

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Industry Battery-General Purpose AGM Battery-TN Series

TN12-80

(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)



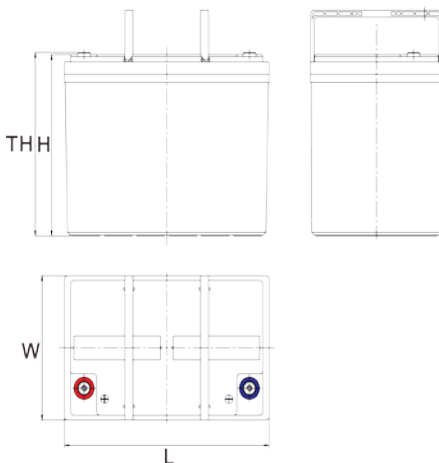
Application

- ◆ 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

Dimension

Unit:mm

Length	260±2mm / 10.24inch
Width	168±2mm / 6.61inch
Container Height	211±3mm / 8.31inch
Total Height	213.5±3mm / 8.41inch



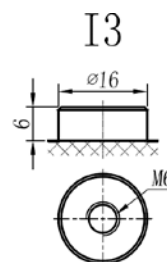
Terminal

Unit:mm

Terminal Type: I3

Weight

23.8kg 52.62lbs



This document is subject to change without prior notification

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Specification

Nominal Voltage	12V	
Rated Capacity(25°C)	83Ah	20hr Rate (1.80V/cell)
	80Ah	10hr Rate (1.80V/cell)
	70Ah	5hr Rate (1.75V/cell)
	65Ah	3hr Rate (1.70V/cell)
	50Ah	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	24A (0.3C)	
Max. Discharge Current (5S)	960A	
Internal Resistance	6mΩ	
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	137.0	107.7	91.6	76.7	61.0	46.8	38.27	24.36	19.29	15.73	12.69	11.01	8.93	7.558	4.124
1.80V/cell	184.0	137.6	110.7	90.6	71.9	54.4	42.83	26.59	20.71	16.85	13.60	11.82	9.47	8.008	4.160
1.75V/cell	207.4	151.3	120.9	97.5	74.7	56.4	44.86	27.61	21.11	17.15	14.01	12.12	9.64	8.088	4.204
1.70V/cell	228.4	164.9	129.1	102.4	77.7	58.7	46.28	28.72	21.72	17.66	14.31	12.32	9.77	8.168	4.284
1.67V/cell	251.9	178.0	137.3	108.8	82.0	60.2	47.81	29.54	22.63	18.27	14.72	12.63	9.92	8.338	4.344
1.60V/cell	277.8	193.2	146.8	115.9	86.5	62.7	49.53	30.45	23.35	18.78	15.23	12.93	10.02	8.428	4.364

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	250.6	199.0	171.0	144.4	116.1	88.6	72.77	46.75	37.04	30.33	24.52	21.42	17.42	14.915	8.168
1.80V/cell	332.8	251.4	203.8	168.3	134.9	102.3	81.18	50.65	39.64	32.23	26.23	22.92	18.52	15.816	8.238
1.75V/cell	367.3	271.8	219.9	179.3	138.9	105.1	84.48	52.35	40.24	32.83	26.83	23.42	18.72	15.916	8.308
1.70V/cell	393.2	289.5	231.5	187.0	143.7	108.9	86.89	54.25	41.24	33.63	27.43	23.92	19.02	16.116	8.458
1.67V/cell	427.4	309.5	244.2	197.2	150.5	110.6	89.19	55.46	42.84	34.73	28.13	24.32	19.22	16.416	8.559
1.60V/cell	460.6	328.4	257.0	207.7	157.7	114.7	91.79	57.06	43.94	35.64	28.93	24.82	19.42	16.517	8.589

