RA12-100SA(12V100Ah)

Specification

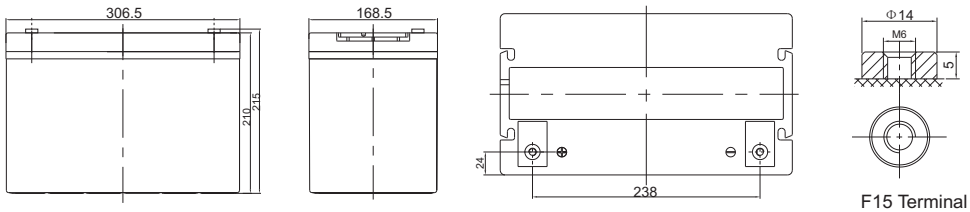
Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	100Ah@10hour-rate to 1.80V per cell @25℃
Weight	Approx. 26.0 Kg (Tolerance±3.0%)
Internal Resistance	Approx. 6.5 mΩ
Terminal	F15(M6)/F12(M8)
Max. Discharge Current	1000A (5 sec)
Short Circuit Current	2200A
Design Life	12 years (Float charging)
Max. Charging Current	30.0 A
Reference Capacity	C3 77.4AH C5 87.0AH C10 100.0AH C20 106.0AH
Standby Use Voltage	13.6 V~13.8 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25℃.Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

RA series is a general purpose battery with 12 years design life in float service. It meets with IEC, JIS, BS, GB/T and YD/T standards. With advanced AGM valve regulated technology and high purity raw material, the RA series battery maintains high consistency for better performance and reliable standby service life. It is suitable for UPS/EPS, Telecom, power grid, medical equipment, emergency light and security system applications.

ISO 9001 ISO 14001 OHSAS 18001

MH 28539 G4M20206-0910-E-16

Dimensions



F15 Terminal

Length	306.5±2mm (12.1 inches)
Width	168.5±2mm (6.63 inches)
Height	210±2mm (8.27 inches)
Total Height	215±2mm (8.46 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℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	216.0	172.7	104.1	61.1	36.4	28.2	22.2	18.9	12.7	10.5	5.52
1.65V	193.3	165.1	100.0	59.0	35.2	27.3	21.6	18.4	12.5	10.4	5.43
1.70V	178.0	154.6	95.5	57.1	34.1	26.6	21.0	17.9	12.3	10.3	5.36
1.75V	162.9	143.9	91.3	55.0	32.9	25.8	20.4	17.4	12.2	10.1	5.30
1.80V	147.4	132.9	87.3	52.9	31.7	25.0	19.9	17.0	12.0	10.0	5.25
1.85V	120.5	110.3	75.2	47.4	29.1	23.1	18.5	15.9	11.2	9.41	4.98

Constant Power Discharge Characteristics : WPC (25℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	347.7	314.5	193.0	113.7	68.3	53.3	42.1	36.0	24.5	20.5	10.8
1.65V	334.9	305.1	187.2	110.4	66.4	51.9	41.1	35.2	24.3	20.3	10.6
1.70V	314.0	290.1	180.8	107.5	64.6	50.7	40.2	34.4	24.0	20.0	10.5
1.75V	292.6	273.8	174.5	104.2	62.6	49.4	39.3	33.7	23.7	19.8	10.4
1.80V	269.5	256.4	168.5	100.8	60.7	48.1	38.3	32.9	23.3	19.6	10.3
1.85V	224.1	215.8	146.6	90.9	55.9	44.6	35.7	30.8	22.0	18.4	9.78

(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 C_{10} should reach 95% after the first cycle and 100% after the third cycle.

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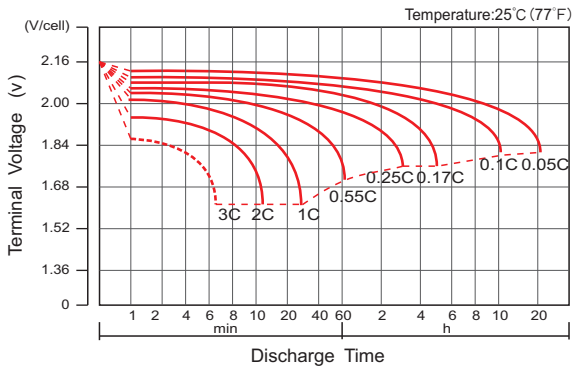
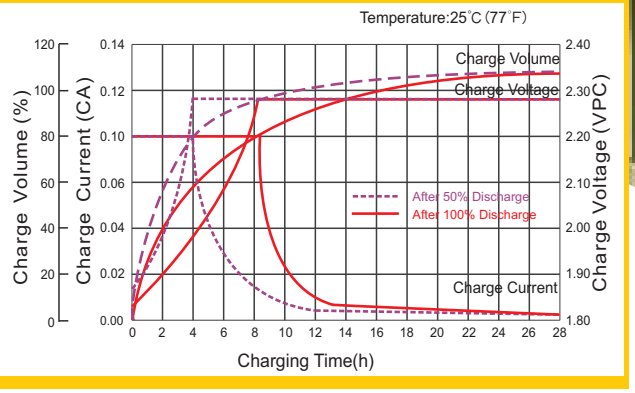
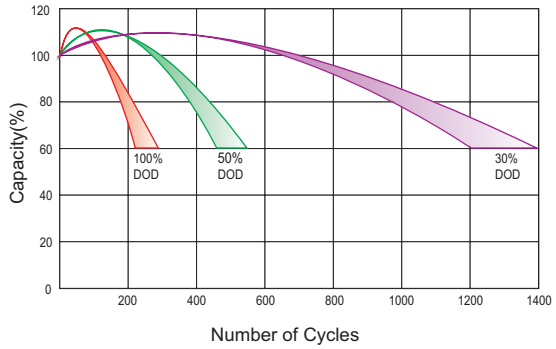
Discharge Characteristics Curve



