RA12-100(12V100Ah)

Specification

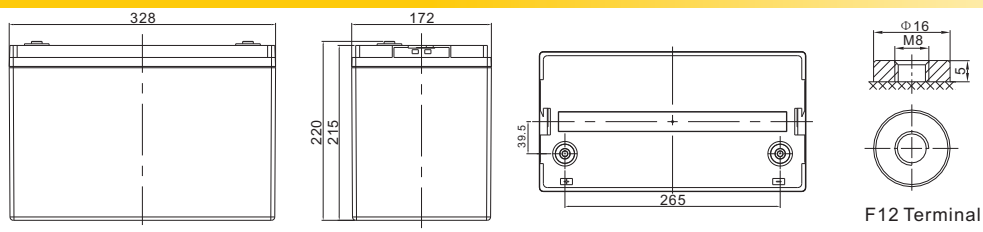
Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	100Ah@10hour-rate to 1.80V per cell @25℃
Weight	Approx. 28.5 Kg (Tolerance±5.0%)
Internal Resistance	≤5.5 mΩ (Full Charge Condition @25℃)
Terminal	Default F12(M8), F5(M8)&L7 Optional
Max. Discharge Current	1000A (5 sec)
Short Circuit Current	2150A
Design Life	12 years
Max. Charging Current	30.0 A
Reference Capacity	C_3 75.0Ah C_5 85.0Ah C_{10} 100.0Ah C_{20} 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 ISO 45001

MH 28539 BSTXD2103160008513EC

Dimensions



F12 Terminal

Length	328±2mm (12.9 inches)
Width	172±2mm (6.77 inches)
Height	215±2mm (8.46 inches)
Total Height	220±2mm (8.66 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	231.9	185.4	109.5	61.1	36.4	28.2	22.2	18.9	12.7	10.5	5.52
1.65V	219.1	177.3	105.1	59.0	35.2	27.3	21.6	18.4	12.5	10.4	5.43
1.70V	201.7	166.0	100.5	57.1	34.1	26.6	21.0	17.9	12.3	10.3	5.36
1.75V	184.6	154.5	96.0	55.0	32.9	25.8	20.4	17.4	12.2	10.1	5.30
1.80V	167.1	142.7	91.8	52.9	31.7	25.0	19.9	17.0	12.0	10.0	5.25
1.85V	136.6	118.4	79.1	47.4	29.1	23.1	18.5	15.9	11.2	9.41	4.98

Constant Power Discharge Characteristics : W/Cell (25℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	394.1	324.1	198.9	114.8	69.0	53.9	42.6	36.4	24.8	20.7	10.9
1.65V	379.6	314.5	193.0	111.5	67.1	52.4	41.6	35.6	24.5	20.5	10.7
1.70V	355.9	298.9	186.3	108.6	65.3	51.2	40.6	34.8	24.2	20.2	10.6
1.75V	331.6	282.2	179.9	105.2	63.3	49.9	39.7	34.0	23.9	20.0	10.5
1.80V	305.4	264.3	173.7	101.8	61.3	48.6	38.7	33.2	23.6	19.8	10.4
1.85V	254.1	222.4	151.1	91.9	56.5	45.1	36.1	31.1	22.2	18.6	9.87

(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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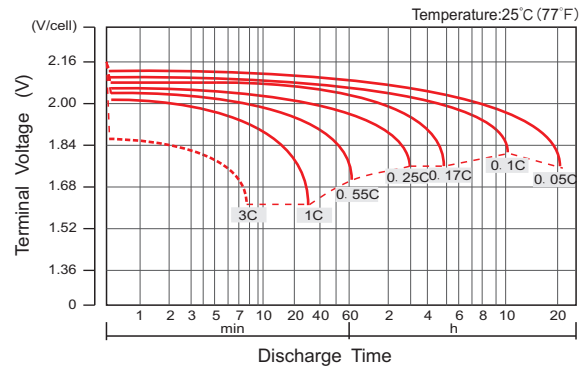
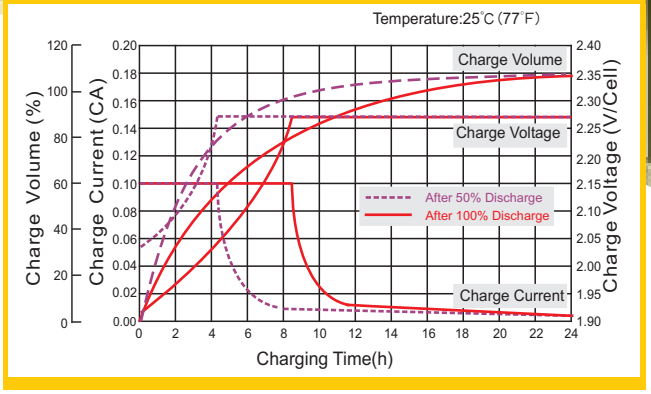
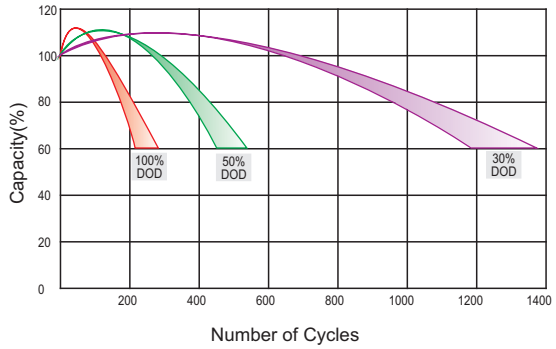
Discharge Characteristics Curve



