

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Energy Storage Battery-AGM-GEL Technology-TNG Series

TNG12-90

(12V 90Ah)

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
- ◆ Special paste formula: additives for deep discharge, long cycle life
- ◆ High quality AGM separator: extend cycle life and prevent micro short circuit
- ◆ The patent Nano silica electrolytes, extend cycle life and improve the deep discharge performance
- ◆ ABS container: increase the strength of battery (Flame-retardant ABS UL94-V0 is optional)



Application

- ◆ Renewable energy system
- ◆ Hybrid solar power system
- ◆ Uninterrupted Power Supply (UPS)
- ◆ Communications and electric equipment
- ◆ Emergency lighting equipment
- ◆ Fire alarm and security systems
- ◆ Robots, control equipment, and other factory automation equipment
- ◆ Emergency power supply (EPS)
- ◆ Various power toy and hobby equipment
- ◆ Lighting equipment

Dimension

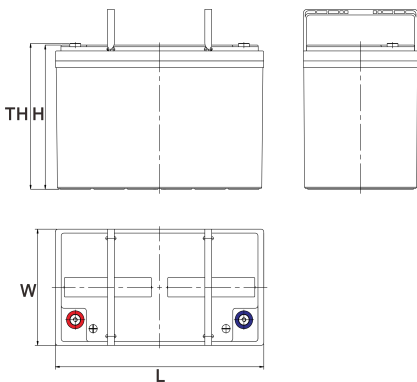
Unit:mm

Length 106.5±2mm / 12.05inch

Width 168±2mm / 6.61inch

Container Height 108.5±3mm / 8.21inch

Total Height 211±3mm / 8.31inch



Terminal

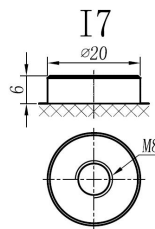
Unit:mm

Terminal Type: I3

Weight

29.5kg

65.04lbs



ISO9001 ISO14001 OHSAS18001

This document is subject to change without prior notification

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Specificaion

Nominal Voltage	12V	
Rated Capacity(25°C)	96Ah	20hr Rate(1.80V/cell)
	90Ah	10hr Rate(1.80V/cell)
	76Ah	5hr Rate(1.75V/cell)
	71Ah	3hr Rate(1.70V/cell)
	54Ah	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 Voltage	Float Voltage	2.25 -2.30V/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	27A (0.3C)	
Max. Discharge Current (5S)	1080A	
Internal Resistance	5mΩ	
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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	151.1	118.8	101.0	84.5	67.2	50.8	41.83	26.65	21.07	17.21	13.87	12.14	9.86	8.50	4.732
1.80V/cell	202.8	151.8	122.1	99.9	79.2	59.1	46.86	29.08	22.67	18.38	14.90	13.02	10.45	9.01	4.778
1.75V/cell	228.7	166.8	133.3	107.5	82.3	61.4	49.03	30.16	23.09	18.79	15.26	13.38	10.63	9.10	4.824
1.70V/cell	251.8	181.8	142.3	112.9	85.6	63.8	50.57	31.36	23.74	19.28	15.67	13.65	10.78	9.19	4.916
1.65V/cell	277.7	196.2	151.4	120.0	90.3	65.4	52.28	32.24	24.74	19.95	16.11	13.96	10.95	9.38	4.981
1.60V/cell	306.3	213.0	161.9	127.8	95.4	68.2	54.13	33.32	25.50	20.57	16.64	14.26	11.06	9.48	5.008

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	276.3	219.4	188.5	159.3	128.0	97.7	80.69	51.75	41.07	33.64	27.19	23.86	19.46	16.83	9.182
1.80V/cell	366.9	277.1	224.7	185.5	148.7	112.7	89.91	56.09	43.94	35.74	29.07	25.50	20.58	17.80	9.257
1.75V/cell	404.9	299.6	242.4	197.7	153.1	115.9	93.63	57.97	44.58	36.41	29.73	26.11	20.88	17.96	9.335
1.70V/cell	433.5	319.1	255.2	206.2	158.5	120.1	96.27	60.14	45.74	37.30	30.43	26.61	21.16	18.12	9.507
1.65V/cell	471.2	341.3	269.3	217.4	165.8	122.0	98.80	61.47	47.47	38.44	31.16	27.12	21.43	18.47	9.619
1.60V/cell	507.7	362.0	283.3	229.1	173.9	126.4	101.77	63.22	48.71	39.51	32.08	27.62	21.60	18.63	9.658