

RGT12-90

12V90Ah(20hr)

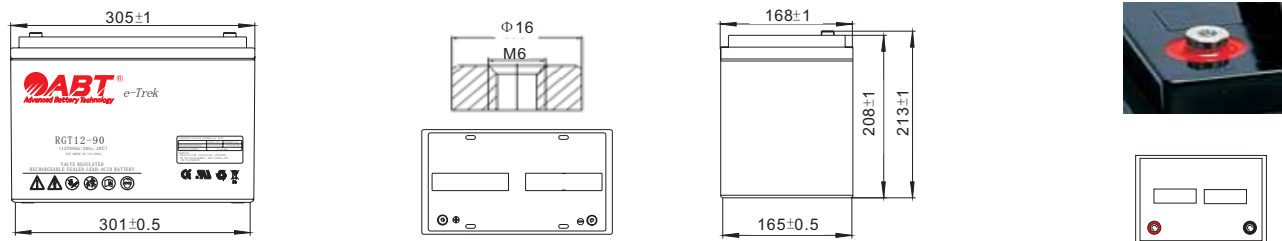
The ABT e-Trek RGT is a Standard Commercial battery according to Eurobat Classification with 8-10 years design life for cyclic application. As with all ABT batteries, all are rechargeable, highly efficient, leakage proof and maintenance free.



Specification

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity 20°C (68°F)	90Ah @20hr-rate to 1.75V Per cell 83.7Ah @10hr-rate to 1.75V Per cell 76.5Ah @5hr-rate to 1.70V Per cell
Weight	Approx. 30.5kg(67.3lb)
Maximum Discharge Current	675A(5S)
Short circuit current	2900A
Maximum charge current	27.0A(30% of rated capacity)
Internal Resistance	Approx. 4.1 mOhms
Mass Energy(Wh/kg)	35.4
Volumic Energy(Wh/L)	101.7
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 φ 16
Torque strength in Nm	12-16
Container Material	ABS(UL94-HB) Flammability resistance of UL94-V0 can be available upon request.
Handle Type	Plastic

Dimensions / Terminal



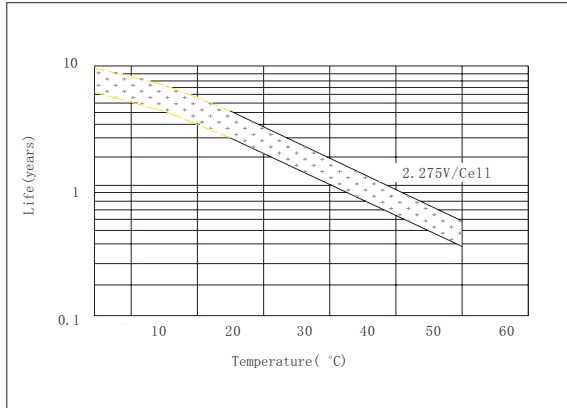
Constant Current Discharge Data (Amperes at 20°C / 68°F)

End Volt. Per Cell	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	303.1	213.5	165.9	101.3	63.26	36.16	25.36	19.43	16.55	10.79	9.590	5.100
1.65V	287.3	204.7	159.8	98.28	60.92	34.54	24.46	18.77	15.80	10.25	9.170	4.920
1.70V	272.6	196.8	152.8	94.44	58.22	33.28	23.51	18.23	15.30	9.890	8.750	4.650
1.75V	252.7	187.6	146.8	90.18	55.76	31.90	22.55	17.63	14.85	9.430	8.370	4.500
1.80V	232.7	178.0	140.3	85.39	52.89	30.52	21.38	16.70	14.50	9.110	8.000	4.300

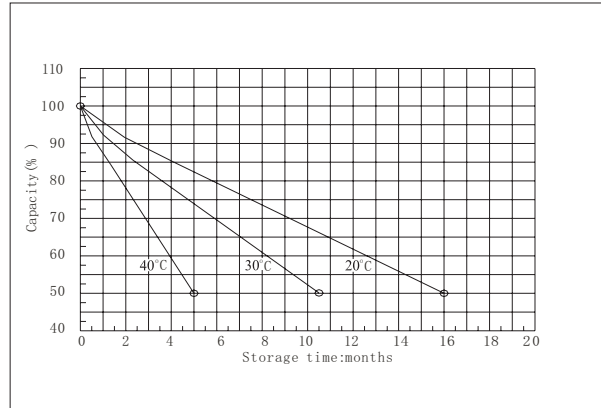
Constant Power Discharge Data (Watts per cell at 20°C / 68°F)