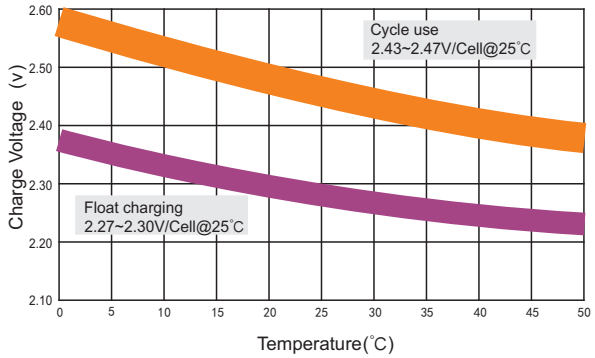
Charge Characteristic Curve For Standby Use(IU)



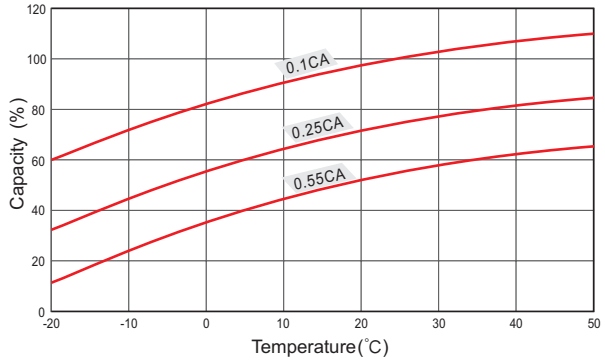
Cycle Life In Relation To Depth Of Discharge



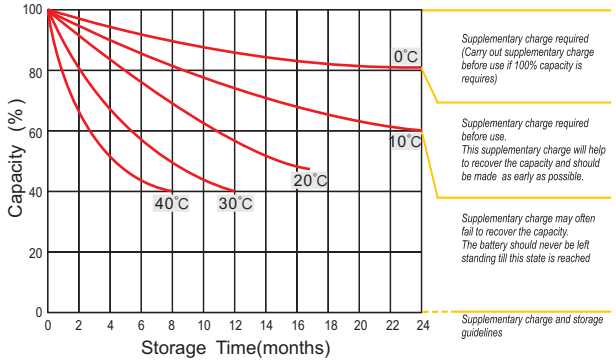
Relationship Between Charging Voltage And Temperature



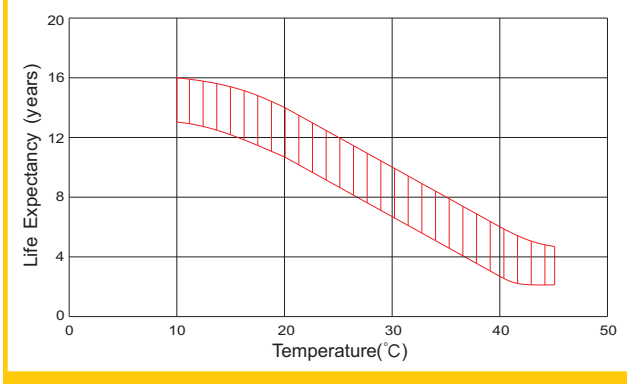
Temperature Effects On Capacity



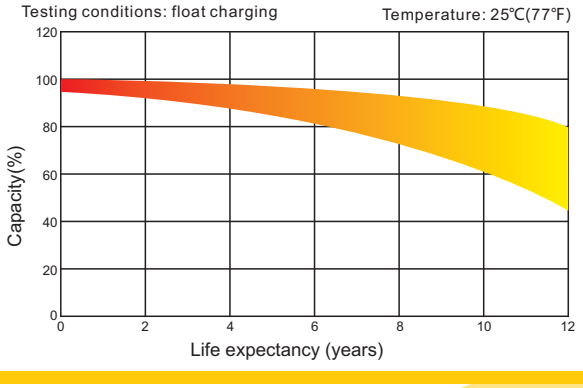
Storage Characteristics



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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