



# RA12-55(12V55Ah)

## Specification

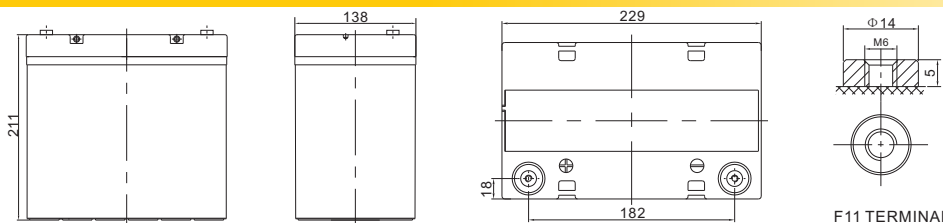


RA series is a general purpose battery with 12 years design life in float service. It meets with IEC, JIS, BS and YDT standards. With advanced AGM valve regulated technology and high purity raw material, the RA series battery maintains high consistency for better performance and reliable standby service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



<b>Cells Per Unit</b>	6
<b>Voltage Per Unit</b>	12
<b>Nominal Capacity</b>	55Ah@10hour-rate to 1.80V per cell @25°C
<b>Weight</b>	Approx. 18 Kg (Tolerance ±3.0%)
<b>Internal Resistance</b>	Approx. 6.0 mΩ
<b>Terminal</b>	F15(M6)/F11(M6)
<b>Max. Discharge Current</b>	550A (5 sec)
<b>Short Circuit Current</b>	1160A
<b>Design Life</b>	12 years (Float charging)
<b>Recommended Maximum Charging Current</b>	16.5 A
<b>Reference Capacity</b>	C3 42.7AH C5 46.9AH C10 55.0AH C20 58.2AH
<b>Standby Use Voltage</b>	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
<b>Cycle Use Voltage</b>	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
<b>Operating Temperature Range</b>	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
<b>Normal Operating Temperature Range</b>	25°C±5°C
<b>Self Discharge</b>	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.
<b>Container Material</b>	A.B.S. UL94-HB, UL94-V0 Optional.

## Dimensions



Length	229±2mm (9.02 inches)
Width	138±2mm (5.43 inches)
Height	211±2mm (8.31 inches)
Total Height	216±2mm (8.50 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	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	193.0	135.1	100.7	58.29	34.21	20.49	15.05	12.22	10.32	6.89	5.86	3.01
1.65V	186.0	131.1	98.08	57.01	33.57	20.19	14.85	12.07	10.20	6.82	5.81	2.98
1.70V	176.9	125.8	94.61	55.32	32.73	19.79	14.58	11.87	10.04	6.73	5.73	2.95
1.75V	165.3	119.0	90.09	53.10	31.63	19.27	14.23	11.60	9.83	6.61	5.63	2.91
1.80V	150.6	110.2	84.28	50.23	30.19	18.57	13.76	11.25	9.55	6.44	5.50	2.85
1.85V	132.5	99.31	76.95	46.56	28.33	17.67	13.15	10.78	9.18	6.23	5.33	2.78

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

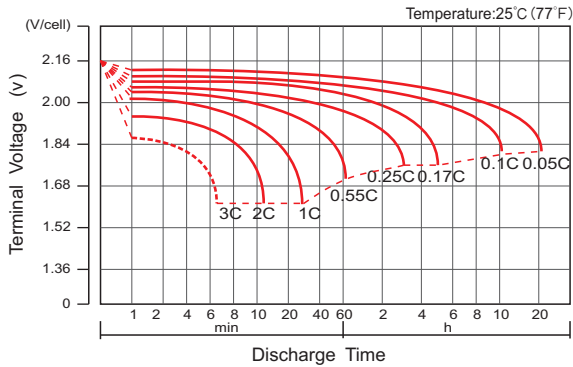
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	332.2	233.1	178.7	107.5	64.92	39.42	29.17	23.82	20.19	13.67	11.70	6.01
1.65V	328.7	232.1	177.7	106.7	64.39	39.13	28.96	23.64	20.06	13.57	11.61	5.97
1.70V	316.1	225.3	172.9	104.1	63.00	38.47	28.51	23.30	19.78	13.40	11.47	5.91
1.75V	300.6	216.9	167.0	100.9	61.18	37.62	27.94	22.86	19.44	13.18	11.29	5.83
1.80V	278.7	204.5	158.5	96.45	58.67	36.45	27.13	22.24	18.95	12.89	11.04	5.73
1.85V	249.6	187.5	146.7	90.30	55.46	34.87	26.05	21.41	18.29	12.48	10.71	5.58

