



AGM TECHNOLOGY  
ABT SunwindSWP Series

## SWP12-40

12V 40Ah(10hr)

### Medium cyclic Performance

ABT Sunwind SWP Series is a general purpose battery according to Eurobat Classification with 10 years design life for renewable application. As with all ABT batteries, all are rechargeable, highly efficient, leakage proof and maintenance free.

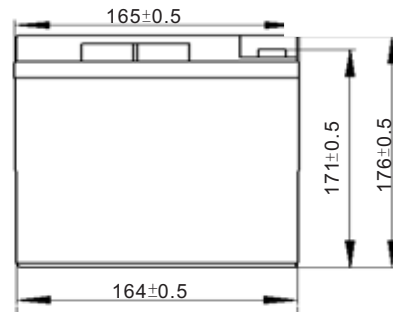
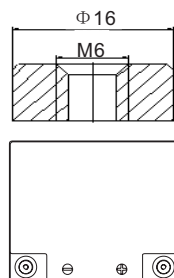
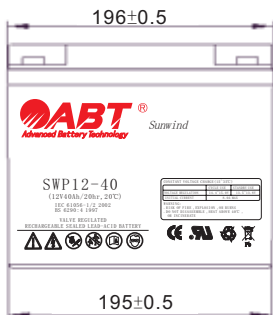
Complying standards:  
IEC61427-2005,



## Specification

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity 20°C (68°F)	41.2Ah @20hr-rate to 1.80V Per cell 40Ah @10hr-rate to 1.80V Per cell 24Ah @1hr-rate to 1.65V Per cell
Weight	Approx. 14.2kg(31.3lbs)
Maximum Discharge Current	120A (3 min)
Short circuit current	1570A
Maximum charge current	8.0A(20% of rated capacity)
Internal Resistance	Approx 7.60 mOhms
Mass Energy(Wh/kg)	33.8
Volumic energy(Wh/L)	84.3
Operating Temperature Range	Discharge -20~60°C; Charge -10~60°C; Storage -20~60°C
Nominal Operating Temperature Range	20°C±3 °C (68°F±5 °F)
Float Charging Voltage	13.5 t o 13.8 VDC/unit Average at 20°C(68°F)
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 20°C(68°F)
Self Discharge	ABT batteries can be stored for more than 6 months at 20°C(68°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	Insert thread and bolt M6 X $\Phi$ 16
Torque strength in Nm	8~10
Container Material	ABS(UL94-HB) Flammability resistance of UL94-V0 can be available upon request.
Hand Type	Incorporated
Flame arrestor	Yes

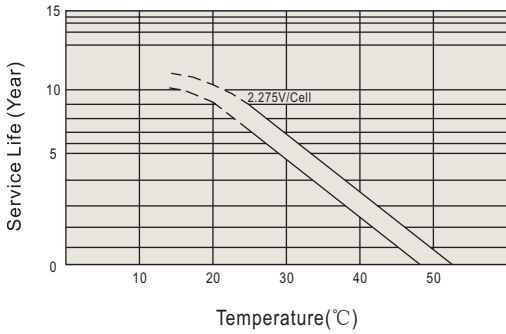
## Dimensions / Terminal



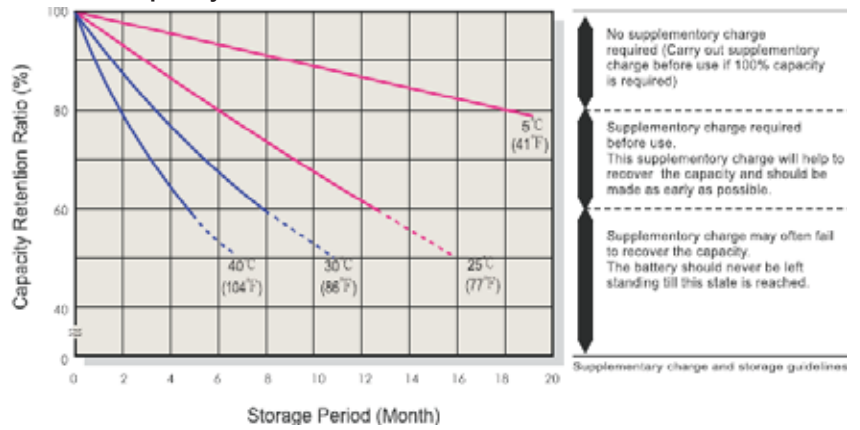
## Capacities C<sub>1</sub>-C<sub>120</sub> (20°C)

C <sub>1</sub>	C <sub>5</sub>	C <sub>10</sub>	C <sub>20</sub>	C <sub>100</sub>	C <sub>120</sub>
1.65Vpc	1.75Vpc	1.80Vpc	1.80Vpc	1.85Vpc	1.85Vpc
24	32	40	41.2	44	44.8

