





SAITE POWER SOURCE (VIETNAM) CO.,LTD

VRLA AGM Battery

BT-12M18AC[12V18Ah]



🖧 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

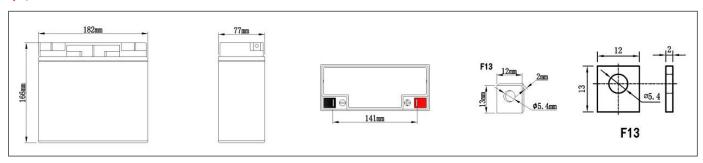
Application

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

Physical Specifications

Nominal Voltage	Nominal Capacity (20HR)		Dime	nsion		Internal	Standard	
		L	W	Н	TH	Weight ±2%	Resistance (In full charge status)	Terminals
12V	18AH	182±2mm	77±2mm	166±2mm	166±2mm	Approx 5.15kg (11.35lbs)	≈17mΩ	F13 (standard)

X Dimensions



Constant-Voltage Charge

Rated Capacity								
20 hour rate (0.85A)	17.50AH							
10 hour rate (1.7A)	16.28AH							
5 hour rate (2.84A)	14.20AH							
27 minute rate (17A)	8.00AH							
7 minute rate (51A)	5.95AH							
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 4.25A.
- 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 0.102A 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 13.6to 13.8 volts with current limit 4.25A 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.

A 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	Minute (M)					Hour (H)							
Voltage (V)	5	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (Amperes at 25°C)													
10.20	62.9	40.9	32.1	16.4	11.9	10.2	8.12	6.04	4.56	2.91	1.95	1.62	0.870
10.50	62.3	40.5	31.8	16.3	11.8	10.2	7.98	5.81	4.41	2.86	1.93	1.61	0.860
10.80	61.7	40.1	31.4	16.0	11.6	10.1	7.84	5.58	4.26	2.81	1.91	1.59	0.850
Constant Power Discharge Data Sheet (Watt at 25°C)													
10.20	693	500	405	229	166.6	126.7	97.20	73.12	52.19	34.40	24.23	19.61	10.56
10.50	664	483	393	224	162.8	124.7	95.78	72.09	51.01	34.01	24.03	19.31	10.41
10.80	630	465	380	217	158.6	122.7	94.35	71.06	50.13	33.61	23.79	18.99	10.26

Performance Characteristics

