

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Industry Battery-General Purpose AGM Battery-TN Series

TN12-180B

(12V 180Ah)

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

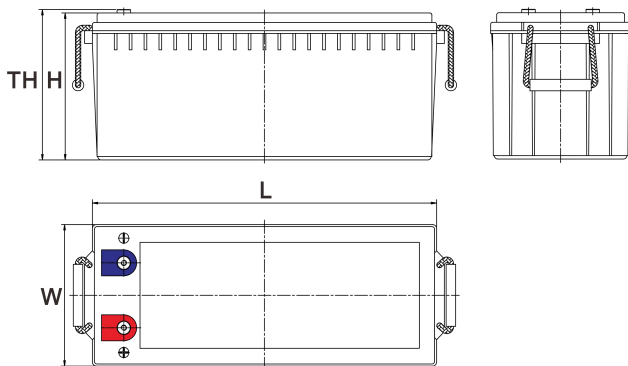
Unit:mm

Length 532±2mm / 20.94inch

Width 207±2mm / 8.15inch

Container Height 215±3mm / 8.46inch

Total Height 220±3mm / 8.66inch



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

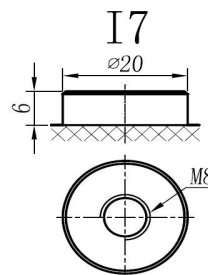
Unit:mm

Terminal Type: I7

Weight

57kg

126.02lbs



This document is subject to change without prior notification

Motive Battery

 Energy Storage Battery

 Reserve Battery

 Motorcycle Battery

TN12-180B

Specificaion

Nominal Voltage	12V	
Rated Capacity(25°C)	187Ah	20hr Rate(1.80V/cell)
	180Ah	10hr Rate(1.80V/cell)
	157Ah	5hr Rate(1.75V/cell)
	147Ah	3hr Rate(1.70V/cell)
	111Ah	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	54A (0.3C)	
Max. Discharge Current (5S)	1800A	
Internal Resistance	3mΩ	
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	242.4	206.2	172.5	137.0	105.2	86.17	54.91	43.34	35.42	28.52	24.75	20.10	17.02	9.279
1.80V/cell	309.8	249.1	203.9	161.8	122.3	96.53	59.89	46.69	37.86	30.65	26.56	21.31	18.02	9.369
1.75V/cell	340.4	272.1	219.3	167.9	127.0	100.99	62.12	47.50	38.67	31.47	27.27	21.72	18.22	9.459
1.70V/cell	371.0	290.5	230.4	174.8	132.1	104.14	64.55	48.92	39.69	32.28	27.88	22.02	18.42	9.640
1.67V/cell	400.4	308.9	244.8	184.4	135.3	107.59	66.38	50.95	41.11	33.19	28.48	22.32	18.72	9.770
1.60V/cell	434.7	330.3	260.9	194.6	141.1	111.45	68.61	52.48	42.33	34.31	29.09	22.52	18.92	9.820

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	447.8	384.7	325.0	261.3	199.4	163.86	105.11	83.38	68.27	55.26	48.25	39.34	33.63	18.418
1.80V/cell	565.5	458.6	378.6	303.5	230.1	182.58	113.91	89.19	72.57	59.06	51.55	41.54	35.64	18.519
1.75V/cell	611.4	494.8	403.4	312.5	236.5	190.09	117.72	90.49	73.87	60.36	52.75	42.14	35.94	18.719
1.70V/cell	651.4	520.9	420.7	323.5	245.0	195.50	122.12	92.89	75.78	61.76	53.75	42.74	36.24	19.019
1.67V/cell	696.5	549.5	443.6	338.4	248.9	200.60	124.82	96.40	78.08	63.26	54.75	43.34	36.94	19.219
1.60V/cell	738.8	578.1	467.5	354.9	258.1	206.61	128.33	98.90	80.28	65.17	55.86	43.64	37.24	19.319

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

TN12-180B

(12V 180Ah)