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

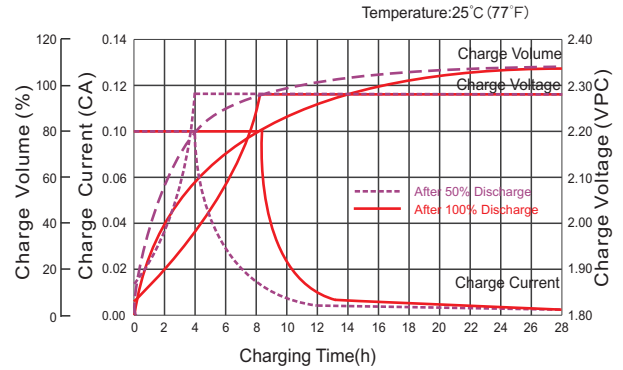
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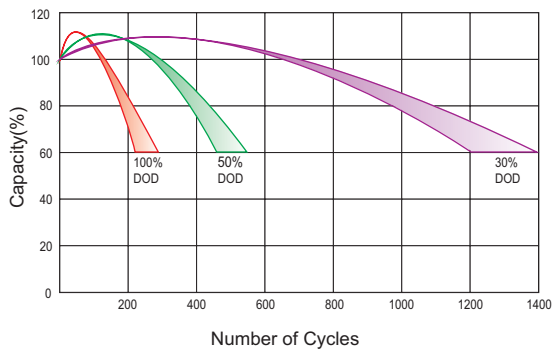
## Discharge Characteristics Curve



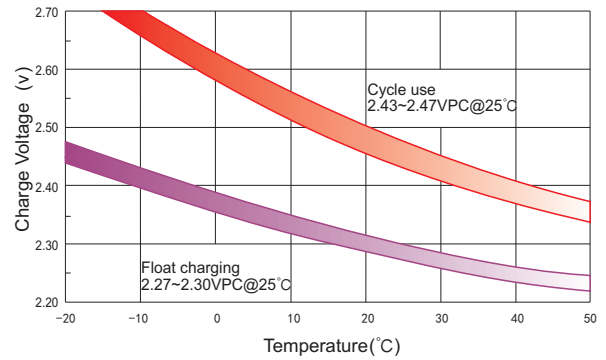
## Charge Characteristic Curve For Standby Use



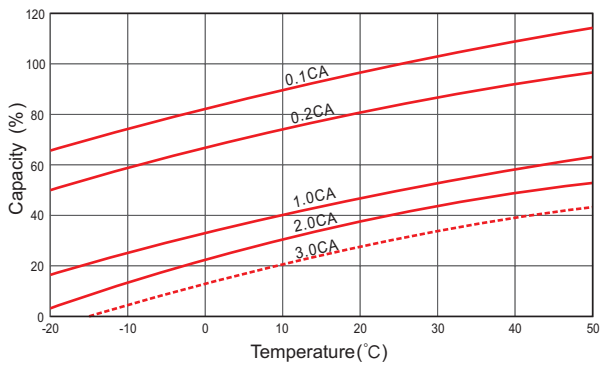
## Cycle Life In Relation To Depth Of Discharge



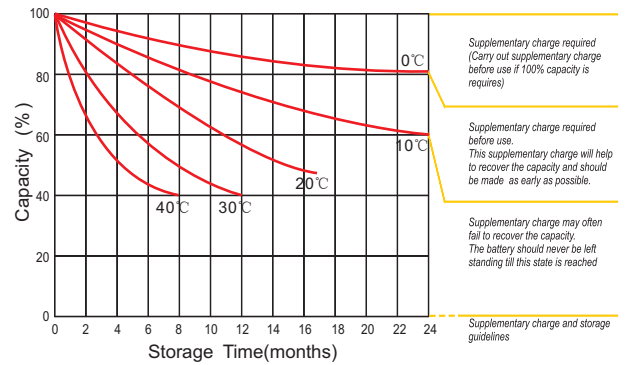
## Relationship Between Charging Voltage And Temperature



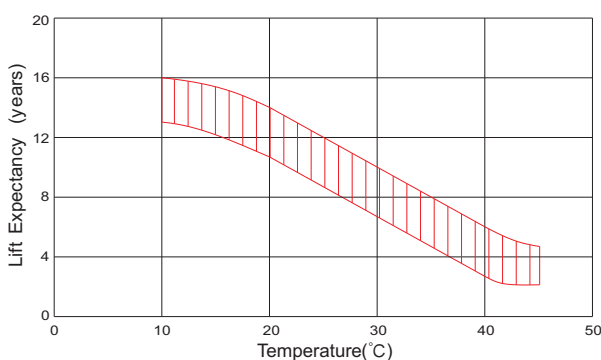
## Temperature Effects On Capacity



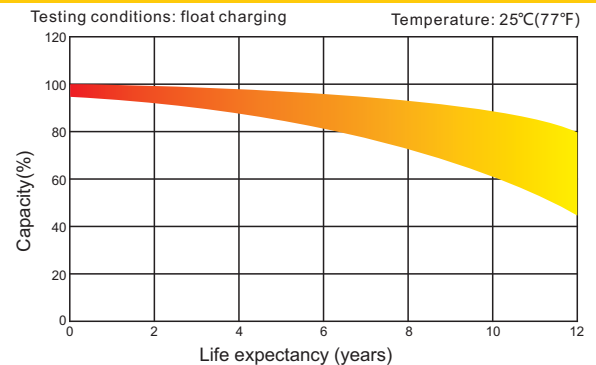
## Storage Characteristics



## 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.