



# RL2-1000G (2V1000Ah)

RL2-1000G is a 2V GEL battery with 15 years+ design life time in float charging use. Ritar Gel battery are featured with low self-discharge, good consistence on deep discharge, long cyclic life, low floating charging voltage and current, free from erosion, pollution, gas escape, and leakage, as well as beneficial to environmental protection.

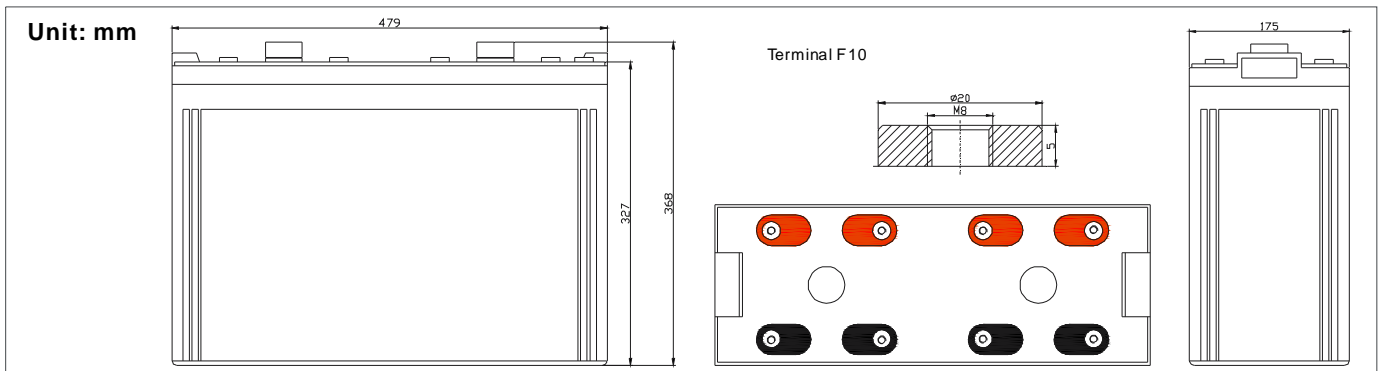


## Specification

<b>Cells Per Unit</b>	1
<b>Voltage Per Unit</b>	2
<b>Capacity</b>	1000Ah@ 10hr-rate to 1.75V per cell @25°C
<b>Weight</b>	Approx.66.2 Kg
<b>Max. Discharge Current</b>	4000 A (5 sec)
<b>Internal Resistance</b>	Approx. 1.1 mΩ
<b>Operating Temperature Range</b>	Discharge: -30°C~60°C Charge: -20°C~50°C Storage: -30°C~60°C
<b>Normal Operating Temperature Range</b>	25°C±5°C
<b>Float charging Voltage</b>	2.25 to 2.30 VDC/unit Average at 25°C
<b>Recommended Maximum Charging Current Limit</b>	200 A
<b>Equalization and Cycle Service</b>	2.35 to 2.38 VDC/unit Average at 25°C
<b>Self Discharge</b>	RITAR batteries can be stored for more than 12 months at 25°C. Please charge batteries before using. For higher temperature, the time interval will be shorter.
<b>Terminal</b>	Thread insert & Bolt (F10)
<b>Container Material</b>	A.B.S. (UL94-HB) Flammability resistance of UL94-V1 can be available upon request.



## Dimensions



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

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	1453	964	604	359	267	213	180	161	130	109
1.65V	1382	926	578	346	256	206	172	157	124	105
1.70V	1288	873	567	340	251	204	170	153	122	103
1.75V	1144	776	522	322	237	193	163	146	118	101
1.80V	985	716	492	307	228	191	157	144	116	97
1.85V	833	644	454	290	217	176	150	136	111	93

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

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	2544	1715	1079	649	486	391	331	305	243	206
1.65V	2520	1706	1075	640	484	387	327	301	241	204
1.70V	2319	1587	1042	630	469	381	324	295	237	202
1.75V	2084	1429	972	602	453	368	310	281	231	196
1.80V	1793	1318	916	576	434	357	301	275	223	190
1.85V	1517	1188	845	542	413	329	288	260	213	184

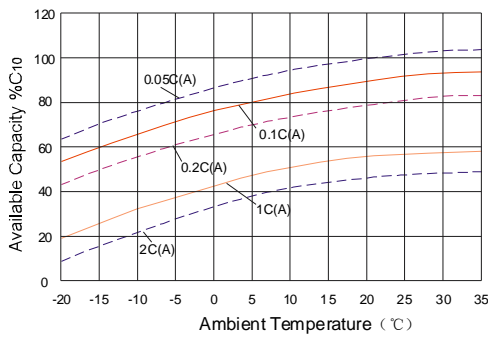
All mentioned values are average values.

