



RL2-500(2V500Ah)

Specification

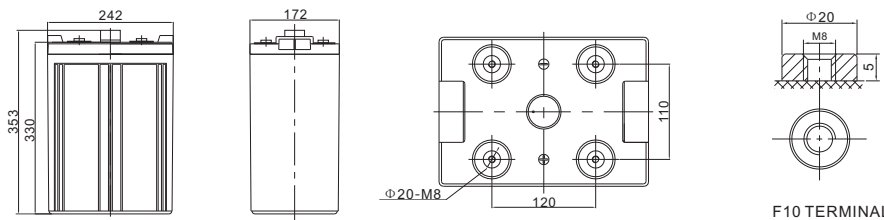
Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	500Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 30.5 Kg (Tolerance ±2%)
Internal Resistance	Approx. 0.62 mΩ
Terminal	F10(M8)
Max. Discharge Current	2500A (5 sec)
Short Circuit Current	4210A
Design Life	20 years (Float charging)
Recommended Maximum Charging Current	100 A
Reference Capacity	C1 308.9AH C3 387.6AH C5 437.5AH C10 500.0AH
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.



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.



Dimensions



Length	242±2mm (9.53 inches)
Width	172±2mm (6.77 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

Unit: mm

Constant Current Discharge Characteristics : A (25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	784.8	493.4	308.9	186.8	136.7	110.1	91.8	63.3	53.3
1.65V	764.2	482.6	303.1	184.1	134.9	108.8	90.8	62.7	52.8
1.70V	737.2	468.3	295.6	180.4	132.4	106.9	89.4	61.9	52.1
1.75V	702.0	449.5	285.6	175.6	129.2	104.5	87.5	60.7	51.2
1.80V	656.7	425.2	272.6	169.3	125.0	101.3	85.0	59.2	50.0
1.85V	599.6	394.2	255.8	161.1	119.5	97.2	81.8	57.2	48.4

Constant Power Discharge Characteristics : WPC (25°C)

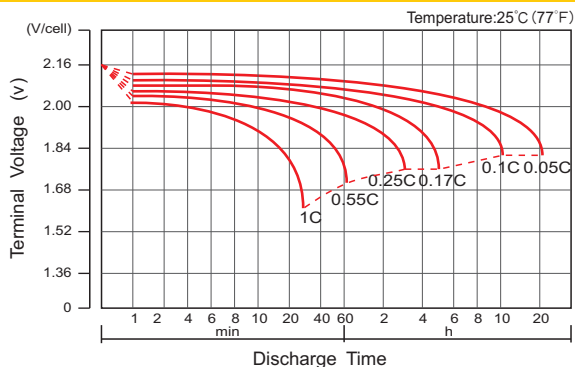
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	1425	922.6	585.4	356.8	262.4	212.3	179.4	124.5	104.9
1.65V	1409	911.9	578.7	353.7	260.3	210.7	177.8	123.5	104.1
1.70V	1367	887.9	566.0	347.6	256.2	207.6	175.3	121.9	102.8
1.75V	1315	856.6	549.5	339.8	250.9	203.6	171.9	119.8	101.2
1.80V	1242	814.2	527.1	328.8	243.6	198.1	167.5	117.0	99.0
1.85V	1146	760.2	497.4	314.3	233.7	190.6	161.4	113.3	96.0

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

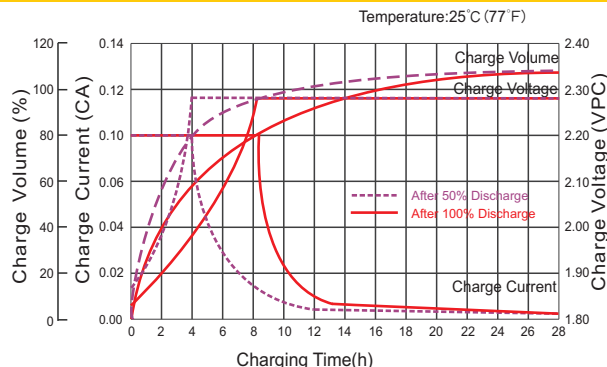
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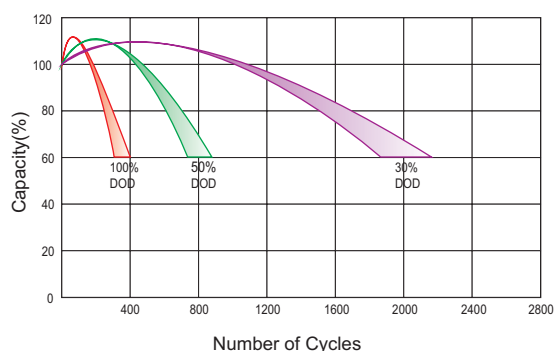
Discharge Characteristics Curve



