



RL22000D (2V2000Ah)

RL22000D is AGM Deep cycle battery with 18 years floating design life, specially designed for frequent cyclic discharge usage. By using strong grid and specific paste plate, it makes battery have 30% more cyclic life time than standby series. It is applicable for solar energy system, golf cart, electric wheelchair, etc..



Specification

Cells Per Unit	1
Voltage Per Unit	2
Capacity	2000Ah@10hr-rate to 1.80V per cell @20°C
Weight	Approx. 126.5 Kg
Max. Discharge Current	7000 A (5 sec)
Internal Resistance	Approx.0.4 mΩ
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	20°C±5°C
Float charging Voltage	2.27 to 2.3 VDC/unit Average at 20°C
Recommended Maximum Charging Current Limit	400 A
Equalization and Cycle Service	2.43 to 2.47 VDC/unit Average at 20°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	Thread insert & Bolt (F10)
Container Material	A.B.S. (UL94-HB) , Flammability resistance of UL94-V1 can be available upon request.



MH28539



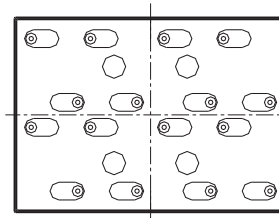
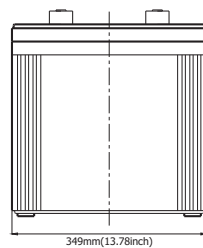
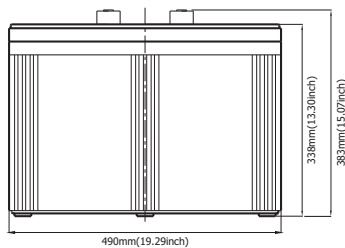
G4M20206-0910-E-16



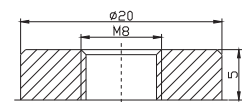
ISO9001:2000 Certificate

Dimensions

Unit: mm Dimension: 490(L)×349(W)×338(H)



Terminal F10



Constant Current Discharge Characteristics: A (20°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	2715	2003	1289	766.1	570.6	454.9	383.0	321.7	259.7	217.1
1.65V	2582	1923	1233	738.2	546.6	438.9	367.1	314.0	248.1	213.3
1.70V	2408	1813	1209	726.2	534.7	434.9	363.1	306.2	244.2	209.4
1.75V	2138	1631	1113	686.3	506.7	411.0	347.1	290.7	236.4	205.6
1.80V	1840	1486	1049	654.4	486.8	407.0	335.2	286.8	232.6	201.7
1.85V	1556	1338	969.6	618.5	462.8	375.1	319.2	271.3	220.9	188.0

Constant Power Discharge Characteristics: W (20°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	4754	3650	2360	1419	1063	854.8	723.9	620.7	494.2	419.1
1.65V	4629	3630	2352	1399	1042	842.1	715.7	612.8	490.0	415.1
1.70V	4373	3436	2309	1378	1027	838.8	709.4	598.5	482.5	408.6
1.75V	3895	3096	2127	1305	989.7	796.7	679.6	569.1	467.3	402.1
1.80V	3372	2825	2005	1246	948.8	793.0	657.5	562.3	459.7	387.8
1.85V	2875	2547	1854	1179	903.8	734.6	627.5	532.7	436.8	373.4

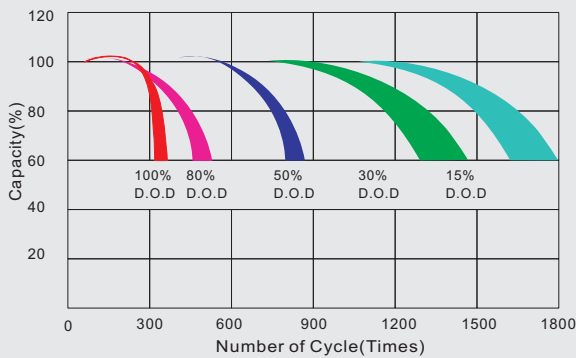
All mentioned values are average values.

RL22000D

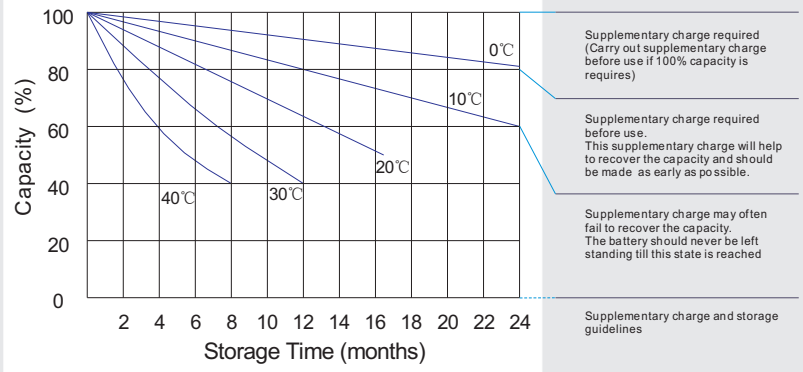
2V2000Ah



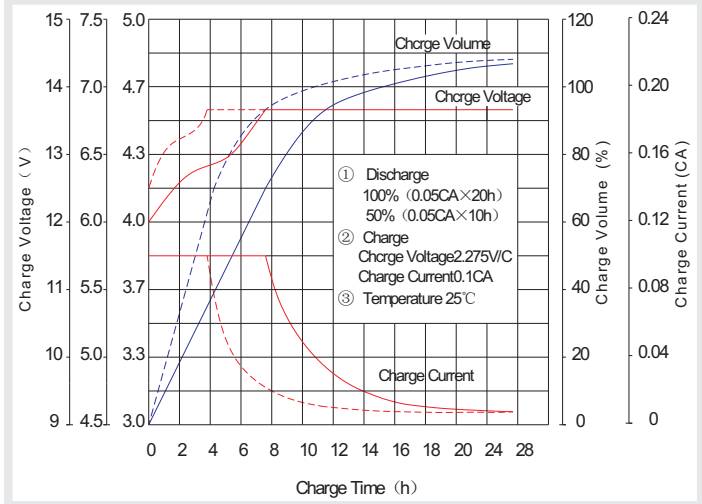
Life characteristics of cyclic use



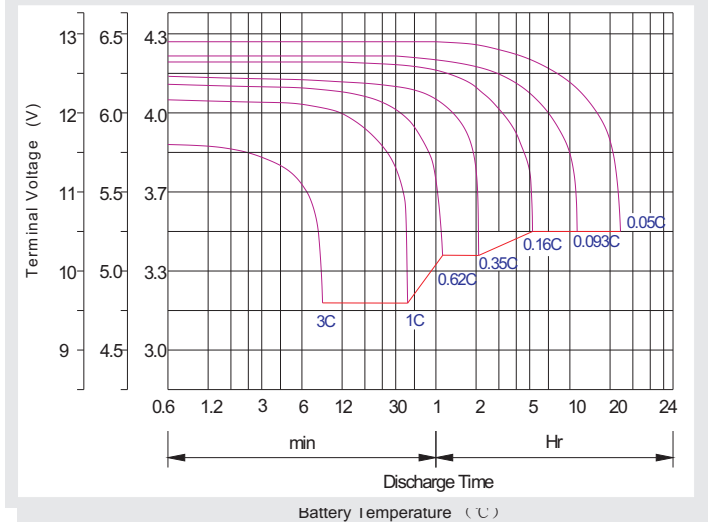
Storage characteristic



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

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

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.