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）



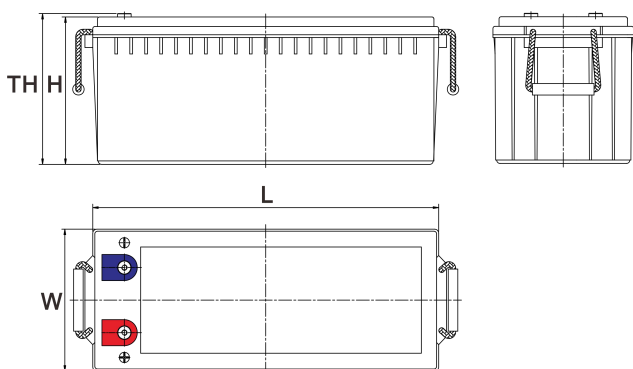
产品应用

- ◆ 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

尺寸

单个尺寸

长	532±2mm
宽	207±2mm
高	215±3mm
总高	220±3mm



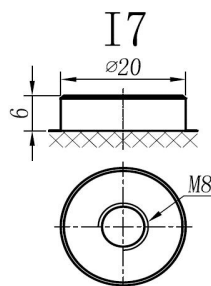
端子类型

单位:mm

端子类型 I7

重量

57kg 126.02lbs



内容如有改动，恕不另行通知



ISO9001 ISO14001 OHSAS18001

天能电池集团有限公司

长兴天能进出口有限公司

www.tiannenggroup.com

版本：

V1.0

发行日期：

2016/7/1

©2016 天能集团 版权所有，保留一切权利；商标所有权属于天能集团及其附属机构

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



TN12-180B

规格书

额定电压	12V	
容量(25°C)	187Ah	20hr Rate(1.80V/cell)
	180Ah	10hr Rate(1.80V/cell)
	157Ah	5hr Rate(1.75V/cell)
	147Ah	3hr Rate(1.70V/cell)
	111Ah	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	54A (0.3C)	
最大放电电流 (5S)	1800A	
电阻	3mΩ	
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	242.4	206.2	172.5	137.0	105.2	86.17	54.91	43.34	35.42	28.52	24.75	20.10	17.02	9.279
1.80V/cell	309.8	249.1	203.9	161.8	122.3	96.53	59.89	46.69	37.86	30.65	26.56	21.31	18.02	9.369
1.75V/cell	340.4	272.1	219.3	167.9	127.0	100.99	62.12	47.50	38.67	31.47	27.27	21.72	18.22	9.459
1.70V/cell	371.0	290.5	230.4	174.8	132.1	104.14	64.55	48.92	39.69	32.28	27.88	22.02	18.42	9.640
1.67V/cell	400.4	308.9	244.8	184.4	135.3	107.59	66.38	50.95	41.11	33.19	28.48	22.32	18.72	9.770
1.60V/cell	434.7	330.3	260.9	194.6	141.1	111.45	68.61	52.48	42.33	34.31	29.09	22.52	18.92	9.820

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	447.8	384.7	325.0	261.3	199.4	163.86	105.11	83.38	68.27	55.26	48.25	39.34	33.63	18.418
1.80V/cell	565.5	458.6	378.6	303.5	230.1	182.58	113.91	89.19	72.57	59.06	51.55	41.54	35.64	18.519
1.75V/cell	611.4	494.8	403.4	312.5	236.5	190.09	117.72	90.49	73.87	60.36	52.75	42.14	35.94	18.719
1.70V/cell	651.4	520.9	420.7	323.5	245.0	195.50	122.12	92.89	75.78	61.76	53.75	42.74	36.24	19.019
1.67V/cell	696.5	549.5	443.6	338.4	248.9	200.60	124.82	96.40	78.08	63.26	54.75	43.34	36.94	19.219
1.60V/cell	738.8	578.1	467.5	354.9	258.1	206.61	128.33	98.90	80.28	65.17	55.86	43.64	37.24	19.319