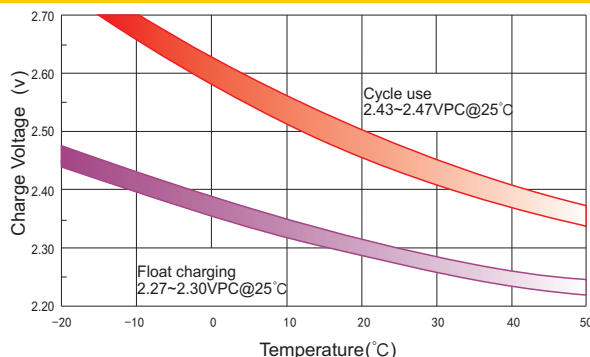
Charge Characteristic Curve For Standby Use



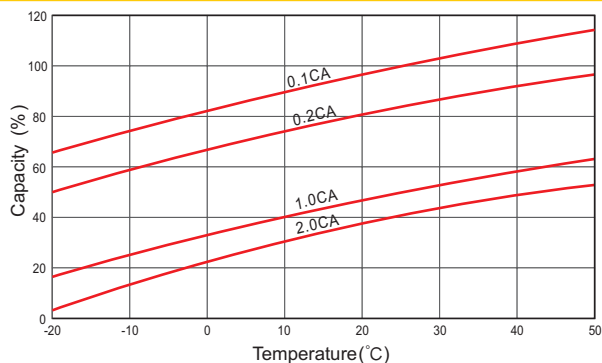
Cycle Life In Relation To Depth Of Discharge



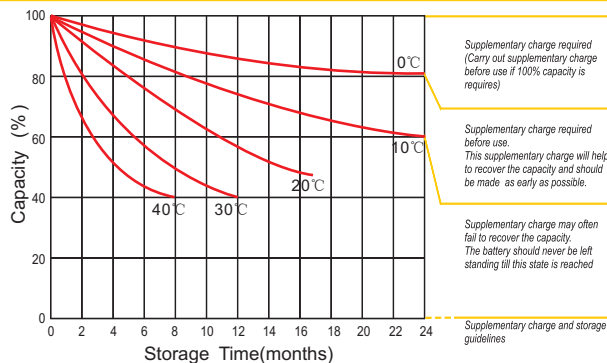
Relationship Between Charging Voltage And Temperature



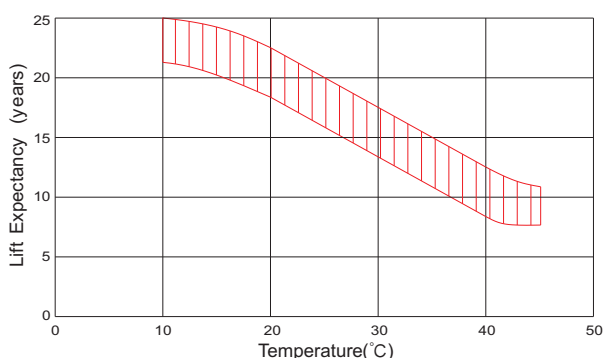
Temperature Effects On Capacity



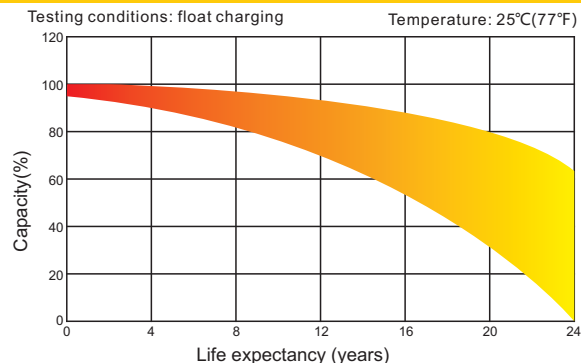
Storage Characteristics



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.