



# RL 22500G (2V2500Ah)

RL22500G is GEL standby battery with 18~20 years floating design life time .The solid Gel protects no way to suffer electrolyte stratification and ensure mild corrosion, its special separator eradicates infection between plates to prevent short circuit. it offers extra-durable performance under extreme temperature.



## Specification

Cells Per Unit	1
Voltage Per Unit	2
Capacity	2500Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 171.0 Kg
Max. Discharge Current	8000 A (5 sec)
Internal Resistance	Approx. 0.53 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	2.27 to 2.3 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	500 A
Equalization and Cycle Service	2.37 to 2.4 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	Thread insert & Bolt (F10)
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.



MH28539



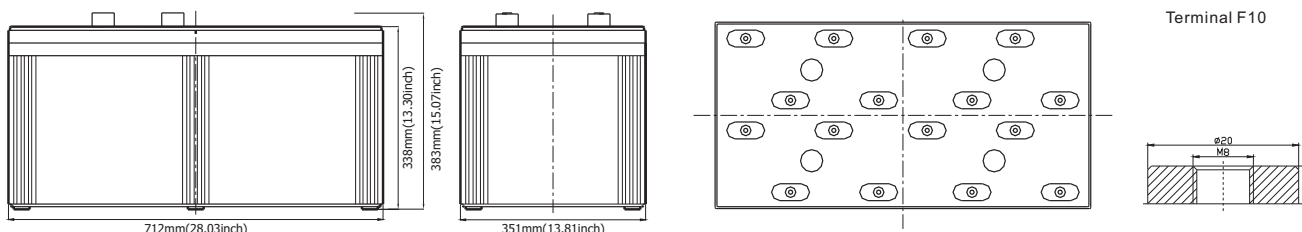
G4M20206-0910-E-16



ISO9001:2000 Certificate

## Dimensions

Unit: mm Dimension: 712(L)×351(W)×338(H)



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

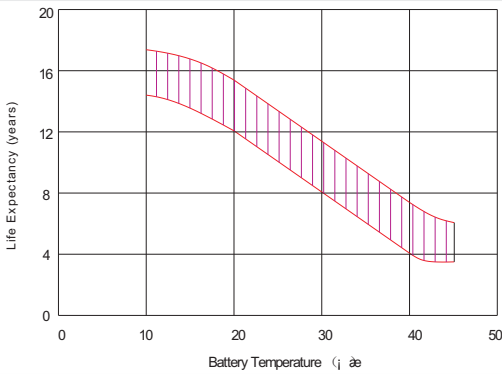
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.60V	3055	2366	1522	904.9	674.0	537.3	452.5	380.0	306.8	256.4	132.0
1.65V	2905	2271	1456	871.9	645.7	518.5	433.6	370.9	293.0	247.2	127.3
1.70V	2709	2141	1428	857.8	631.6	513.7	428.9	361.7	288.4	242.7	125.0
1.75V	2405	1903	1315	810.7	598.6	485.5	410.0	343.4	279.3	238.1	122.6
1.80V	2070	1755	1240	773.0	575.0	480.7	395.9	338.8	274.7	228.9	117.9
1.85V	1751	1580	1145	730.5	546.7	443.0	377.1	320.5	261.0	219.8	113.2

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

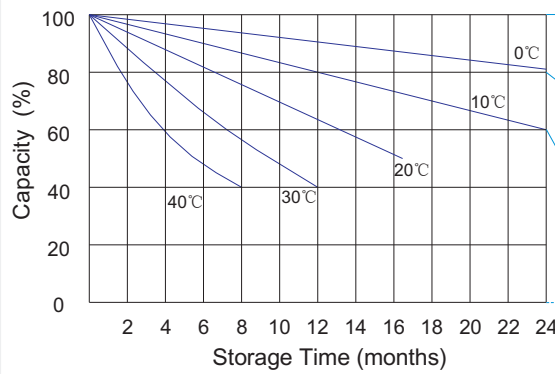
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.60V	5348	4206	2720	1635	1225	985.1	834.2	718.8	572.3	485.3	249.9
1.65V	5208	4184	2710	1612	1221	975.6	824.8	709.7	567.7	480.7	247.6
1.70V	4920	3892	2625	1588	1183	961.5	815.4	695.9	558.6	476.2	245.2
1.75V	4382	3506	2451	1518	1141	928.5	782.4	663.9	544.8	462.4	238.2
1.80V	3793	3232	2309	1452	1093	900.2	758.8	650.2	526.5	448.7	231.1
1.85V	3235	2913	2130	1367	1042	829.5	725.8	613.5	503.6	435.0	224.0

All mentioned values are average values.

### Effect of temperature on long term float life



### Storage characteristic



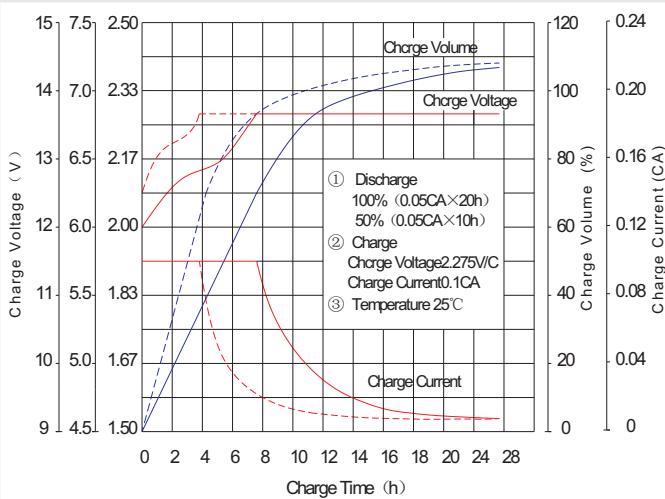
Supplementary charge required (Carry out supplementary charge before use if 100% capacity is required)

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible.

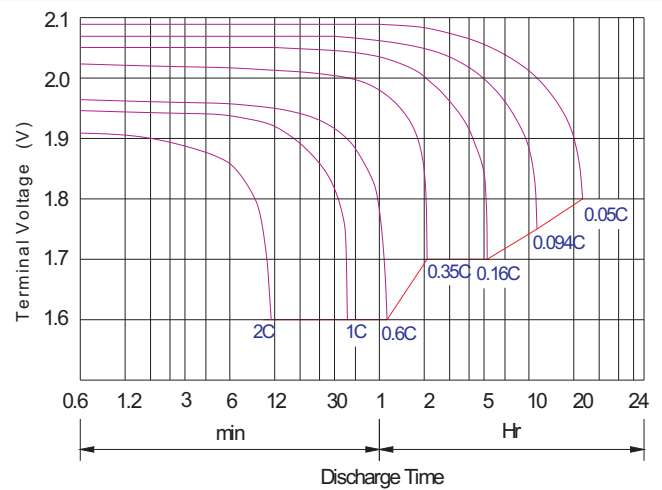
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached

Supplementary charge and storage guidelines

### Charge characteristic Curve for standby 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

<b>Float Service:</b>
※ Every month, recommend inspection every battery voltage.
※ Every three months, recommend equalization charge for one time.
Equalization charge method:
Discharge: 100% rate capacity discharge.
Charge: Max. current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h.
※ Effect of temperature on float charge voltage: -3mV/°C/Cell.
※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.

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

### Charging Method:

Constant Voltage	-0.2Cx2h+2.40~2.45V,24h,Max. Current 0.2CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h