

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Maintenance Free-High Rate UPS Battery-TNX Series

TN12-28W

(12V 28W, 15min@1.67Vpc)

(12V 7Ah, C20 @1.80Vpc)

GENERAL FEATURES

- ♦ Oxygen recombination technology: maintenance-free, no need to add water or acid during application
- ♦ Optimized plate design to increase power output at 15min backup time, high performance in high-rate discharge
- ♦ Wide operating temperature range from -20°C to 55°C, excellent deep discharge recovery capability
- ♦ New structure for plate grid, good corrosion resistance and greatly reduced resistance of the battery,
- ♦ 12 years design life @25°C, low self-discharge rate



Application

- ♦ UPS (High Rate)
- ♦ Communication Equipments
- ♦ Security systems
- ♦ Data & Network centers
- ♦ Emergency power supply (EPS)
- ♦ Bank and financial system
- ♦ Hospitals & Testing laboratories

Dimension

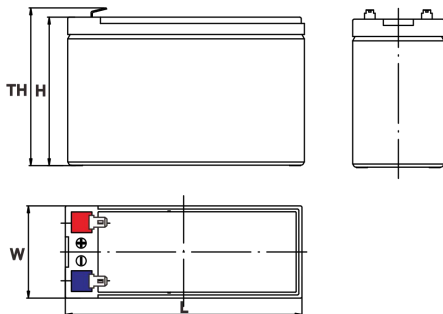
Unit:mm

Length 151±2mm / 5.94inch

Width 65.5±2mm / 2.58inch

Container Height 93.5±3mm / 3.68inch

Total Height 99.5±3mm / 3.92inch



Terminal

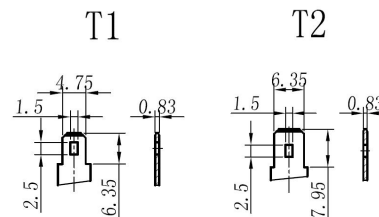
Unit:mm

Terminal Type: T1/T2

Weight

2.18kg

4.81lbs



ISO9001 ISO14001 OHSAS18001

This document is subject to change without prior notification

- Motive Battery Energy Storage Battery
 Reserve Battery Motorcycle Battery



TN12-28W

Specification

Nominal Voltage	12V	
Rated Power (15min Rate 25°C)	28W F.V (1.67V/cell)	
Rated Capacity (20HR 25°C)	7.3Ah (1.80V/cell)	
Dimension	Length	151±2mm / 5.94inch
	Width	65.5±2mm / 2.58inch
	Container Height	93.5±3mm / 3.68inch
	Total Height	99.5±3mm / 3.92inch
Weight	2.18kg / 4.81lbs	
Terminal	T1/T2	
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	2.25 -2.27V/cell@25°C, Tem.Coefficient : -3mV/cell/°C
	Equalize Voltage	2.40 -2.50V/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	2.1A (0.3C)	
Max. Discharge Current (5S)	97.5A	
Internal Resistance	21mΩ	
Self-Discharge	<3%, TNX 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	25.7	16.8	13.1	10.9	8.1	5.9	4.63	2.56	1.82	1.44	1.20	1.04	0.84	0.698	0.361
1.80V/cell	28.9	18.3	14.2	11.7	8.6	6.2	4.83	2.64	1.88	1.48	1.24	1.08	0.87	0.718	0.367
1.75V/cell	31.1	19.5	15.0	12.3	8.9	6.4	5.05	2.73	1.94	1.53	1.28	1.11	0.89	0.738	0.376
1.70V/cell	33.1	20.5	15.7	12.7	9.3	6.6	5.18	2.80	1.99	1.58	1.32	1.14	0.91	0.751	0.381
1.67V/cell	34.7	21.2	16.2	13.2	9.5	6.8	5.28	2.86	2.03	1.60	1.34	1.16	0.92	0.759	0.384
1.60V/cell	35.6	21.7	16.6	13.4	9.7	6.9	5.37	2.90	2.06	1.63	1.36	1.17	0.93	0.765	0.386

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	46.3	29.9	23.5	19.6	14.8	10.8	8.55	4.79	3.42	2.72	2.27	1.98	1.59	1.333	0.725
1.80V/cell	50.4	31.8	25.0	20.9	15.5	11.3	8.88	4.91	3.52	2.78	2.34	2.04	1.65	1.368	0.739
1.75V/cell	53.3	33.7	26.3	21.9	16.0	11.6	9.31	5.05	3.61	2.87	2.40	2.09	1.69	1.404	0.753
1.70V/cell	55.9	34.9	27.3	22.5	16.5	11.9	9.51	5.18	3.71	2.94	2.46	2.14	1.71	1.429	0.761
1.67V/cell	57.7	35.7	27.8	23.0	16.8	12.1	9.63	5.27	3.76	2.98	2.50	2.17	1.73	1.442	0.766
1.60V/cell	58.1	36.0	27.9	23.0	16.9	12.2	9.74	5.32	3.79	3.02	2.52	2.19	1.74	1.451	0.769

