



# RL2-800 (2V800Ah)

## Specification

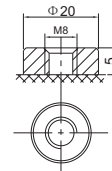
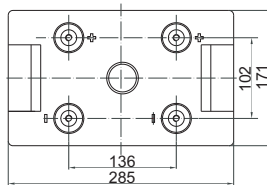
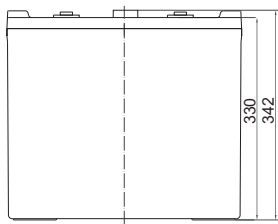


RL series is a general purpose battery with 20 years design life in float service. It meets with heavy duty grids, thicker plates, special additives and advanced AGM valve regulated technology, the RL series battery provides consistent performance and long service life. The new grid design effectively 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.



Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	800Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 38.5 Kg (Tolerance ± 3.0%)
Internal Resistance	Approx. 0.50 mΩ
Terminal	F10(M8)
Max. Discharge Current	3000A (5 sec)
Short Circuit Current	6370A
Design Life	20 years (Float charging)
Max. Charging Current	160 A
Reference Capacity	C1 440.0AH C3 619.2AH C5 698.0AH C10 800.0AH
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.

## Dimensions



F10 TERMINAL

Length	285±2mm (11.2 inches)
Width	171±2mm (6.73 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	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	758.3	488.8	301.0	225.6	181.6	150.9	101.4	84.4
1.65V	727.9	472.0	291.4	218.7	176.7	147.0	100.3	83.4
1.70V	695.8	456.7	281.8	212.7	171.9	143.2	98.7	82.1
1.75V	665.0	440.0	272.0	206.4	167.5	139.6	97.4	81.0
1.80V	635.6	423.2	262.2	200.0	162.7	136.0	95.7	80.0
1.85V	547.5	379.5	240.3	184.9	151.2	126.8	89.9	75.3

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

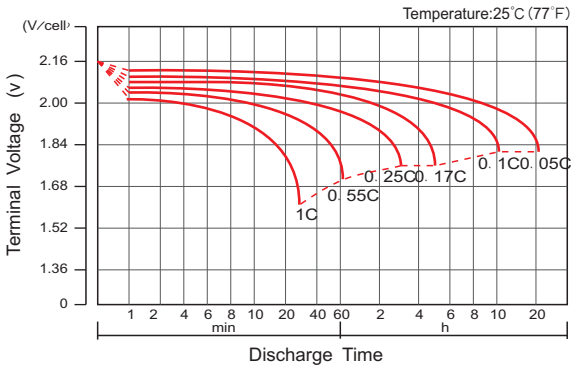
F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	1377.2	918.5	570.5	431.0	348.7	290.9	198.1	165.9
1.65V	1336.1	892.1	555.0	419.4	340.5	284.4	196.3	164.1
1.70V	1289.9	868.5	539.6	409.8	332.5	278.0	193.7	161.8
1.75V	1245.5	841.8	523.2	399.3	325.2	271.9	191.4	159.9
1.80V	1202.5	814.3	507.0	388.5	317.0	265.9	188.6	158.1
1.85V	1046.0	734.9	467.1	360.7	295.8	248.8	177.4	149.0

(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.

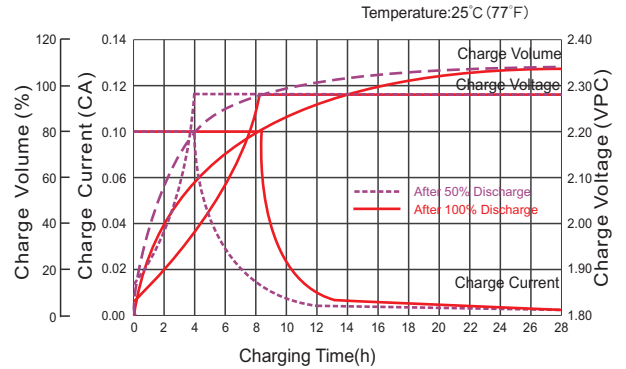
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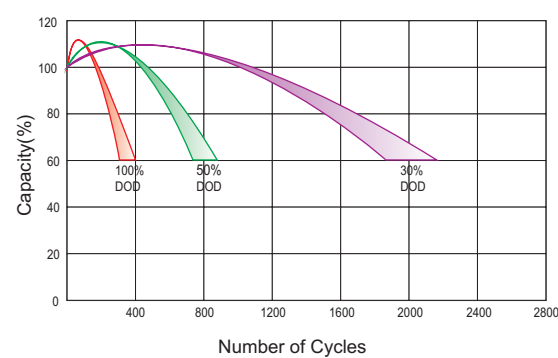
## Discharge Characteristics Curve



