

☐ Motive Battery

■ Energy Storage Battery

■ Reserve Battery

☐ Motorcycle Battery



Industry Battery-General Purpose AGM Battery-TN Series

TN12-5.0

(12V 5.0Ah)

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 3~5 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

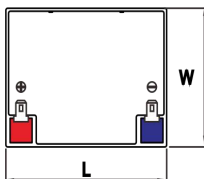
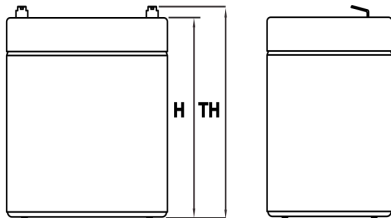
Unit:mm

Length 90±2mm / 3.54inch

Width 70±2mm / 2.76inch

Container Height 101±3mm / 3.98inch

Total Height 107±3mm / 4.21inch



Application

- ◆ Uninterrupted Power Supply (UPS)
- ◆ Communications and electric equipment
- ◆ Emergency lighting equipment
- ◆ Fire alarm and security system
- ◆ 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

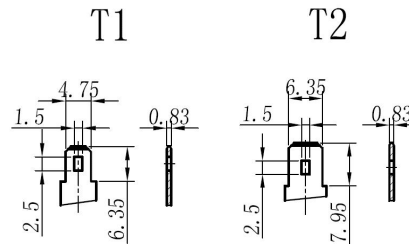
Unit:mm

Terminal Type: T1/T2

Weight

1.6kg

3.54lbs



ISO9001 ISO14001 OHSAS18001

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TN12-5.0

Specificaion

Nominal Voltage	12V	
Rated Capacity(25°C)	5.00Ah	20hr Rate (1.80V/cell)
	4.65Ah	10hr Rate (1.80V/cell)
	4.28Ah	5hr Rate (1.75V/cell)
	3.87Ah	3hr Rate (1.70V/cell)
	3.11Ah	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	1.5A (0.3C)	
Max. Discharge Current (5S)	78A	
Internal Resistance	38mΩ	
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	9.7	6.8	5.6	4.8	3.9	3.0	2.48	1.52	1.15	0.94	0.80	0.69	0.55	0.449	0.248
1.80V/cell	11.9	8.1	6.5	5.5	4.3	3.3	2.66	1.61	1.21	0.99	0.83	0.72	0.57	0.465	0.250
1.75V/cell	14.1	9.1	7.1	6.0	4.6	3.5	2.81	1.68	1.25	1.02	0.86	0.74	0.58	0.474	0.253
1.70V/cell	16.1	10.1	7.7	6.4	4.8	3.6	2.92	1.74	1.29	1.05	0.88	0.76	0.59	0.482	0.257
1.67V/cell	17.7	10.8	8.2	6.7	5.0	3.8	3.04	1.79	1.33	1.07	0.90	0.77	0.60	0.489	0.261
1.60V/cell	18.6	11.3	8.5	6.9	5.2	3.9	3.11	1.85	1.36	1.09	0.92	0.78	0.62	0.497	0.262

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	18.3	12.8	10.7	9.4	7.6	5.8	4.81	2.95	2.25	1.86	1.59	1.37	1.10	0.914	0.505
1.80V/cell	22.2	15.3	12.3	10.5	8.3	6.3	5.14	3.12	2.35	1.95	1.65	1.42	1.13	0.940	0.508
1.75V/cell	26.0	17.1	13.4	11.3	8.8	6.7	5.38	3.23	2.42	1.99	1.68	1.45	1.15	0.953	0.509
1.70V/cell	29.2	18.6	14.4	12.1	9.2	6.9	5.58	3.34	2.49	2.03	1.71	1.48	1.16	0.964	0.515
1.67V/cell	31.7	19.7	15.0	12.6	9.5	7.1	5.78	3.42	2.55	2.06	1.74	1.50	1.18	0.972	0.520
1.60V/cell	32.8	20.3	15.6	12.8	9.7	7.2	5.86	3.50	2.59	2.10	1.77	1.53	1.19	0.984	0.520