)	41Ah 20hr Rate(1.80V/cell)
	38Ah 10hr Rate(1.80V/cell)
	33Ah 5hr Rate(1.75V/cell)
	31Ah 3hr Rate(1.70V/cell)
	23Ah 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	11.4A (0.3C)
最大放电电流(5S)	456A
电阻	10mΩ
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	63.8	50.1	42.7	35.7	28.4	21.8	17.90	11.40	9.02	7.37	5.94	5.17	4.20	3.59	2.001
1.80V/cell	85.6	64.1	51.5	42.2	33.5	25.3	20.10	12.50	9.71	7.87	6.38	5.55	4.45	3.80	2.042
1.75V/cell	96.5	70.4	56.3	45.3	34.7	26.3	21.00	12.90	9.89	8.04	6.54	5.70	4.53	3.84	2.062
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1.60V/cell	129.3	90.0	68.4	54.0	40.2	29.1	23.19	14.30	10.90	8.81	7.13	6.08	4.71	4.00	2.114

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	63.8	50.1	42.7	35.7	28.4	21.8	17.90	11.40	9.02	7.37	5.94	5.17	4.20	3.59	1.960
1.80V/cell	85.6	64.1	51.5	42.2	33.5	25.3	20.10	12.50	9.71	7.87	6.38	5.55	4.45	3.80	2.000
1.75V/cell	96.5	70.4	56.3	45.3	34.7	26.3	21.00	12.90	9.89	8.04	6.54	5.70	4.53	3.84	2.020
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