



# RL2-300 (2V300Ah)

## Specification

Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	300Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 16.5 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 0.72 mΩ
Terminal	F10(M8)
Max. Discharge Current	1500A (5 sec)
Short Circuit Current	2910A
Design Life	20 years (Float charging)
Max. Charging Current	60 A
Reference Capacity	C1 165.0AH C3 232.2AH C5 261.5AH C10 300.0AH
Standby Use Voltage	2.27 V~2.30 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.43 V~2.47 V @ 25°C Temperature Compensation: -4mV/°C/Cell
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
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging be stored for up to 6 months at 25°C and then recharging than 3% at 25°C. Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



RL series is a general purpose battery with 20 years design life in float service. It meets with heavy duty grids, thicker plates, special additives and advanced AGM valve regulated technology, the RL series battery provides consistent performance and long service life. The new grid design effectively reduces the internal resistance, which provides higher specific energy density and excellent high rate discharge characteristics. It is suitable for communications back-up power and EPS/UPS applications.



ISO 9001



ISO 14001



OHSAS 18001

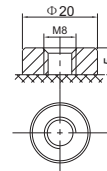
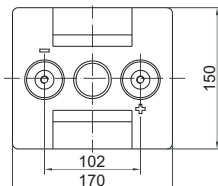
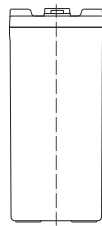
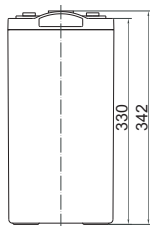


MH 28539



G4M20206-0910-E-16

## Dimensions



F10 TERMINAL

Length	170±2mm (6.69 inches)
Width	150±2mm (5.91 inches)
Height	330±2mm (13.0 inches)
Total Height	342±2mm (13.5 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

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

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	470.9	296.1	183.3	112.9	84.6	68.1	56.6	38.0	31.6
1.65V	441.2	284.2	177.0	109.3	82.0	66.3	55.1	37.6	31.3
1.70V	413.2	271.7	171.3	105.7	79.8	64.5	53.7	37.0	30.8
1.75V	384.5	259.7	165.0	102.0	77.4	62.8	52.3	36.5	30.4
1.80V	355.1	248.2	158.7	98.3	75.0	61.0	51.0	35.9	30.0
1.85V	294.6	213.8	142.3	90.1	69.3	56.7	47.6	33.7	28.2

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

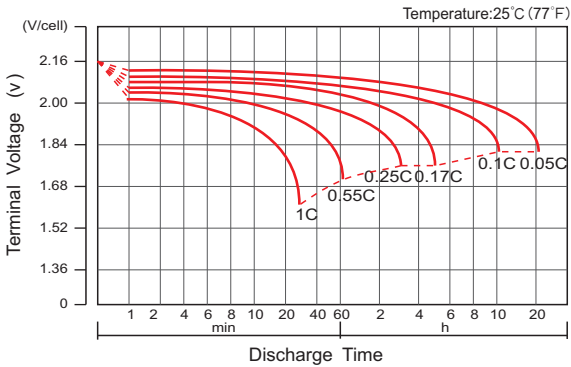
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	823.2	537.8	344.5	213.9	161.6	130.8	109.1	74.3	62.2
1.65V	782.7	521.7	334.6	208.1	157.3	127.7	106.7	73.6	61.5
1.70V	744.0	503.6	325.7	202.4	153.7	124.7	104.3	72.6	60.7
1.75V	702.5	486.3	315.7	196.2	149.7	122.0	102.0	71.8	60.0
1.80V	657.8	469.5	305.4	190.1	145.7	118.9	99.7	70.7	59.3
1.85V	553.6	408.4	275.6	175.2	135.3	110.9	93.3	66.5	55.9

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C10 should reach 95% after the first cycle and 100% after the third cycle.

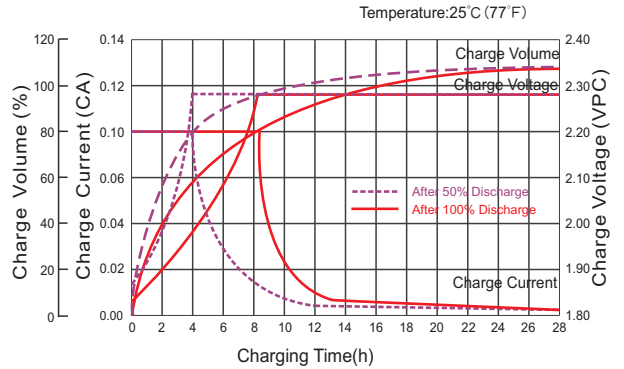
# RL2-300(2V300Ah)