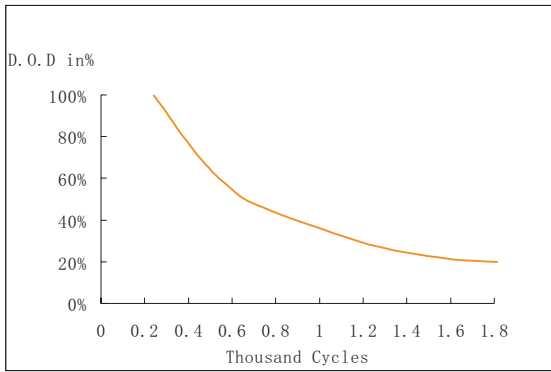
**Trickle (or float) Service Life**



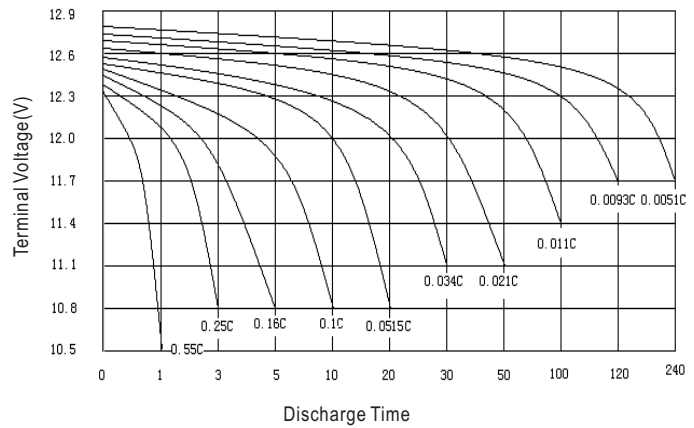
**Capacity Retention Characteristic**



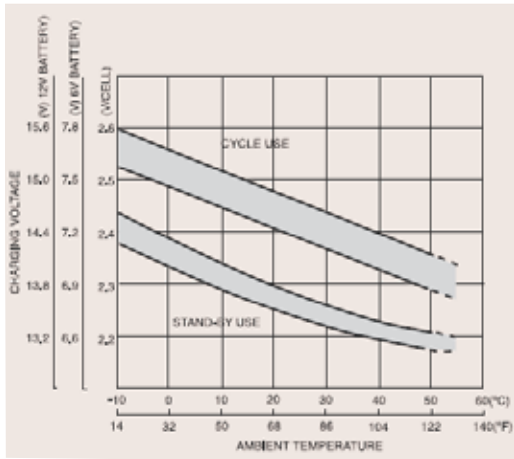
**Cycle vs depth of discharge**



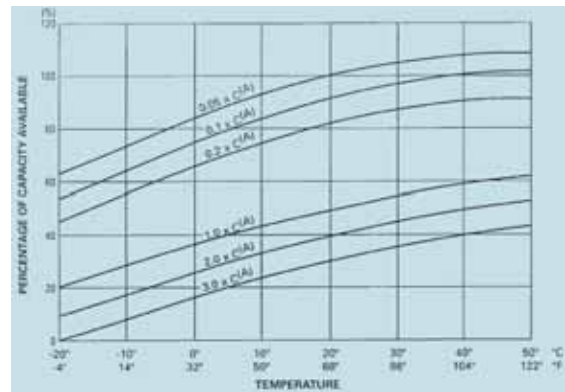
**Terminal Voltage(V) and Discharge Time(20°C68°F)**



**Charge Voltage depend on the temperature**



**Capacity depend on the temperature**



**Charging Procedures**

Application	Charge Voltage(V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Ranges	
Cycle Use	20°C(68°F)	2.40	2.40~2.50	0.2C
Standby	20°C(68°F)	2.26	2.25~2.30	0.2C

**Discharge Current VS. Discharge Voltage**

Final Discharge Voltage V/Cell	1.85	1.80	1.70	1.60
Discharge Current(A)	0.05C>(A)	0.05C<(A)<0.25C	0.25C<(A)<1.0C	(A)>1.0C

**Contact information**

Shandong Sacred Sun Power Sources Co., Ltd.  
 Add: No1, Shengyang Road, Qufu City, Shandong Province, China 273100  
 Tel: +86-537-4438 666 extn 6027 Fax: +86-537-4411 936  
 Website: <http://www.abtbatt.com> E-mail: [sales@abtbatt.com](mailto:sales@abtbatt.com)

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

Copyright SACREDSUN,  
 All rights reserved.  
 (Edition: May.2011)