



# RL 22500 (2V2500Ah)

RL 22500 is a general purpose battery with 18 years floating design life. With heavy duty grid, thick plates, special additives, RL series battery maintain very long life time and stable performance.



## Specification

Cells Per Unit	1
Voltage Per Unit	2
Capacity	2500Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 171.0 Kg
Max. Discharge Current	8000 A (5 sec)
Internal Resistance	Approx. 0.35 mΩ
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°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	2.43 to 2.47 VDC/unit Average at 25°C
Self Discharge	RITAR 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



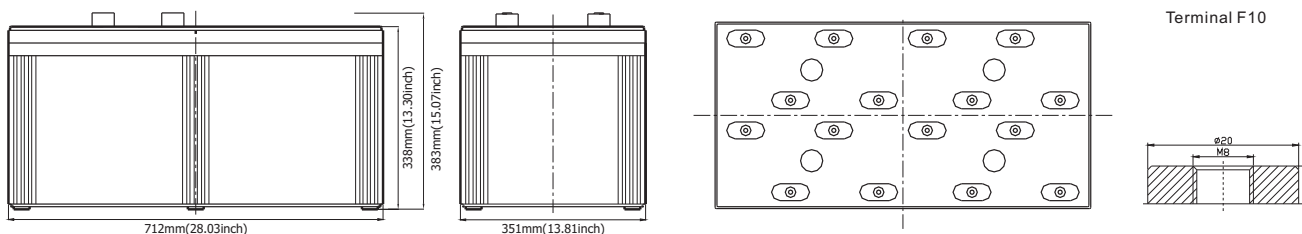
G4M20206-0910-E-16



ISO9001:2000 Certificate

## Dimensions

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



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

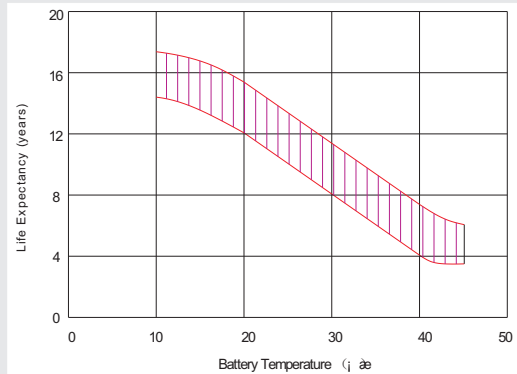
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	3394	2503	1611	957.6	713.2	568.6	478.8	402.1	324.6	271.3
1.65V	3228	2404	1541	922.7	683.3	548.6	458.9	392.4	310.1	266.6
1.70V	3010	2266	1511	907.7	668.3	543.6	453.9	382.8	305.2	261.8
1.75V	2672	2039	1392	857.9	633.4	513.7	433.9	363.4	295.5	256.9
1.80V	2300	1857	1312	818.0	608.5	508.7	419.0	358.5	290.7	252.1
1.85V	1945	1672	1212	773.1	578.6	468.8	399.0	339.2	276.2	235.1

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

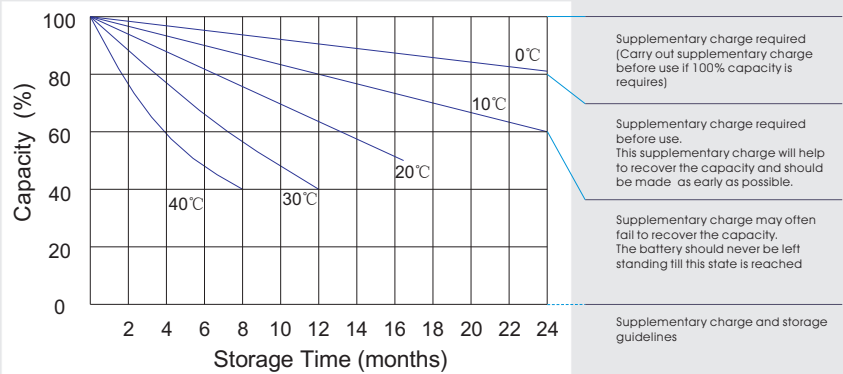
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	5942	4562	2950	1774	1329	1068	904.9	775.9	617.7	523.8
1.65V	5787	4538	2940	1748	1303	1053	894.6	766.0	612.5	518.9
1.70V	5466	4295	2886	1723	1283	1048	886.7	748.2	603.1	510.8
1.75V	4869	3870	2658	1631	1237	995.9	849.5	711.3	584.1	502.7
1.80V	4215	3531	2507	1557	1186	991.3	821.9	702.9	574.7	484.7
1.85V	3594	3184	2317	1474	1130	918.2	784.4	665.9	546.1	466.7

All mentioned values are average values.

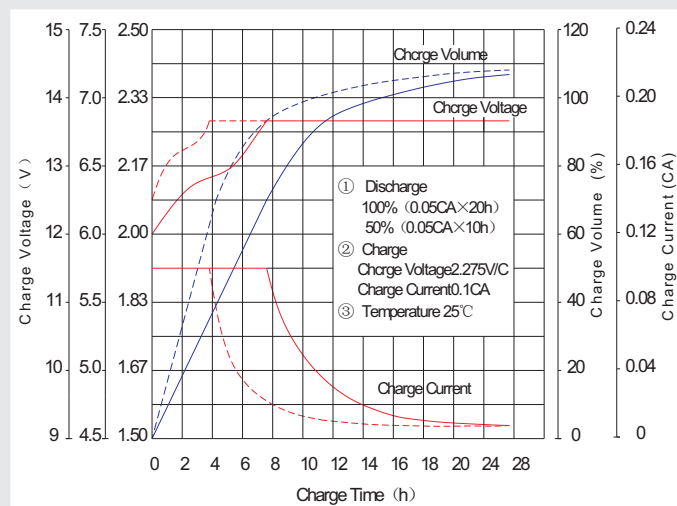
### Effect of temperature on long term float life



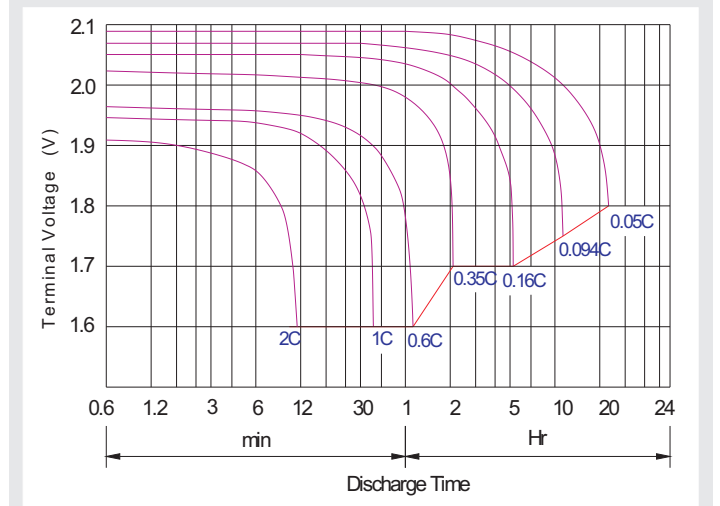
### Storage characteristic



### 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