



RL2-300(2V300Ah)

Specification

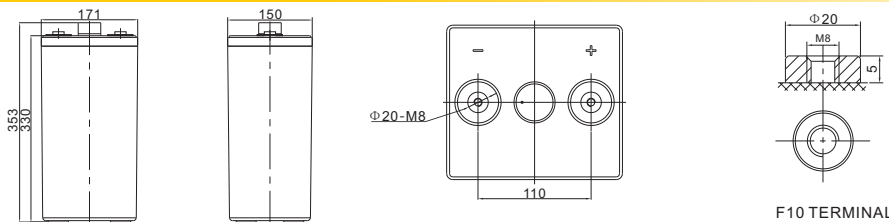


RL series is a general purpose battery with 20 years design life in float service. It meets with heavy duty grids, thicker plates, special additives and advanced AGM valve regulated technology, the RL series battery provides consistent performance and long service life. The new grid design effectively 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	300Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 18.3 Kg (Tolerance ±3%)
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)
Recommended Maximum Charging Current	60 A
Reference Capacity	C1 185.3AH C3 232.5AH C5 262.5AH 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 is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Dimensions



Length	171±2mm (6.73 inches)
Width	150±2mm (5.91 inches)
Height	330±2mm (13.0 inches)
Total Height	353±2mm (13.9 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

F10 TERMINAL

Unit: mm

Constant Current Discharge Characteristics : A (25°C)

F.V/Tim e	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	470.9	296.1	185.3	112.1	82.0	66.1	55.1	38.0	32.0
1.65V	458.5	289.6	181.9	110.4	80.9	65.3	54.5	37.6	31.7
1.70V	442.3	281.0	177.3	108.3	79.5	64.2	53.6	37.1	31.3
1.75V	421.2	269.7	171.4	105.4	77.5	62.7	52.5	36.4	30.7
1.80V	394.0	255.1	163.6	101.6	75.0	60.8	51.0	35.5	30.0
1.85V	359.7	236.5	153.5	96.6	71.7	58.3	49.1	34.3	29.1

Constant Power Discharge Characteristics : WPC (25°C)

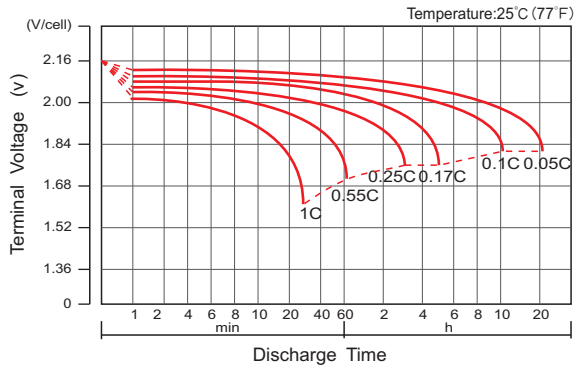
F.V/Tim e	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	855.3	553.6	351.2	214.1	157.4	127.4	107.6	74.7	62.9
1.65V	845.3	547.1	347.2	212.2	156.2	126.4	106.7	74.1	62.4
1.70V	820.0	532.7	339.6	208.6	153.7	124.6	105.2	73.2	61.7
1.75V	788.9	514.0	329.7	203.9	150.6	122.2	103.2	71.9	60.7
1.80V	745.5	488.5	316.2	197.3	146.2	118.9	100.5	70.2	59.4
1.85V	687.3	456.1	298.4	188.6	140.2	114.4	96.8	68.0	57.6

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

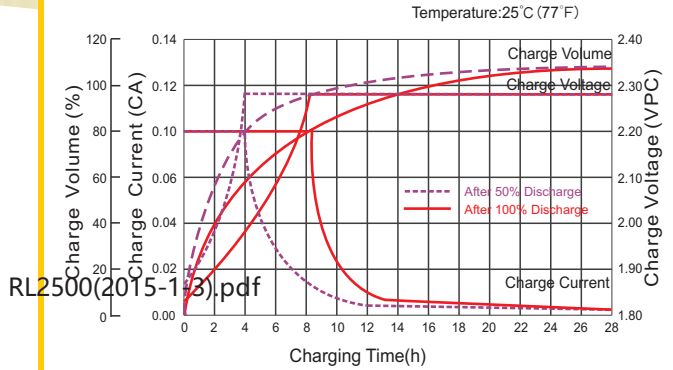
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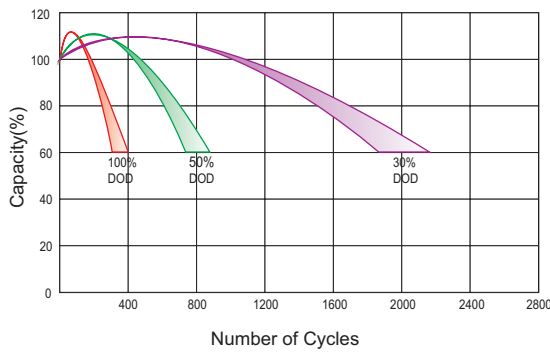
Discharge Characteristics Curve