# RL2-1000G

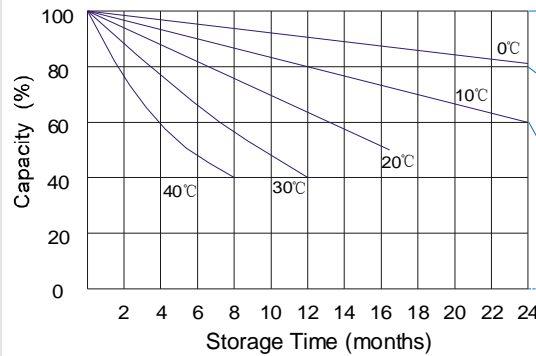
2V1000Ah



## Temperature effects curve



## Storage characteristic



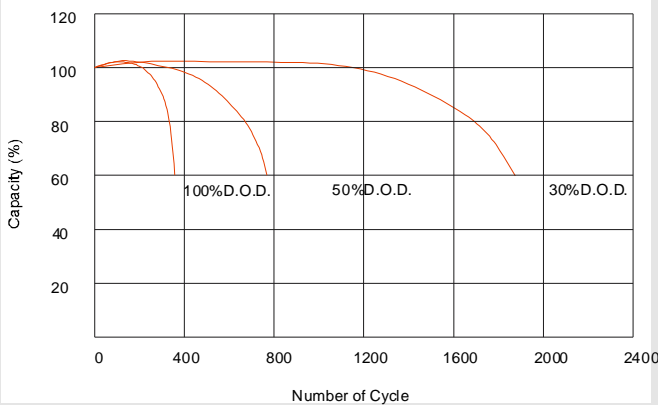
Supplementary charge required  
(Carry out supplementary charge before use if 100% capacity is required)

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

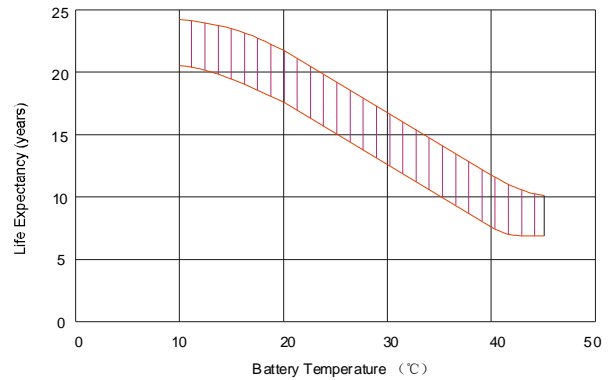
Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this state is reached

Supplementary charge and storage guidelines

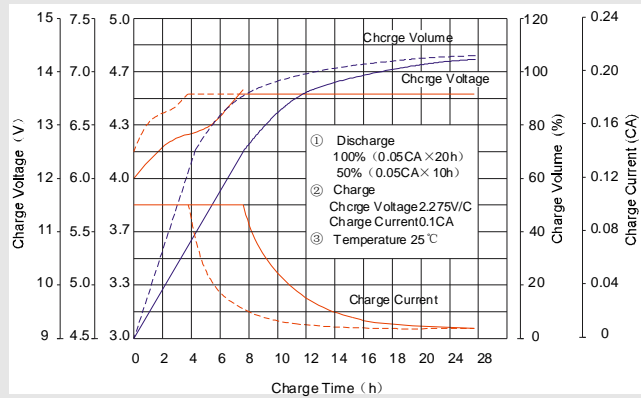
## Life characteristics of cyclic use



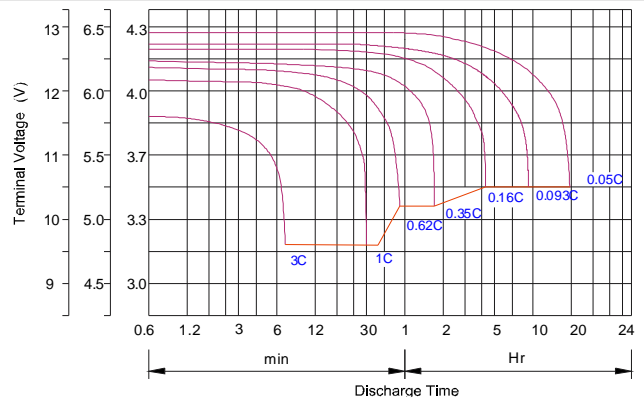
## Effect of temperature on long term float life



## Charge characteristic Curve for standby use



## Discharge characteristic Curve



## Charging Procedures(12V series)

Application	Charge Voltage (V)			Max. Charge Current
	Temperature	Set point	Allowable range	
Cycle Use	25°C	14.2	14.1~14.3	0.3C
Standby	25°C	13.7	13.6~13.8	0.3C

## 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 twelve months, if they are stored at 25°C.

## Charging Method:

Constant Voltage	-0.2Cx2h +14.1~14.3V,24h,Max. Current 0.2CA
Constant Current	-0.2Cx2h +0.1CAx12h

## Charging Procedures(6V series)

Application	Charge Voltage (V)			Max. Charge Current
	Temperature	Set point	Allowable range	
Cycle Use	25°C	7.10	7.05~7.15	0.3C
Standby	25°C	6.85	6.8~6.9	0.3C

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