

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Industry Battery-General Purpose AGM Battery-TN Series

TN12-230

(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 corrosion resistance
- ♦ Design life is 7~9 years at 25°C under standby application, 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 522±2mm / 20.55inch

Width 238±2mm / 9.37inch

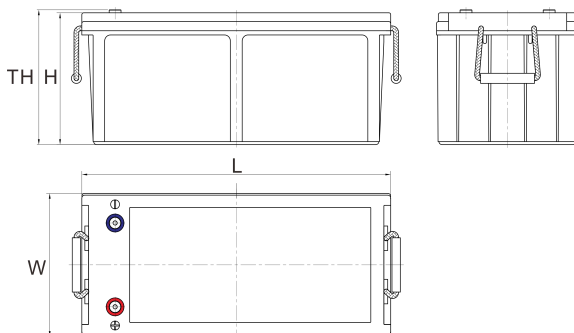
Container Height 218±3mm / 8.58inch

Total Height 221±3mm / 8.7inch



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



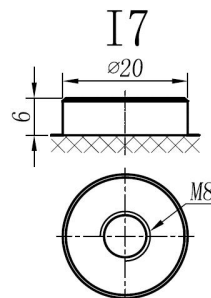
Terminal

Unit:mm

Terminal Type: I7

Weight

65.3kg 143.96lbs



This document is subject to change without prior notification

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TN12-230

Specificaion

Nominal Voltage	12V	
Rated Capacity(25°C)	240Ah	20hr Rate(1.80V/cell)
	230Ah	10hr Rate(1.80V/cell)
	201Ah	5hr Rate(1.75V/cell)
	187Ah	3hr Rate(1.70V/cell)
	142Ah	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	Float Voltage	2.23 -2.27V/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	69A (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	320.5	276.3	235.5	178.2	134.4	110.07	70.2	53.9	43.9	36.5	31.6	25.67	21.8	11.896
1.80V/cell	395.9	325.1	271.4	206.6	156.3	123.26	76.5	59.1	47.4	39.2	33.9	27.18	23.0	12.011
1.75V/cell	434.9	347.6	288.0	217.8	162.2	128.98	79.4	60.7	48.7	40.3	34.8	27.64	23.3	12.127
1.70V/cell	474.0	371.2	303.9	226.1	168.7	133.07	82.5	62.4	49.8	41.2	35.5	28.11	23.5	12.358
1.67V/cell	511.6	394.7	323.9	235.5	172.9	137.50	84.9	65.1	51.6	42.4	36.4	28.69	23.9	12.473
1.60V/cell	548.4	422.1	342.6	248.6	180.2	142.40	87.7	67.1	53.1	43.5	37.2	29.15	24.2	12.589

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	597.2	520.0	447.9	342.5	257.0	211.2	135.4	104.6	85.2	71.2	62.1	50.6	43.4	23.688
1.80V/cell	728.9	603.7	508.6	391.2	296.6	235.3	146.8	113.9	91.6	76.1	66.4	53.5	45.9	23.920
1.75V/cell	788.1	637.7	534.4	409.0	304.8	245.0	151.6	116.7	93.7	78.0	68.0	54.3	46.3	24.036
1.70V/cell	839.5	671.4	559.7	422.1	315.8	252.0	157.5	119.7	95.9	79.7	69.3	55.0	46.7	24.500
1.67V/cell	897.7	708.4	592.1	436.2	320.8	258.6	160.8	124.2	98.8	81.5	70.6	56.2	47.6	24.849
1.60V/cell	940.3	745.1	619.4	457.3	332.6	266.4	165.5	127.5	101.4	83.6	71.9	56.9	48.1	24.965

动力电池

储能电池

备用电池

摩托车电池



阀控式免维护铅酸蓄电池-通用型

TN12-230

(12V 230Ah)

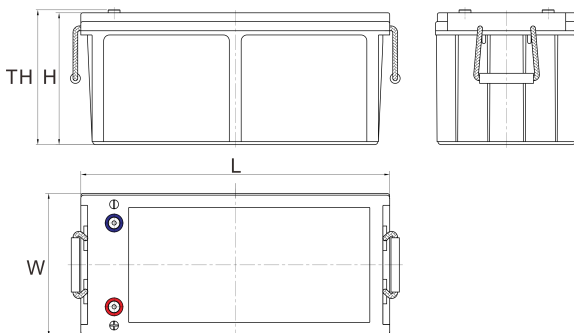
产品特点

- ◆ 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
- ◆ 在25°C下，产品浮充设计寿命为7~9年，优良的深放电恢复能力
- ◆ 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	522±2mm
宽	238±2mm
高	218±3mm
总高	221±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

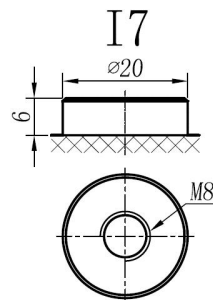
端子类型

单位:mm

端子类型 I7

重量

65.3kg 143.96lbs



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



TN12-230

规格书

额定电压	12V	
容量(25°C)	240Ah	20hr Rate(1.80V/cell)
	230Ah	10hr Rate(1.80V/cell)
	201Ah	5hr Rate(1.75V/cell)
	187Ah	3hr Rate(1.70V/cell)
	142Ah	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	69A (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	320.5	276.3	235.5	178.2	134.4	110.1	70.2	53.9	43.9	36.5	31.6	25.7	21.8	11.896
1.80V/cell	395.9	325.1	271.4	206.6	156.3	123.3	76.5	59.1	47.4	39.2	33.9	27.2	23.0	12.011
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1.70V/cell	474.0	371.2	303.9	226.1	168.7	133.1	82.5	62.4	49.8	41.2	35.5	28.1	23.5	12.358
1.67V/cell	511.6	394.7	323.9	235.5	172.9	137.5	84.9	65.1	51.6	42.4	36.4	28.7	23.9	12.473
1.60V/cell	548.4	422.1	342.6	248.6	180.2	142.4	87.7	67.1	53.1	43.5	37.2	29.2	24.2	12.589

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	597.2	520.0	447.9	342.5	257.0	211.2	135.4	104.6	85.2	71.2	62.1	50.6	43.4	23.688
1.80V/cell	728.9	603.7	508.6	391.2	296.6	235.3	146.8	113.9	91.6	76.1	66.4	53.5	45.9	23.920
1.75V/cell	788.1	637.7	534.4	409.0	304.8	245.0	151.6	116.7	93.7	78.0	68.0	54.3	46.3	24.036
1.70V/cell	839.5	671.4	559.7	422.1	315.8	252.0	157.5	119.7	95.9	79.7	69.3	55.0	46.7	24.500
1.67V/cell	897.7	708.4	592.1	436.2	320.8	258.6	160.8	124.2	98.8	81.5	70.6	56.2	47.6	24.849
1.60V/cell	940.3	745.1	619.4	457.3	332.6	266.4	165.5	127.5	101.4	83.6	71.9	56.9	48.1	24.965