





SAITE TECHNOLOGY VIET NAM JSC

VRLA AGM Battery

BT-12M7.0AT [12V7.0Ah]



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, approx3% of capacity per month at 20°C (average)
- Wide operating temperature range from 0°C~40°C
- · Lead-Aluminum-Calcium-Tin alloy high energy, prevent corrosion
- Flame retardant ABS (UL 94-FV0)

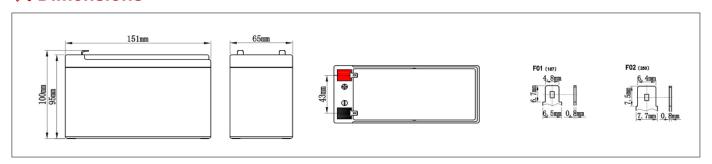
Application

- DC power supply
- UPS/EPS power supply
- Electrical devices & instruments
- Security and fire alarm systems
- Telecom stations and power stations
- Medical equipment
- · Emergency lighting systems

Physical Specifications

Nominal Voltage	Nominal		Dime	nsion		Internal	Standard	
	Capacity (20HR)	L	W	Н	TH	Weight ±3%	Resistance (In full charge status)	Terminals
12V	7AH	151±2mm	65±2mm	93±2mm	100±2mm	Approx2.15kg (4.63lbs)	≤25mΩ	F01/F02 (standard)

X Dimensions



Constant-Voltage Charge

Rated Capacity								
20 hours rate (0.375A)	7.50AH							
10 hours rate (0.70A)	7.00AH							
5 hours rate (1.275A)	6.10AH							
27 minutes rate (7.0A)	3.15AH							
7 minutes rate (22.5A)	2.63AH							
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 1.875A.
- 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 0.045A 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 1.875A 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.

▲ 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

	Minute (M)					Hour (H)							
End Voltage													
Life voltage	5	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (@25°C) Unit: A													
9.6V	30.1	21.5	15.7	8.6	5.9	4.89	3.81	2.72	2.08	1.37	0.92	0.728	0.390
9.9V	28.6	20.5	14.9	8.2	5.7	4.77	3.72	2.65	2.02	1.34	0.90	0.721	0.386
10.2V	26.9	19.5	14.2	7.8	5.5	4.65	3.62	2.58	1.98	1.30	0.88	0.714	0.383
10.5V	25.5	18.6	13.5	7.4	5.3	4.54	3.54	2.52	1.93	1.27	0.86	0.707	0.379
10.8V	24.8	17.7	12.9	7.1	5.1	4.43	3.45	2.46	1.88	1.24	0.85	0.700	0.375
Constant Power Discharge Data Sheet (@25°C) Unit: W													
9.6V	320	231	190	107	74	54.9	42.2	31.8	22.4	15.05	10.44	8.01	4.33
9.9V	304	220	181	102	71	53.6	41.2	31.0	21.9	14.68	10.23	7.93	4.28
10.2V	282	209	172	97	69	52.3	40.2	30.3	21.4	14.32	10.03	7.86	4.24
10.5V	270	200	164	93	67	51.0	39.2	29.5	20.8	13.97	9.84	7.78	4.20
10.8V	256	190	156	88	64	49.7	38.3	28.8	20.3	13.63	9.64	7.70	4.16

Performance Characteristics

