

AGM TECHNOLOGY  
ABT Sunwind SWM Series

## SWM2-400

2V400 Ah(10hr)



### High Performance

The ABT Sunwind SWM range of VRLA lead acid batteries have been designed specific for use in applications which demand the highest levels of security and reliability. With proven compliance to the most rigorous international standards.

Sunwind SWM is recognized as premium battery for Solar and wind energy system, Energy equilibrium system applications. Sunwind's reputation for long service life combined with excellent high cyclic performance also makes it the number one choice for high integrity.

### Mechanical Characteristics

	SI Unit	English Unit
Length	175mm	6.89inch
Width	174mm	6.85inch
Height	348.5mm	13.72inch
Total Height	357.5mm	14.07inch
Approx. Weight	24.0kg	52.91lbs
Type of material for box and lids : ABS Standard (FV0 Optional)		

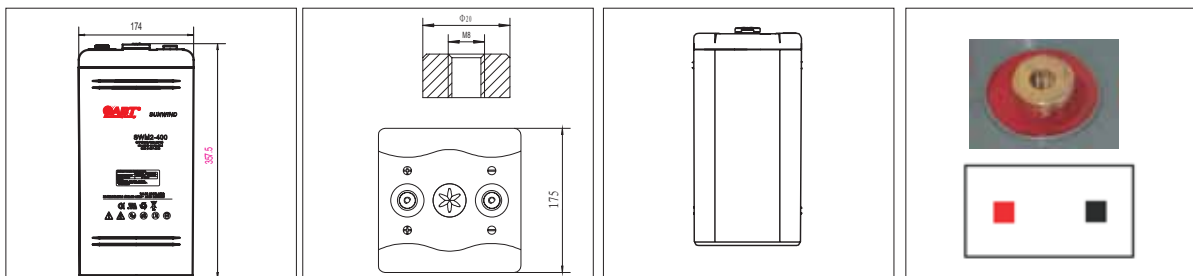
### Product Characteristics

- Thick Pb-Ca-Sn alloy grids designed to resist corrosion and prolong life
- Low resistance microporous glass fibre separator
- Low specific acid density
- Centralized venting system for gas ventilation
- Flame arrester to improve safety
- Pillar with brass insert where screwed an copper connector fitted with a bolt and stainless nut and washers
- Low Self Discharge rate:  $\leq 3\%$  (20 °C) Monthly on average
- U. L. Components Recognition
- Design life 15 years

### Performance Characteristics

Nominal Voltage	2V
Number of Cell	1
Nominal Capacity 20°C (68°F)	10 hour rate (40A, 1.80V) 400Ah 3 hour rate (100A, 1.80V) 300Ah 1 hour rate (220A, 1.75V) 220Ah
Intensity	
Max. Discharge Current	20°C (68°F) 2000A(5s)
Short circuit current	4900A
Maximum charge current	60A(15% of rated capacity)
Internal Resistance	Fully Charged battery 20°C (68°F) 0.36mOhms
Mass Energy(Wh/kg)	33.33
Volume Energy(Wh/L)	75.39
Self-Discharge	3% of capacity declined per month at 20°C(average)
Operating Temperature Range	Discharge -20~60°C Charge -10~60°C Storage -20~60°C
Charge Methods:	Constant Voltage Charge 20°C (68°F) Cycle use 2.34-2.38V Temperature compensation -3.5mV/°C/unit Standby use 2.24-2.28V Temperature compensation -3.5mV/°C/unit
Terminal Type	Inserted Thread and bolt M8X $\phi$ 20
Torque strength in N m	12~16
Handle Type	No
Flame arrester	Yes