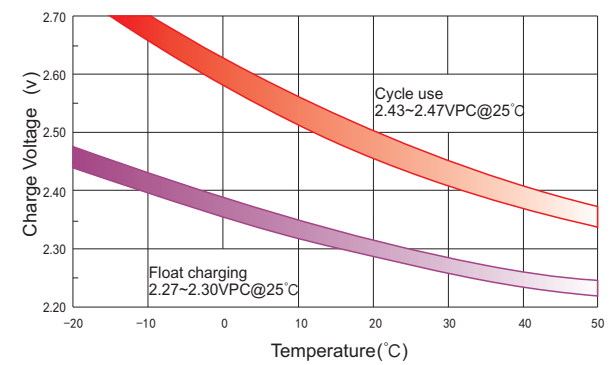
## Charge Characteristic Curve For Standby Use



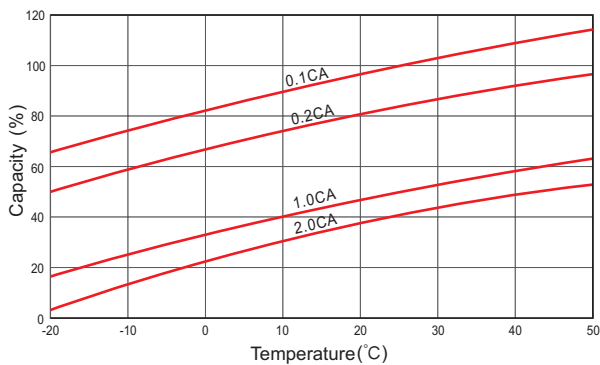
## Cycle Life In Relation To Depth Of Discharge



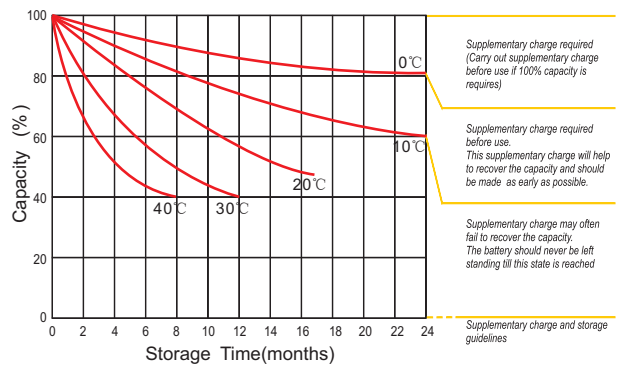
## Relationship Between Charging Voltage And Temperature



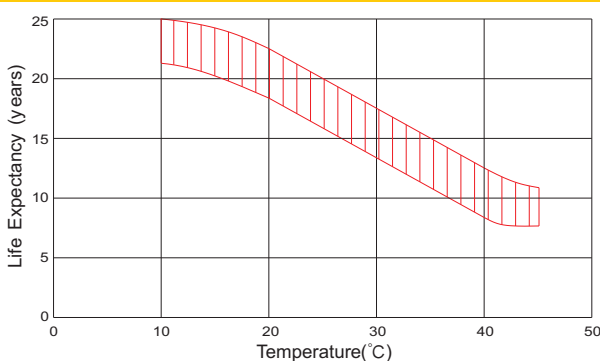
## Temperature Effects On Capacity



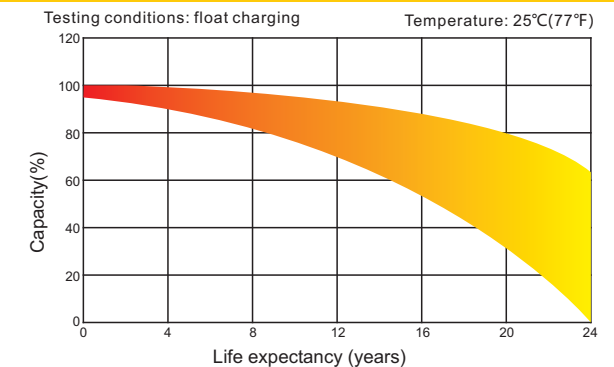
## Storage Characteristics



## 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.

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