SAITE POWER SOURCE (VIETNAM) CO.,LTD

VRLA AGM Battery

BT-12M5.0AC[12V5.0Ah]

General Features

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

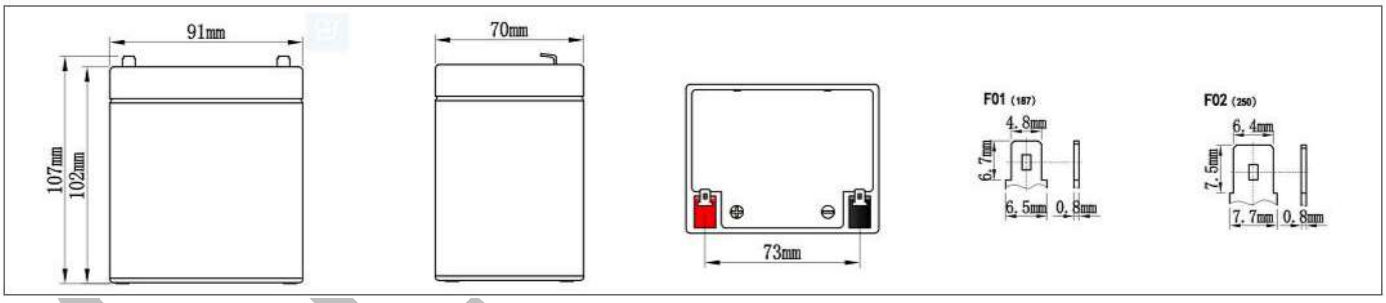
Application

- 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 ±3%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V	5.0AH	91±2mm	70±2mm	102±2mm	107±2mm	Approx1.51kg (3.322lbs)	≈25mΩ	F01/F02 (standard)

Dimensions



Constant-Voltage Charge

Rated Capacity	
20 hour rate (0.25A)	5.60AH
10 hour rate (0.50A)	5.15AH
5 hour rate (0.85A)	4.60AH
27 minute rate(5.0A)	2.75AH
7 minute rate (15.0A)	2.20AH
Capacity affected by Temperature	
40ºC(104ºF)	103%
25ºC(77ºF)	100%
0ºC(32ºF)	86%

Cycle Application
1. Limit initial current less than1.25A.
2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25ºC(77ºF).
3. Hold at 14.1V to 14.4V until current drop to under 0.03A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/ºC.
Standby Service
1. Hold battery across constant voltage source of 13.6to 13.8 volts with current limit 1.25A 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/ºC.

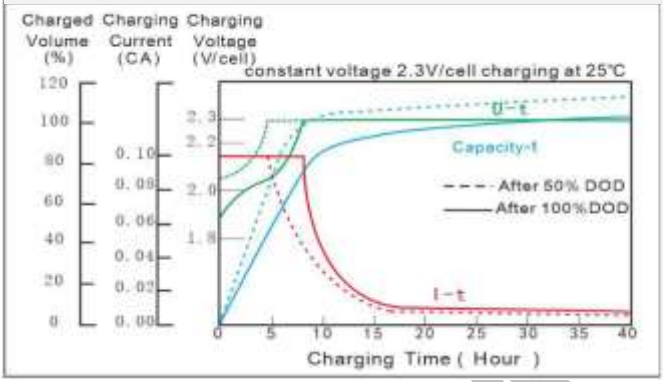
NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

