

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



## Industry Battery-General Purpose AGM Battery-TN Series

# TN12-80Z

(12V 80Ah)

### 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

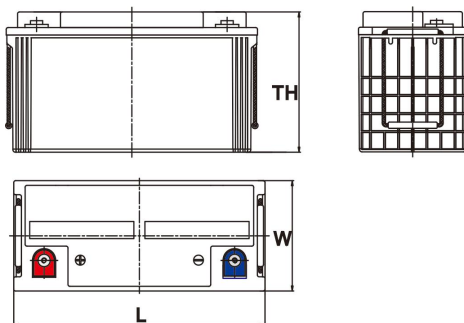
Unit:mm

Length 407±2mm / 16.02inch

Width 177±2mm / 6.97inch

Container Height 225±3mm / 8.86inch

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

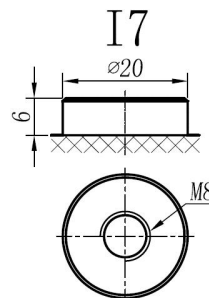
Unit:mm

Terminal Type: I7

### Weight

28.3kg

62.39lbs



This document is subject to change without prior notification

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## TN12-80Z

### Specificaion

<b>Nominal Voltage</b>	12V	
<b>Rated Capacity(25°C)</b>	85Ah	20hr Rate(1.80V/cell )
	80Ah	10hr Rate(1.80V/cell )
	72Ah	5hr Rate(1.75V/cell )
	67Ah	3hr Rate(1.70V/cell )
	50Ah	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>	24A ( 0.3C )	
<b>Max. Discharge Current (5S)</b>	960A	
<b>Internal Resistance</b>	6mΩ	
<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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	140.0	110.0	93.6	78.3	62.3	47.8	39.09	24.89	19.70	16.07	12.96	11.25	9.12	7.558	4.213
1.80V/cell	188.0	140.6	113.1	92.5	73.4	55.6	43.76	27.17	21.15	17.21	13.89	12.07	9.68	8.008	4.254
1.75V/cell	211.9	154.5	123.5	99.6	76.3	57.7	45.83	28.20	21.57	17.52	14.31	12.38	9.84	8.088	4.295
1.70V/cell	233.4	168.4	131.9	104.6	79.4	59.9	47.28	29.34	22.19	18.04	14.62	12.59	9.98	8.168	4.377
1.67V/cell	257.3	181.8	140.3	111.2	83.8	61.5	48.84	30.17	23.12	18.66	15.04	12.90	10.13	8.338	4.438
1.60V/cell	283.8	197.4	150.0	118.4	88.4	63.2	49.90	30.68	23.52	18.92	15.34	13.09	10.14	8.428	4.459

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	277.2	217.9	185.3	155.1	123.3	93.3	76.33	48.59	38.47	31.38	25.31	22.07	17.90	14.964	8.342
1.80V/cell	372.2	278.4	223.9	183.2	145.4	108.5	85.45	53.05	41.31	33.61	27.13	23.69	18.99	15.856	8.423
1.75V/cell	419.5	305.9	244.6	197.2	151.0	112.6	89.50	55.07	42.12	34.22	27.94	24.30	19.32	16.014	8.504
1.70V/cell	462.1	333.5	261.2	207.1	157.1	117.0	92.33	57.30	43.33	35.23	28.55	24.70	19.58	16.173	8.666
1.67V/cell	509.4	360.0	277.8	220.1	165.8	120.1	95.37	58.92	45.15	36.45	29.36	25.31	19.88	16.510	8.788
1.60V/cell	561.9	390.8	297.0	234.5	174.9	125.1	98.81	60.74	46.57	37.46	30.37	25.92	20.09	16.688	8.828

□ 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

# TN12-80Z

(12V 80Ah)

### 产品特点

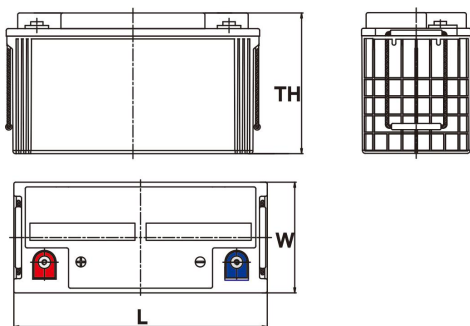
- ◆ 阀控式免维护设计，寿命期间无需加水或加酸
- ◆ 专利稀土合金板栅，减少气体产生，自放电率低，抗腐蚀能力出众
- ◆ 在25°C下，产品浮充设计寿命为7~9年，优良的深放电恢复能力
- ◆ 高质量AGM隔板：防止微短路，延长循环寿命
- ◆ ABS壳盖：电池外壳强度高（阻燃壳体UL94-V0可选）



### 尺寸

单个尺寸

长	407±2mm
宽	177±2mm
高	225±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

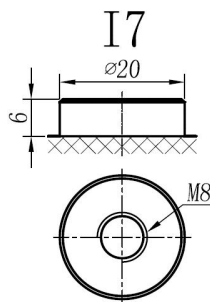
### 端子类型

单位:mm

端子类型 I7

### 重量

28.3kg 62.39lbs



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

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动力电池

储能电池

备用电池

摩托车电池



## TN12-80Z

### 规格书

额定电压	12V	
容量(25°C)	85Ah	20hr Rate(1.80V/cell)
	80Ah	10hr Rate(1.80V/cell)
	72Ah	5hr Rate(1.75V/cell)
	67Ah	3hr Rate(1.70V/cell)
	50Ah	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	24A (0.3C)	
最大放电电流 (5S)	960A	
电阻	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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	140.0	110.0	93.6	78.3	62.3	47.8	39.09	24.89	19.70	16.07	12.96	11.25	9.12	7.558	4.213
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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	277.2	217.9	185.3	155.1	123.3	93.3	76.33	48.59	38.47	31.38	25.31	22.07	17.90	14.964	8.342
1.80V/cell	372.2	278.4	223.9	183.2	145.4	108.5	85.45	53.05	41.31	33.61	27.13	23.69	18.99	15.856	8.423
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1.67V/cell	509.4	360.0	277.8	220.1	165.8	120.1	95.37	58.92	45.15	36.45	29.36	25.31	19.88	16.510	8.788
1.60V/cell	561.9	390.8	297.0	234.5	174.9	125.1	98.81	60.74	46.57	37.46	30.37	25.92	20.09	16.688	8.828