

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Maintenance Free-High Rate UPS Battery-TNX Series

TNX12-21W

(12V 21W, 15min@1.67Vpc)

(12V 5.8Ah, 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

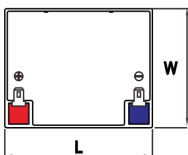
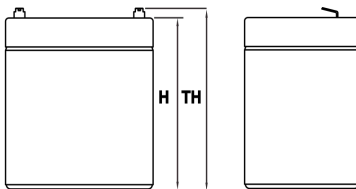
Unit:mm

Length 90±2mm / 3.54inch

Width 70±2mm / 2.76inch

Container Height 101±3mm / 3.98inch

Total Height 107±3mm / 4.21inch



Terminal

Unit:mm

Terminal Type: T1/T2

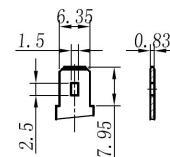
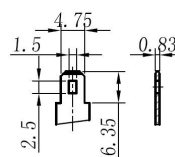
Weight

1.8kg

3.97lbs

T1

T2



ISO9001 ISO14001 OHSAS18001

This document is subject to change without prior notification

- Motive Battery Energy Storage Battery
 Reserve Battery Motorcycle Battery



TNX12-21W

Specificaion

Nominal Voltage	12V	
Rated Power (15min Rate 25°C)	21W F.V (1.67V/cell)	
Rated Capacity (20HR 25°C)	5.5Ah (1.80V/cell)	
Dimension	Length	90±2mm / 3.54inch
	Width	70±2mm / 2.76inch
	Container Height	101±3mm / 3.98inch
	Total Height	107±3mm / 4.21inch
Weight	1.8kg / 3.97lbs	
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	1.74A (0.3C)	
Max. Discharge Current (5S)	81A	
Internal Resistance	25mΩ	
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	18.7	12.5	9.7	8.1	6.0	4.4	3.42	1.86	1.32	1.05	0.87	0.76	0.61	0.499	0.271
1.80V/cell	21.0	13.7	10.5	8.6	6.3	4.5	3.55	1.92	1.36	1.08	0.90	0.78	0.63	0.513	0.277
1.75V/cell	23.0	14.4	11.1	9.0	6.6	4.7	3.67	1.98	1.41	1.11	0.93	0.81	0.65	0.527	0.282
1.70V/cell	24.5	15.2	11.6	9.4	6.8	4.8	3.76	2.03	1.45	1.14	0.95	0.83	0.66	0.537	0.286
1.67V/cell	25.7	15.7	12.0	9.7	7.0	5.0	3.83	2.07	1.47	1.16	0.97	0.84	0.67	0.543	0.288
1.60V/cell	26.5	16.1	12.3	9.9	7.1	5.0	3.89	2.10	1.49	1.18	0.98	0.85	0.67	0.547	0.290

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	34.5	23.1	18.1	15.1	11.4	8.3	6.54	3.57	2.55	2.02	1.69	1.47	1.18	0.993	0.540
1.80V/cell	37.6	24.8	19.2	15.9	11.8	8.6	6.74	3.66	2.62	2.07	1.74	1.52	1.23	1.019	0.550
1.75V/cell	40.8	25.9	20.2	16.6	12.2	8.8	6.93	3.76	2.69	2.14	1.79	1.56	1.26	1.046	0.561
1.70V/cell	42.9	27.0	20.9	17.1	12.6	9.0	7.09	3.86	2.76	2.19	1.84	1.59	1.28	1.065	0.567
1.67V/cell	44.3	27.5	21.3	17.5	12.8	9.2	7.18	3.92	2.80	2.22	1.86	1.61	1.29	1.074	0.571
1.60V/cell	44.8	27.8	21.4	17.5	12.8	9.3	7.25	3.96	2.82	2.25	1.88	1.63	1.30	1.081	0.573

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

TNX12-21W

(12V 21W, 15min@1.67Vpc)

(12V 5.8Ah, 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



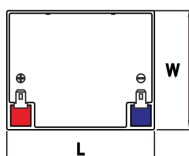
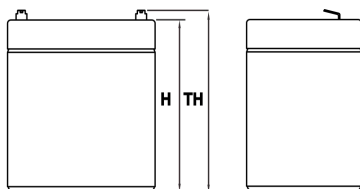
产品应用

- ◆ 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	90±2mm / 3.54inch
宽	70±2mm / 2.76inch
高	101±3mm / 3.98inch
总高	107±3mm / 4.21inch



端子类型

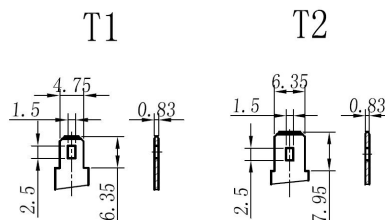
单位:mm

端子类型 T1/T2

重量

1.8kg

3.97lbs



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

TNX12-21W

规格书

额定电压	12V	
15分钟放电功率	21W F.V (1.67V/cell)	
额定容量 (10小时)	5.5Ah (1.80V/cell)	
尺寸	长	90±2mm
	宽	70±2mm
	高	101±3mm
	总高	107±3mm
重量	1.8kg	
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	1.74A (0.3C)	
最大放电电流 (5S)	81A	
电阻	25mΩ	
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	18.7	12.5	9.7	8.1	6.0	4.4	3.42	1.86	1.32	1.05	0.87	0.76	0.61	0.499	0.271
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1.67V/cell	25.7	15.7	12.0	9.7	7.0	5.0	3.83	2.07	1.47	1.16	0.97	0.84	0.67	0.543	0.288
1.60V/cell	26.5	16.1	12.3	9.9	7.1	5.0	3.89	2.10	1.49	1.18	0.98	0.85	0.67	0.547	0.290

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	34.5	23.1	18.1	15.1	11.4	8.3	6.54	3.57	2.55	2.02	1.69	1.47	1.18	0.993	0.540
1.80V/cell	37.6	24.8	19.2	15.9	11.8	8.6	6.74	3.66	2.62	2.07	1.74	1.52	1.23	1.019	0.550
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1.60V/cell	44.8	27.8	21.4	17.5	12.8	9.3	7.25	3.96	2.82	2.25	1.88	1.63	1.30	1.081	0.573