

## VRLA AGM Battery

BT-12M9.0AC-N[12V9.0Ah]



### General Features

- Designed floating charging service life: 8 years (25°C)
- Sealed and maintenance free operation
- Safety valve installation for explosion proof
- Low self-discharge characteristic
- Wide operating temperature range from 0°C~40°C
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion

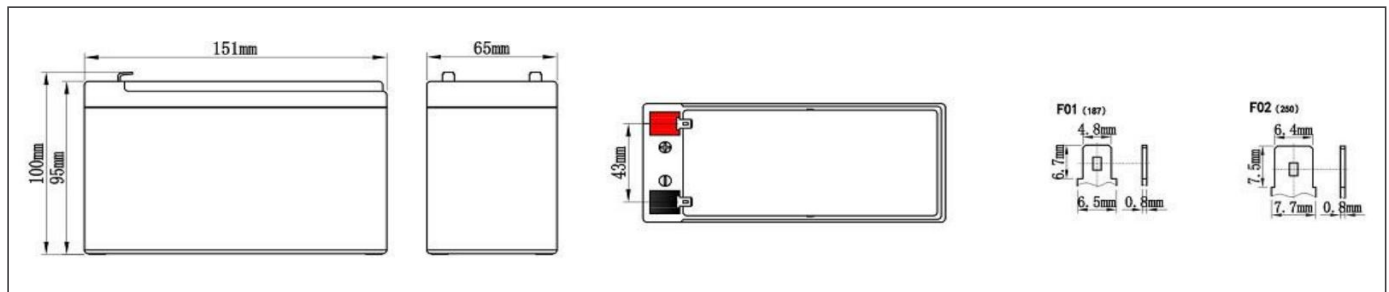
### Application

- DC power supply
- Medical equipments
- UPS/EPS power supply
- Emergency lighting systems
- Alarm and security systems

### Physical Specifications

Nominal Voltage	Nominal Capacity (20HR)	Dimension				Weight ±2%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V	9.0AH	151±2mm	65±2mm	95±2mm	100±2mm	Approx2.55kg (5.62lbs)	≈18mΩ	F01/F02 (standard)

### Dimensions



### Battery Discharge Table

End Voltage (V)	Minute (M)				Hour (H)							
	10	15	30	45	1	1.5	2	3	5	8	10	20
<b>Constant Current Discharge Data Sheet (@25°C) Unit: A</b>												
9.6V	23.9	18.7	9.61	6.74	5.67	4.53	3.37	2.54	1.63	1.08	0.870	0.459
9.9V	22.8	17.9	9.16	6.51	5.54	4.42	3.29	2.48	1.59	1.06	0.862	0.455
10.2V	21.7	17.0	8.72	6.29	5.40	4.31	3.21	2.42	1.55	1.04	0.853	0.450
10.5V	21.5	16.8	8.59	6.22	5.37	4.23	3.08	2.34	1.51	1.03	0.844	0.455
10.8V	21.3	16.7	8.51	6.15	5.32	4.14	2.96	2.25	1.49	1.02	0.836	0.450
<b>Constant Power Discharge Data Sheet (@25°C) Unit: W</b>												
9.6V	288	233	132	93.2	69.5	53.3	40.1	28.6	18.9	13.2	10.4	5.62
9.9V	274	222	125	90.0	67.8	52.0	39.1	27.9	18.4	12.9	10.3	5.57
10.2V	261	211	119	87.0	66.2	50.8	38.2	27.3	18.0	12.7	10.2	5.51
10.5V	252	205	117	85.0	65.1	50.0	37.6	26.6	17.8	12.6	10.1	5.43
10.8V	243	198	114	82.8	64.0	49.3	37.1	26.2	17.6	12.4	9.91	5.36

**NOTE :** The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

## Constant-Voltage Charge

Rated Capacity	
20 hour rate (0.45A)	9.10AH
10 hour rate (0.90A)	8.36AH
5 hour rate (1.53A)	7.55AH
27 minute rate(9.0A)	4.60AH
7 minute rate (27.0A)	3.70AH
Capacity affected by Temperature	
40°C(104°F)	103%
25°C(77°F)	100%
0°C(32°F)	86%

Cycle Application
1. Limit initial current less than 2.25A.
2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).
3. Hold at 14.1V to 14.4V until current drop to under 0.054A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/°C.
Standby Service
1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 2.25A continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charge status.
2. Temperature compensation coefficient of charging voltage is -18mV/°C.

## Performance Characteristics