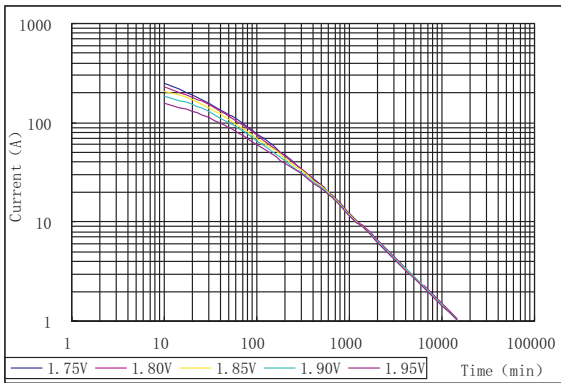
### Dimensions / Terminal



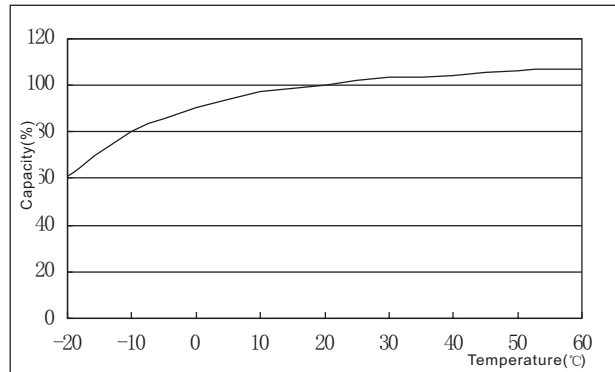
**Capacities C<sub>1</sub>-C<sub>120</sub> ( 20°C )**

C <sub>1</sub>	C <sub>3</sub>	C <sub>5</sub>	C <sub>10</sub>	C <sub>100</sub>	C <sub>120</sub>
1.75Vpc	1.80Vpc	1.80Vpc	1.80Vpc	1.85Vpc	1.85Vpc
220	300	340	400	472	480

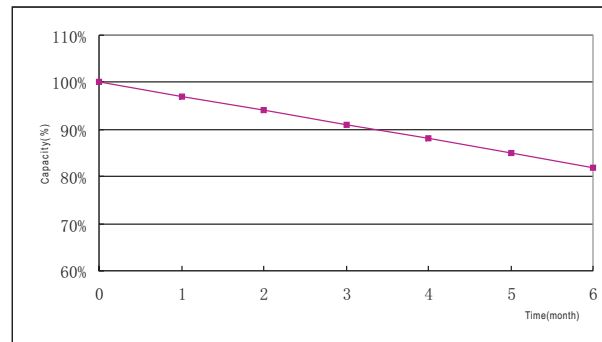
**Constant Current Discharge Curve**



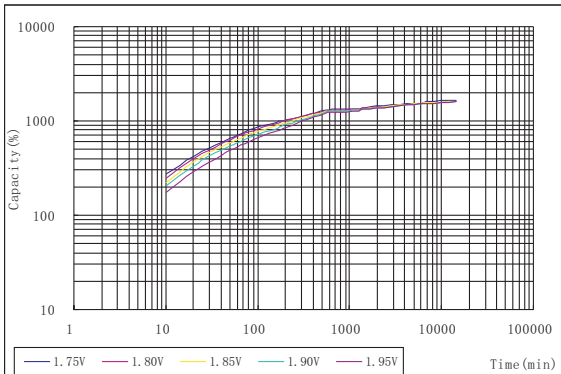
**Capacity Vs Temperature**



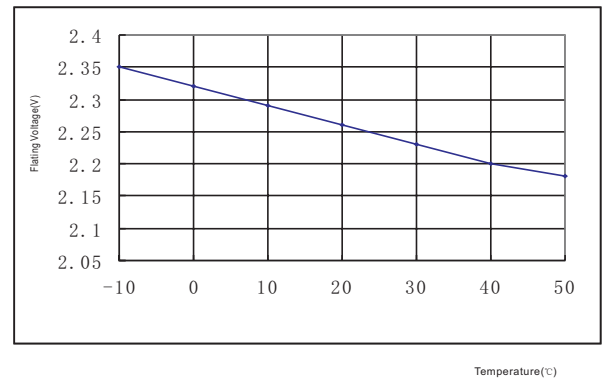
**Self Discharge**



**Capacity Discharge Curve**



**Floating Charge Voltage Vs Temperature**



**Contact information**

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ABT VRLA Battery: Available Power Range From 7Ah to 3000Ah

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