



# RA6-225SDG (6V225Ah)

RA6-225SDG is GEL Deep cycle battery superiorly designed for frequent cyclic discharge applications under extreme temperature. By using strong grid to insure reliable performance under frequent cyclic discharge use. 400 cycles could be available at 100% DOD. Offering extra-durable cyclic performance, high efficiency of recovery ,that is more suitable for solar, mobility, E-toll, marine , deep discharge UPS etc..



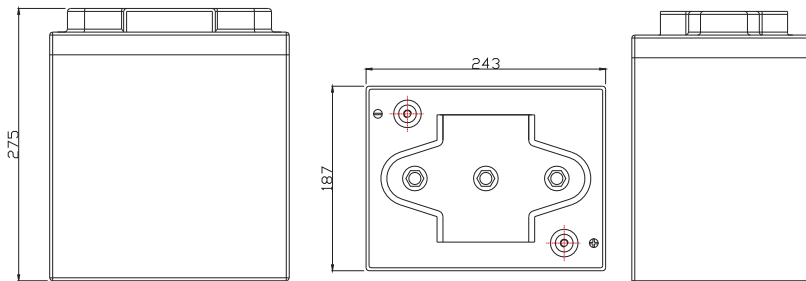
## Specification

Cells Per Unit	3
Voltage Per Unit	6
Capacity	225Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 32.0Kg
Max. Discharge Current	2250 A (5 sec)
Internal Resistance	Approx. 4.0 mΩ
Operating Temperature Range	Discharge: -40°C~60°C Charge: -20°C~50°C Storage: -40°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	6.8 to 6.9 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	45 A
Equalization and Cycle Service	7.1 to 7.2 VDC/unit Average at 25°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal F14
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.

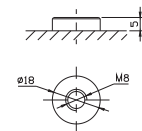


## Dimensions

Unit: mm Dimension:243(L)×188(W)×275(H)



Terminal F14



### Constant Current Discharge Characteristics: A (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
4.80V	564.1	403.7	324.1	217.2	132.4	79.22	54.76	44.88	36.73	25.30	21.39	11.77
5.00V	547.8	384.1	317.4	213.7	131.8	78.62	54.55	44.67	36.52	25.10	21.19	11.55
5.10V	531.6	370.5	312.4	213.9	130.6	78.03	54.13	44.46	36.30	24.89	20.98	11.34
5.25V	482.9	346.0	301.0	210.6	129.3	77.43	53.92	44.04	35.87	24.68	20.78	11.12
5.40V	441.0	319.2	280.7	203.3	126.3	76.04	52.45	43.01	35.22	24.27	20.57	10.91
5.55V	380.8	288.6	254.6	192.3	120.0	72.67	50.14	40.93	33.71	23.24	19.95	10.27

### Constant Power Discharge Characteristics: W (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
4.80V	2917	2150	1782	1238	765	467	326	267	219	151	128	70.5
5.00V	2860	2084	1754	1224	763	464	326	267	219	150	127	69.3
5.10V	2827	2029	1734	1227	757	462	324	267	218	149	126	68.0
5.25V	2604	1912	1673	1210	750	458	323	264	215	148	125	66.7
5.40V	2399	1783	1565	1171	737	452	314	258	211	146	123	65.5
5.55V	2132	1631	1425	1111	705	436	301	246	202	139	120	61.6

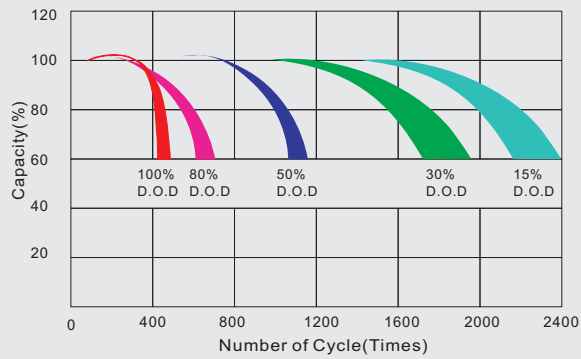
All mentioned values are average values.

# RA6-225SDG

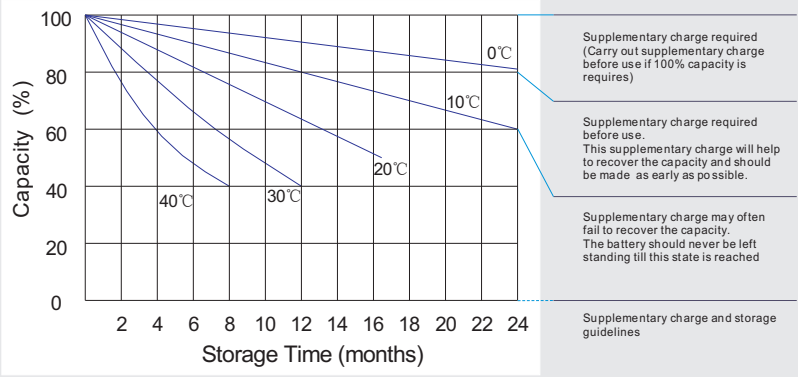
6V225Ah



## Life characteristics of cyclic use



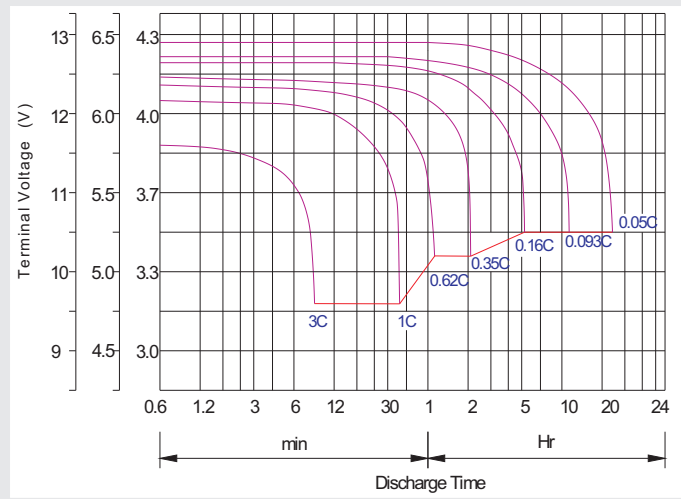
## Storage characteristic



## Charge characteristic curve for cyclic use



## Discharge characteristic curve



## Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

## Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

## Maintenance & Cautions

### Cycle service

- ※ Avoid battery over discharge, especially battery series connection use.
- ※ Charged with recommend voltage, ensure battery can be full recharged.
- In general, recharge capacity should be 1.1-1.15 times discharge capacity.
- ※ Effect of temperature on cycle charge voltage: -4mV/°C/Cell.
- ※ There are a number of factors that will affect the length of cyclic service.
- The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged.
- Generally speaking, the most important factors is depth of discharge.

**Charge the batteries at least once every six months, if they are stored at 25°C.**

### Charging Method:

Constant Voltage	-0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.3CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h