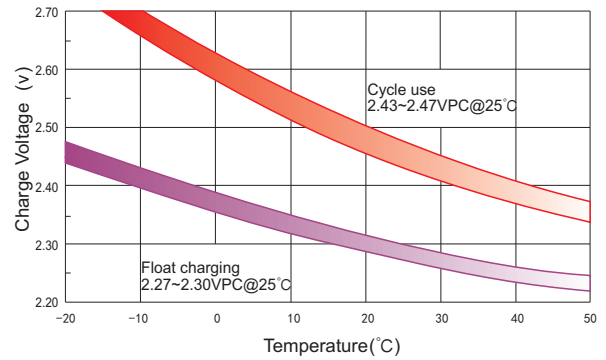
Charge Characteristic Curve For Standby Use



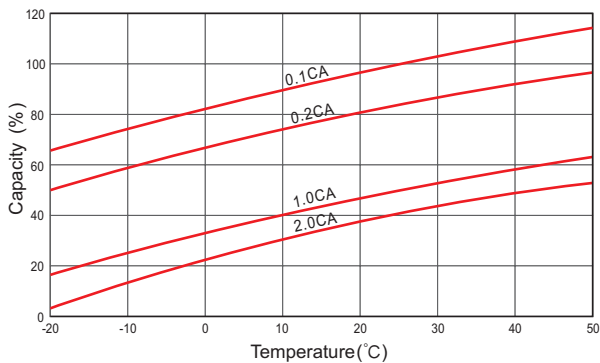
Cycle Life In Relation To Depth Of Discharge



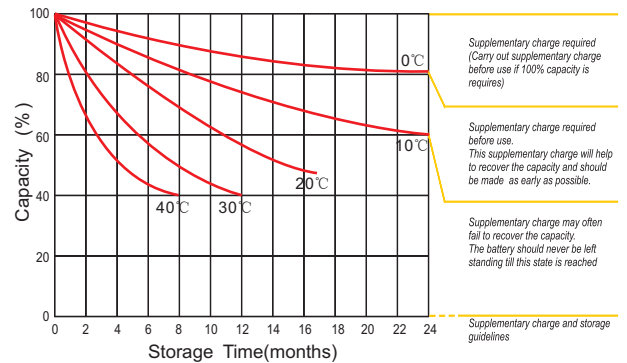
Relationship Between Charging Voltage And Temperature



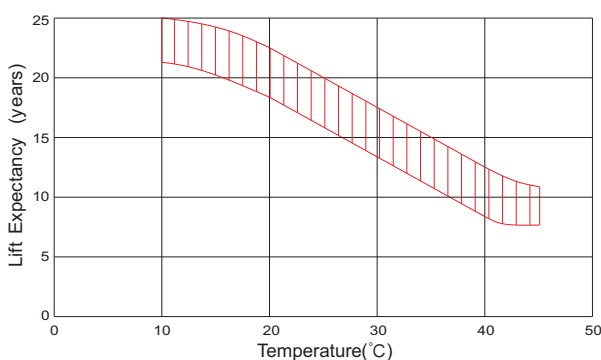
Temperature Effects On Capacity



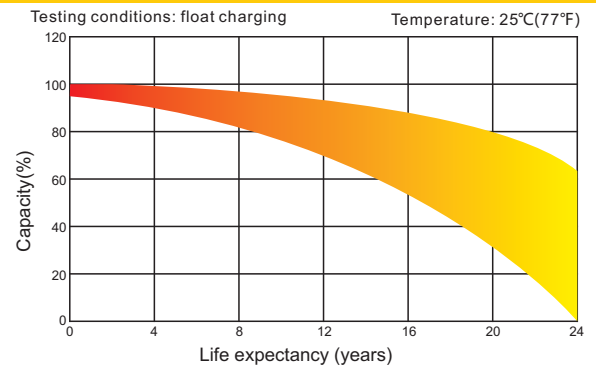
Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use



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