Battery Discharge Table

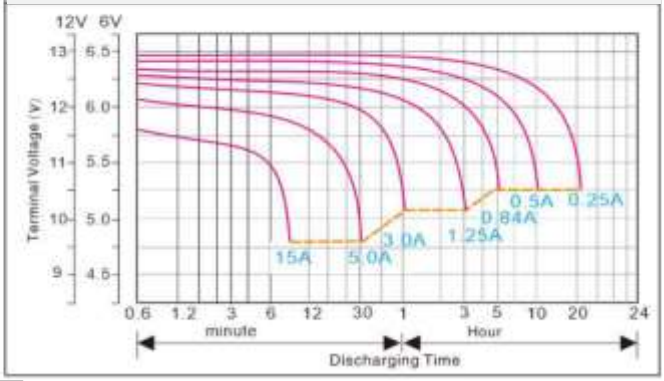
End Voltage (V)	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (Amperes at 25ºC)													
10.20	20.45	13.65	10.87	5.579	4.195	3.156	2.569	1.971	1.472	0.926	0.621	0.532	0.282
10.50	19.61	13.39	10.64	5.419	4.099	3.145	2.536	1.915	1.439	0.916	0.614	0.527	0.280
10.80	18.56	13.07	10.34	5.217	3.918	3.111	2.469	1.816	1.384	0.897	0.609	0.522	0.277
Constant Power Discharge Data Sheet (Watt at 25ºC)													
10.20	223.7	160.9	130.2	73.56	53.63	40.79	31.29	23.54	16.80	11.07	7.793	6.313	3.399
10.50	213.7	155.5	126.4	72.03	52.38	40.15	30.82	23.21	16.42	10.96	7.740	6.207	3.355
10.80	202.6	149.8	122.2	69.95	51.05	39.49	30.37	22.88	16.13	10.82	7.655	6.111	3.299

Performance Characteristics

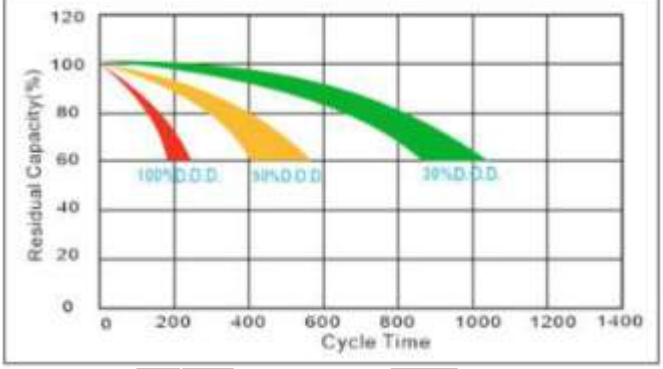
Charge Characteristics (25ºC/77ºF)



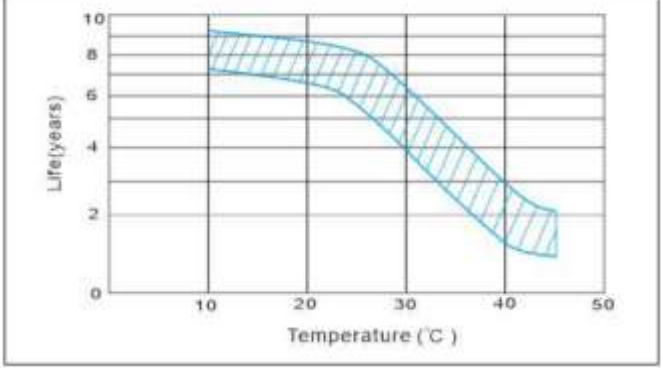
Discharge Characteristic (25ºC/77ºF)



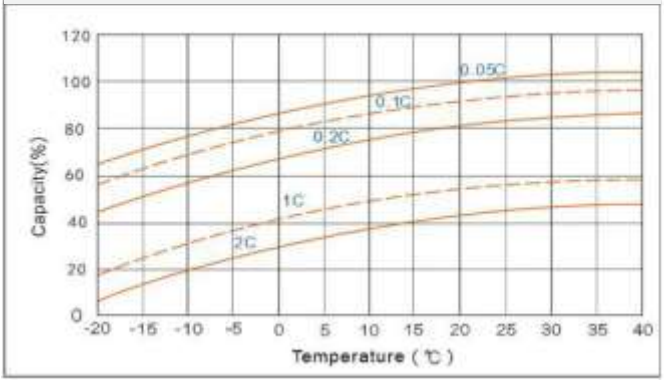
Cycle Life in Relation to Depth of Discharge



Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics

Saite Power Source (Vietnam) Co.,Ltd
Road No.6, An Phuoc IP, An Phuoc Ward, Long Thanh District,
Dong Nai Province, Vietnam
0084-2513686919 sales@saitebattery.vn
0084-2513686918 www.saitebattery.vn