☐ Motive Battery ■ Energy Storage Battery

☐ Reserve Battery ☐ Motorcycle Battery

TN POWER

Energy Storage Battery-AGM-GEL Technology-TNG Series

TNG12-230

(12V 230Ah)

GENERAL FEATURES

- Oxygen recombination technology: maintenance-free, no need to add water or acid
- The patent grid alloy:less gassing, low self-discharge, excellent corrossion 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)

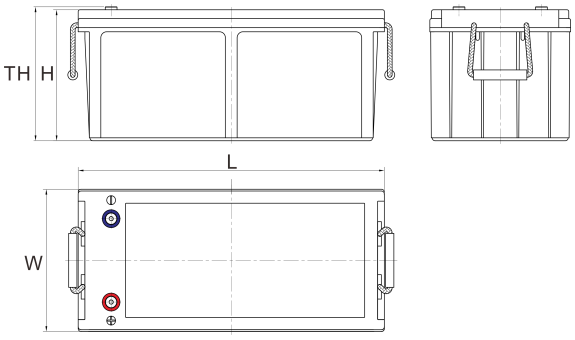
Application

- 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

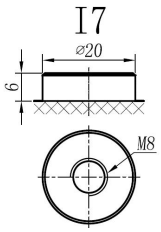
Length	522±2mm	/	20.55inch
Width	238±2mm	/	9.37inch
Container Height	218±3mm	/	8.58inch
Total Height	224±3mm	/	8.82inch



Terminal

Unit:mm

Terminal Type: I7



Weight

65.6kg 144.62lbs

ISO9001 ISO14001 OHSAS18001

This document is subject to change without prior notification

No.18th, Baoqiao Road, Huaxi Industrial Zone of Changxing County, Zhejiang, China

☐ Motive Battery ■ Energy Storage Battery

☐ Reserve Battery ☐ Motorcycle Battery

TN POWER

TNG12-230

Specificaion

Nominal Voltage		12V
Rated Capacity(25°C)		245Ah 20hr Rate(1.80V/cell)
		230Ah 10hr Rate(1.80V/cell)
		198Ah 5hr Rate(1.75V/cell)
		185Ah 3hr Rate(1.70V/cell)
		140Ah 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/℃
	Equalize Voltage	2.35 -2.40V/cell@25°C, Tem. Coefficient: -3mV/cell/℃
	Cycle Voltage	2.40 -2.50V/cell@25°C, Tem. Coefficient: -5mV/cell℃
Max Charging Current		60A (0.3C)
Max. Discharge Current (5S)		2250A
Internal Resistance		2.6mΩ
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	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	314.1	270.8	230.8	174.6	131.7	108.4	69.1	53.12	43.23	35.99	31.28	25.41	21.76	12.134
1.80V/cell	388.0	318.6	266.0	202.5	153.2	121.4	75.3	58.18	46.68	38.63	33.58	26.91	23.02	12.252
1.75V/cell	426.2	340.7	282.3	213.4	159.0	127.0	78.2	59.79	47.94	39.67	34.50	27.37	23.25	12.370
1.70V/cell	464.6	363.8	297.8	221.6	165.3	131.1	81.3	61.51	49.09	40.59	35.19	27.83	23.48	12.605
1.65V/cell	501.3	386.8	317.5	230.8	169.4	135.4	83.6	64.16	50.82	41.74	35.99	28.40	23.94	12.723
1.60V/cell	537.4	413.7	335.7	243.7	176.6	140.3	86.3	66.11	52.31	42.89	36.80	28.86	24.17	12.841

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	585.2	509.6	438.9	335.7	251.8	208.0	133.4	103.05	83.95	70.11	61.50	50.12	43.43	23.664
1.80V/cell	714.3	591.6	498.4	383.4	290.6	231.7	144.6	112.20	90.24	74.92	65.75	52.99	45.87	23.896
1.75V/cell	772.3	625.0	523.7	400.8	298.7	241.3	149.4	114.95	92.30	76.86	67.36	53.80	46.33	24.012
1.70V/cell	822.7	658.0	548.5	413.6	309.5	248.2	155.1	117.92	94.47	78.46	68.63	54.49	46.68	24.476
1.65V/cell	879.7	694.3	580.2	427.5	314.4	254.7	158.4	122.38	97.33	80.29	69.89	55.64	47.61	24.824
1.60V/cell	921.5	730.2	607.0	448.1	325.9	262.4	163.0	125.58	99.85	82.35	71.16	56.33	48.07	24.940

No.18th, Baoqiao Road, Huaxi Industrial Zone of Changxing County, Zhejiang, China

☐ 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

TNG12-230

(12V 230Ah)

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：电池外壳强度强（阻燃壳体UL94-V0可选）

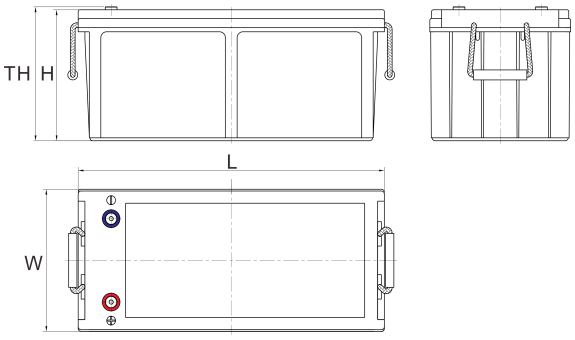
产品应用

- 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

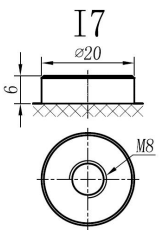
长	522±2mm	/ 20.55inch
宽	238±2mm	/ 9.37inch
高	218±3mm	/ 8.58inch
总高	224±3mm	/ 8.82inch



端子类型

单位:mm

端子类型	I7



重量

65.6kg	144.62lbs

ISO9001　ISO14001　OHSAS18001

内容如有改动， 恕不另行通知

浙江省长兴画溪工业区包桥路18号天能集团　邮编：313199

☐动力电池 ■ 储能电池

☐备用电池 ☐ 摩托车电池

TN POWER

TNG12-230

规格书

额定电压		12V
容量(25°C)		245Ah 20hr Rate(1.80V/cell)
		230Ah 10hr Rate(1.80V/cell)
		198Ah 5hr Rate(1.75V/cell)
		185Ah 3hr Rate(1.70V/cell)
		140Ah 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		60A (0.3C)
最大放电电流(5S)		2250A
电阻		2.6mΩ
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	314.1	270.8	230.8	174.6	131.7	108.4	69.1	53.12	43.23	35.99	31.28	25.41	21.76	12.134
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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	585.2	509.6	438.9	335.7	251.8	208.0	133.4	103.05	83.95	70.11	61.50	50.12	43.43	23.664
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