动力电池

储能电池

备用电池

摩托车电池



阀控免维护-高功率UPS电池-TNX系列

TN12-28W

(12V 28W, 15min@1.67Vpc)

(12V 7Ah, C20 @1.80Vpc)

产品特点：

- ◆ 氧复合技术: 阀控式免维护, 使用期间无需加水或加酸
- ◆ 极板优化处理, 提升15分钟放电性能, 高倍率放电性能优异
- ◆ 在-20°C到55°C温度区间内均可正常使用, 深放电恢复能力出色
- ◆ 隔板特色设计, 抗腐蚀性能佳, 同时大幅度降低电池内阻
- ◆ 12年设计寿命(25°C), 自放电率低



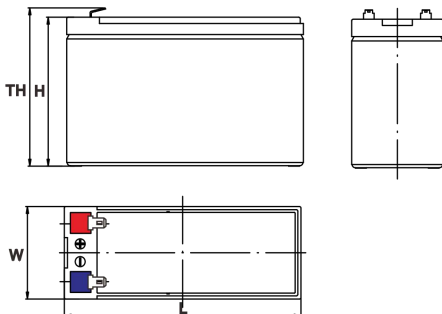
产品应用

- ◆ 不间断电源(高功率)
- ◆ 通讯设备
- ◆ 安全系统
- ◆ 数据网络中心
- ◆ 应急电源系统
- ◆ 银行资金系统
- ◆ 医疗测试设备

尺寸

单个尺寸

长	151±2mm / 5.94inch
宽	65.5±2mm / 2.58inch
高	93.5±3mm / 3.68inch
总高	99.5±3mm / 3.92inch



端子类型

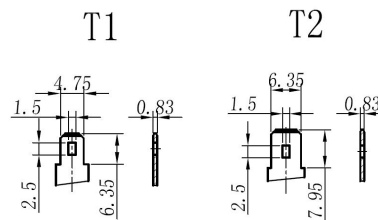
单位:mm

端子类型 T1/T2

重量

2.18kg

4.81lbs



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



TN12-28W

规格书

额定电压	12V	
15分钟放电功率	28W F.V (1.67V/cell)	
额定容量 (10小时)	7.3Ah (1.80V/cell)	
尺寸	长	151±2mm
	宽	65.5±2mm
	高	93.5±3mm
	总高	99.5±3mm
重量	2.18kg	
端子	T1/T2	
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	2.25 -2.27V/单格@25°C, 温度补偿系数: -3mV/单格/°C
	均充电压	2.40 -2.50V/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	2.1A (0.3C)	
最大放电电流 (5S)	97.5A	
电阻	21mΩ	
自放电	<3%, TNX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	25.7	16.8	13.1	10.9	8.1	5.9	4.63	2.56	1.82	1.44	1.20	1.04	0.84	0.698	0.361
1.80V/cell	28.9	18.3	14.2	11.7	8.6	6.2	4.83	2.64	1.88	1.48	1.24	1.08	0.87	0.718	0.367
1.75V/cell	31.1	19.5	15.0	12.3	8.9	6.4	5.05	2.73	1.94	1.53	1.28	1.11	0.89	0.738	0.376
1.70V/cell	33.1	20.5	15.7	12.7	9.3	6.6	5.18	2.80	1.99	1.58	1.32	1.14	0.91	0.751	0.381
1.67V/cell	34.7	21.2	16.2	13.2	9.5	6.8	5.28	2.86	2.03	1.60	1.34	1.16	0.92	0.759	0.384
1.60V/cell	35.6	21.7	16.6	13.4	9.7	6.9	5.37	2.90	2.06	1.63	1.36	1.17	0.93	0.765	0.386

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	46.3	29.9	23.5	19.6	14.8	10.8	8.55	4.79	3.42	2.72	2.27	1.98	1.59	1.333	0.725
1.80V/cell	50.4	31.8	25.0	20.9	15.5	11.3	8.88	4.91	3.52	2.78	2.34	2.04	1.65	1.368	0.739
1.75V/cell	53.3	33.7	26.3	21.9	16.0	11.6	9.31	5.05	3.61	2.87	2.40	2.09	1.69	1.404	0.753
1.70V/cell	55.9	34.9	27.3	22.5	16.5	11.9	9.51	5.18	3.71	2.94	2.46	2.14	1.71	1.429	0.761
1.67V/cell	57.7	35.7	27.8	23.0	16.8	12.1	9.63	5.27	3.76	2.98	2.50	2.17	1.73	1.442	0.766
1.60V/cell	58.1	36.0	27.9	23.0	16.9	12.2	9.74	5.32	3.79	3.02	2.52	2.19	1.74	1.451	0.769