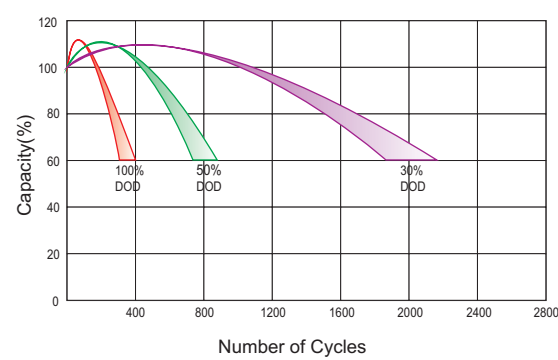
## Discharge Characteristics Curve



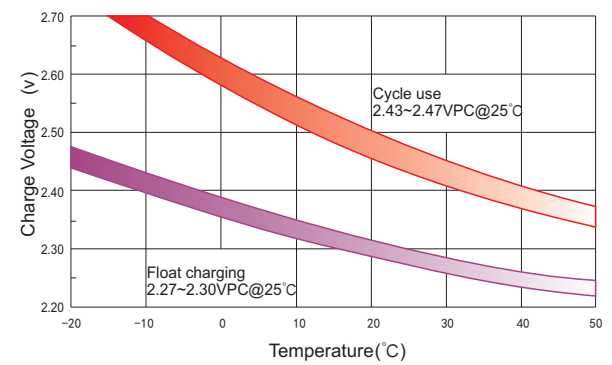
## Charge Characteristic Curve For Standby Use



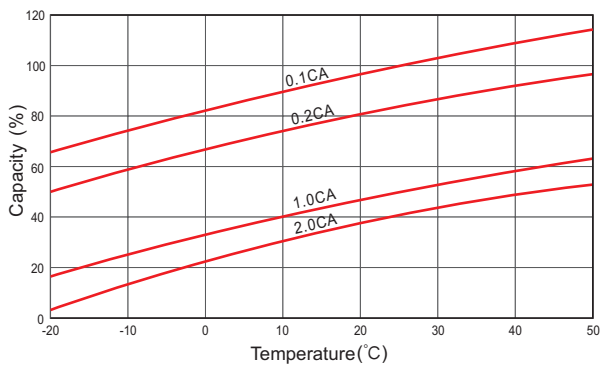
## Cycle Life In Relation To Depth Of Discharge



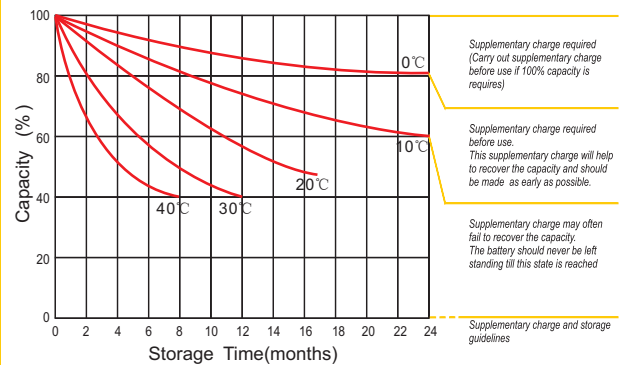
## Relationship Between Charging Voltage And Temperature



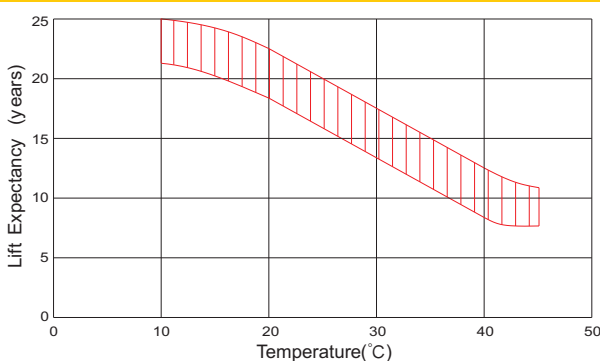
## Temperature Effects On Capacity



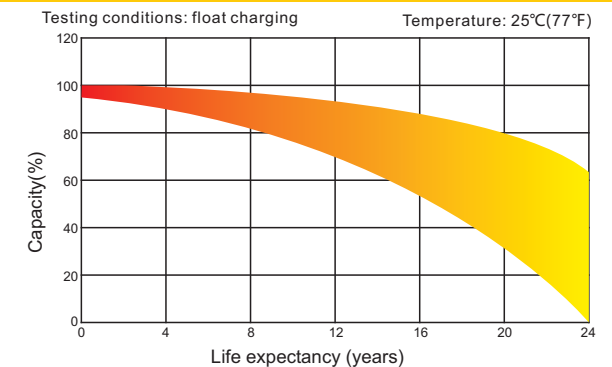
## Storage Characteristics



## Effect Of Temperature On Long Term Life



## Charge Characteristic Curve For Standby Use



(Note) All above information shall be changed without prior notice, Ritar reserves the right to explain and update the latest information.

**HENGYANG RITAR POWER CO.,LTD.**  
 URL: [www.ritarpower.com](http://www.ritarpower.com)

Add: No.1 Huagong Road, Songmu Industrial Park, Shigu District, Hengyang, Hunan, China 421001  
 Tel: +86-734-8595528 Fax: +86-734-8595518 E-mail: [sales@ritarpower.com](mailto:sales@ritarpower.com)

Version 19B-0