

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



## Maintenance Free VRLA AGM Battery - Long Life Type

# TNL12-200

(12V 200Ah)

### 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
- ♦ Long life, low self-discharge rate and high reliability, deep discharge recoverability
- ♦ High quality AGM separator: extend cycle life and prevent micro short circuit
- ♦ ABS container: increase the strength of battery (Flame-retardant ABS UL94-V0 is optional)

### Dimension

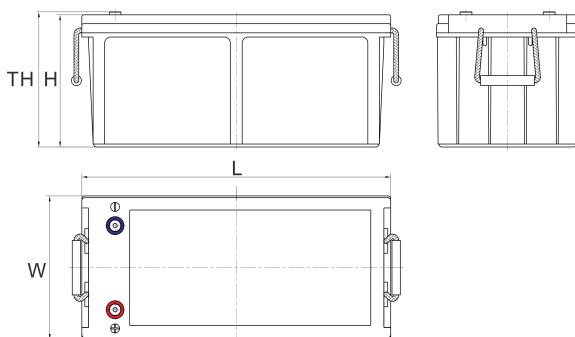
Unit:mm

Length 520±2mm / 20.47inch

Width 239±2mm / 9.41inch

Container Height 220±3mm / 8.66inch

Total Height 225±3mm / 8.86inch



### Application

- ♦ Uninterrupted Power Supply ( UPS )
- ♦ Communications and electric equipment
- ♦ Emergency lighting equipment
- ♦ Fire alarm and security system
- ♦ Robots, control equipment, and other factory automation equipment
- ♦ Emergency power supply ( EPS )
- ♦ Portable VTR/TV, radio and so on
- ♦ Power tools, lawn mowers, vacuum cleaners
- ♦ Cameras and photographic equipment
- ♦ Portable measuring equipment
- ♦ Portable telephone sets
- ♦ Various power toys and hobby equipment
- ♦ Lighting equipment

### Terminal

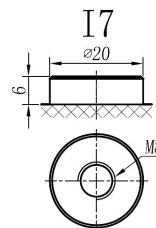
Unit:mm

Terminal Type: I7

### Weight

64kg

141.5lbs



This document is subject to change without prior notification

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### Specificaion

<b>Nominal Voltage</b>	12V	
<b>Rated Capacity(25°C)</b>	214Ah	20hr Rate(1.80V/cell )
	200Ah	10hr Rate(1.80V/cell )
	177Ah	5hr Rate(1.75V/cell )
	167Ah	3hr Rate(1.70V/cell )
	126Ah	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</b>	<b>Float Voltage</b>	2.23 -2.27V/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>	60A ( 0.3C )	
<b>Max. Discharge Current (5'</b>	2000A	
<b>Internal Resistance</b>	2.7mΩ	
<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	234.2	197.0	174.8	144.9	113.4	97.03	62.83	47.20	38.67	32.58	28.38	22.73	19.419	10.310
1.80V/cell	268.1	221.2	193.2	157.5	122.3	102.41	67.50	50.75	41.11	34.51	30.10	23.94	20.020	10.711
1.75V/cell	304.4	249.3	213.5	171.1	133.5	111.65	70.24	52.78	42.53	35.32	31.01	24.75	20.521	11.011
1.70V/cell	343.8	276.6	235.7	186.8	143.7	118.15	73.99	55.52	44.46	37.35	32.52	25.86	21.321	11.311
1.67V/cell	369.2	296.2	250.8	197.1	152.1	122.21	76.73	57.75	46.18	38.57	33.63	26.66	21.922	11.612
1.60V/cell	406.2	324.4	272.4	210.3	158.0	125.86	78.66	59.28	47.20	39.48	34.34	27.17	22.422	11.812

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	437.3	371.6	332.9	279.2	217.2	186.49	121.52	91.79	75.38	63.56	55.86	45.05	38.739	20.721
1.80V/cell	494.6	411.6	362.8	298.6	232.5	195.80	129.83	98.00	79.68	67.07	58.96	47.25	39.940	21.421
1.75V/cell	552.9	458.4	397.1	321.8	251.3	212.51	134.53	101.50	82.18	68.47	60.66	48.65	40.941	21.922
1.70V/cell	610.4	501.5	435.0	349.4	269.6	224.12	141.44	106.71	85.69	72.27	63.46	50.65	42.543	22.422
1.67V/cell	649.5	532.8	459.4	365.8	282.8	230.23	145.75	110.51	88.69	74.27	65.47	52.25	43.644	23.123
1.60V/cell	698.5	574.1	493.7	387.6	292.3	235.84	148.75	112.81	90.39	75.88	66.57	53.05	44.444	23.423

动力电池

储能电池

备用电池

摩托车电池



## 阀控式免维护AGM电池-长寿命系列

# TNL12-200

(12V 200Ah)

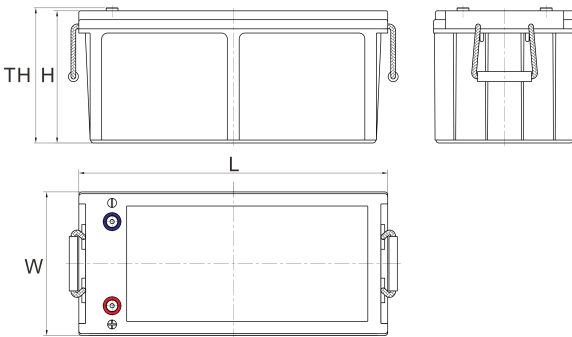
### 产品特点

- ◆ 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
- ◆ 电池寿命长，自放电率低具有高可靠性，深放电恢复能力出色
- ◆ 高质量AGM隔板：防止微短路，延长循环寿命
- ◆ 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	520±2mm
宽	239±2mm
高	220±3mm
总高	225±3mm



### 产品应用

- ◆ 不间断电源(UPS)
- ◆ 通信和电力设备
- ◆ 紧急照明设备
- ◆ 火灾报警及安防系统
- ◆ 机器人、控制设备及其他机械自动化设备
- ◆ 应急电源系统
- ◆ 便携式音频设备
- ◆ 电动工具，割草机，真空吸尘器
- ◆ 照相设备
- ◆ 便携式测量工具
- ◆ 便携式通话设备
- ◆ 各式电动玩具及娱乐设施
- ◆ 照明设备

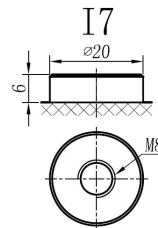
### 端子类型

单位:mm

端子类型 I7

### 重量

64kg 141.5lbs



ISO9001 ISO14001 OHSAS18001

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

额定电压	12V	
容量(25°C)	214Ah	20hr Rate(1.80V/cell)
	200Ah	10hr Rate(1.80V/cell)
	177Ah	5hr Rate(1.75V/cell)
	167Ah	3hr Rate(1.70V/cell)
	126Ah	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	浮充电压	2.23 -2.27V/单格@25°C, 温度补偿系数: -3mV/单格/°C
	均充电压	2.35 -2.40V/单格@25°C, 温度补偿系数: -3mV/单格/°C
	循环使用电压	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)	2000A	
电阻	2.7mΩ	
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	234.2	197.0	174.8	144.9	113.4	97.03	62.83	47.20	38.67	32.58	28.38	22.73	19.419	10.310
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1.60V/cell	406.2	324.4	272.4	210.3	158.0	125.86	78.66	59.28	47.20	39.48	34.34	27.17	22.422	11.812

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	437.3	371.6	332.9	279.2	217.2	186.49	121.52	91.79	75.38	63.56	55.86	45.05	38.739	20.721
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