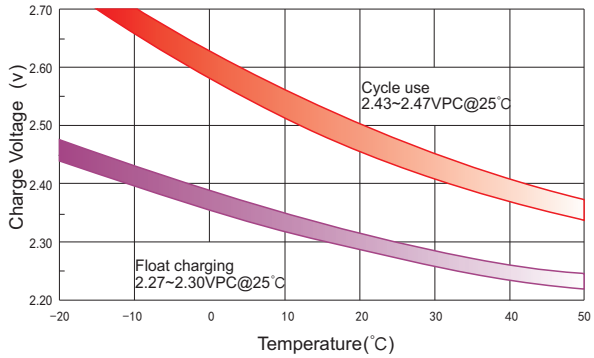
Charge Characteristic Curve For Standby Use



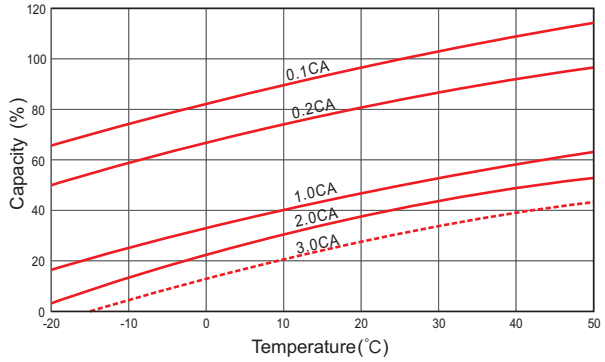
Cycle Life In Relation To Depth Of Discharge



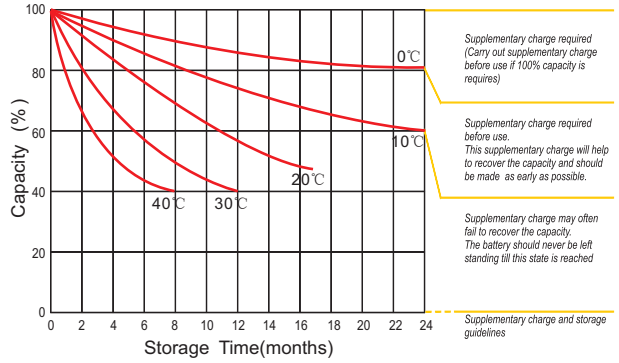
Relationship Between Charging Voltage And Temperature



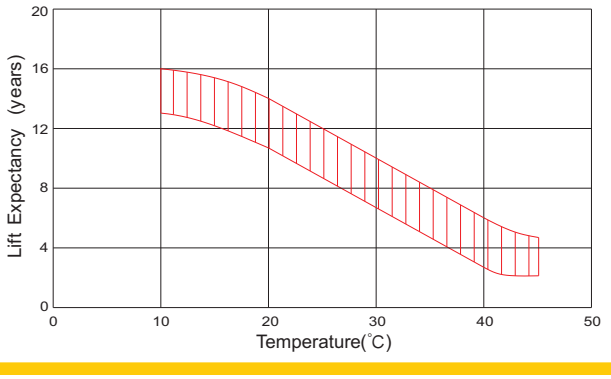
Temperature Effects On Capacity



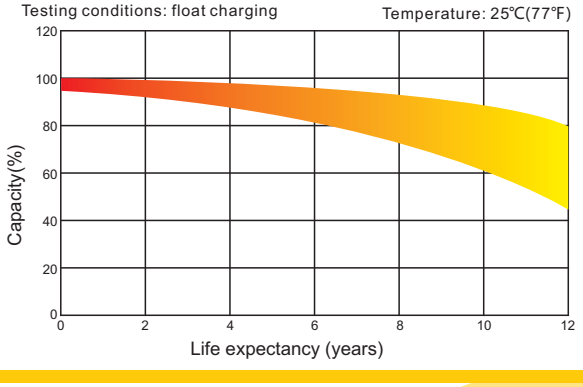
Storage Characteristics



Effect Of Temperature On Long Term Life



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.

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