End Volt. Per Cell	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	490.0	365.4	288.1	181.4	108.3	62.30	45.10	34.70	29.40	19.40	16.90	8.903
1.65V	473.0	352.8	280.7	177.2	105.1	60.40	43.90	33.80	28.60	18.70	16.30	8.726
1.70V	458.2	340.9	271.8	172.2	101.7	58.70	42.70	33.10	28.20	18.20	15.90	8.613
1.75V	437.0	329.5	264.6	166.8	98.50	56.80	41.80	32.30	27.30	17.80	15.40	8.322
1.80V	415.0	319.0	257.9	159.3	93.40	54.90	40.30	31.40	26.40	17.10	14.80	8.121

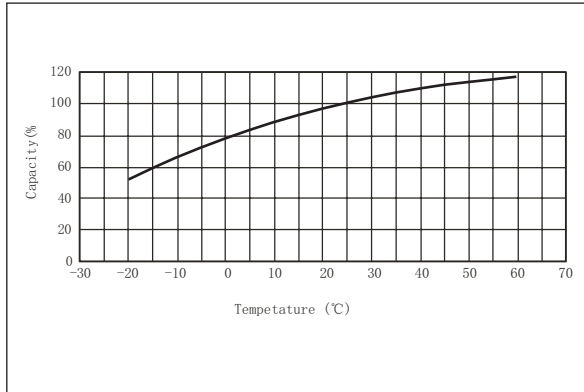
Trickle (or float) Service Life



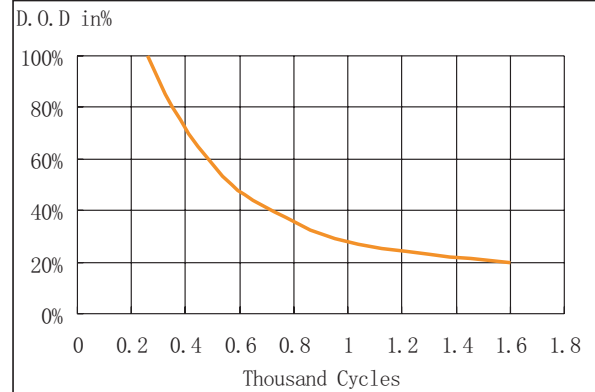
Capacity Retention Characteristic



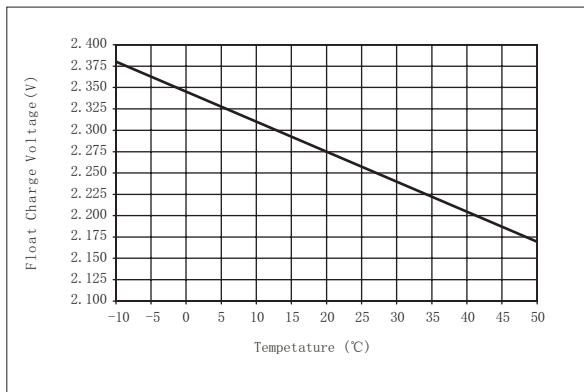
Capacity and Temperature



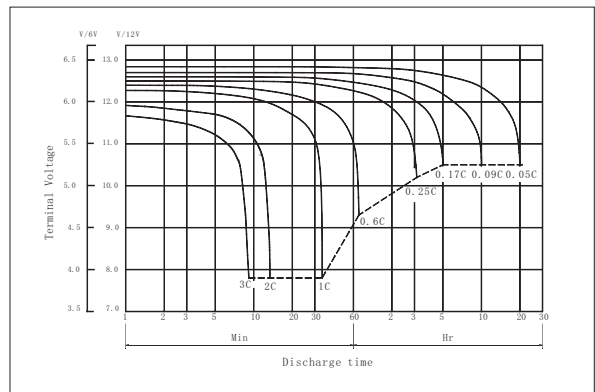
Cycle Service Life



Float Charge Voltage and Temperature



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



Charging Procedures

Application	Charge Voltage(V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Ranges	
Cycle Use	20°C(68°F)	2.45	2.40~2.50	0.3C
Standby	20°C(68°F)	2.275	2.25~2.30	0.3C

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.40
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Contact information

Sandong Sacred Sun Power Sources Co., Ltd.
Add: 1, Shengyang Road, Qufu 273100 Shandong, China
Tel: +86-537-4438 666 extn 6028 Fax: +86-537-4411 936
Website: <http://www.abtbatt.com> Email: sales@abtbatt.com

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

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