



# RA12-120B(12V120Ah)

## Specification

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	120Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 33.5 Kg (Tolerance ±2.0%)
Internal Resistance	Approx. 4.5 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1200A (5 sec)
Short Circuit Current	2150A
Design Life	12 years (Float charging)
Recommended Maximum Charging Current	36 A
Reference Capacity	C3 93.0AH C5 107.2AH C10 120.0AH C20 126.8AH
Standby Use Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 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.



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.



## Dimensions

Length	407±2mm (16.0 inches)
Width	177±2mm (6.97 inches)
Height	225±2mm (8.86 inches)
Total Height	225±2mm (8.86 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	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	268.9	211.7	124.6	74.6	44.7	32.8	26.7	22.5	15.0	12.8	6.56
1.65V	260.9	206.2	121.9	73.2	44.1	32.4	26.3	22.3	14.9	12.7	6.51
1.70V	250.4	198.9	118.3	71.4	43.2	31.8	25.9	21.9	14.7	12.5	6.44
1.75V	236.8	189.4	113.6	69.0	42.0	31.0	25.3	21.4	14.4	12.3	6.34
1.80V	219.4	177.2	107.4	65.9	40.5	30.0	24.5	20.8	14.1	12.0	6.22
1.85V	197.7	161.7	99.6	61.8	38.6	28.7	23.5	20.0	13.6	11.6	6.06

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

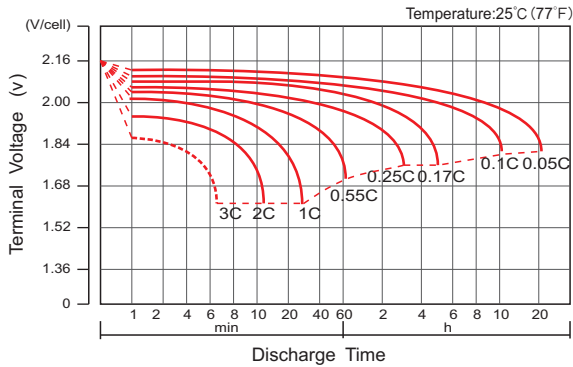
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	464.0	375.7	229.8	141.6	86.0	63.6	52.0	44.0	29.8	25.5	13.1
1.65V	462.1	373.5	228.1	140.5	85.4	63.2	51.6	43.8	29.6	25.3	13.0
1.70V	448.5	363.5	222.6	137.4	83.9	62.2	50.8	43.2	29.2	25.0	12.9
1.75V	431.7	351.1	215.9	133.5	82.1	61.0	49.9	42.4	28.8	24.6	12.7
1.80V	407.0	333.1	206.2	128.0	79.5	59.2	48.5	41.3	28.1	24.1	12.5
1.85V	373.2	308.5	193.1	121.0	76.1	56.8	46.7	39.9	27.2	23.4	12.2

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

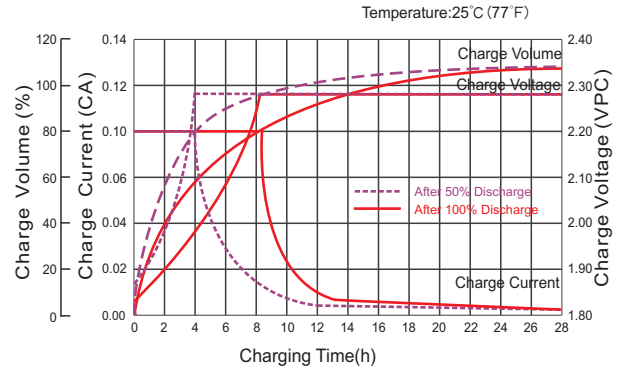
# RA12-120B(12V120Ah)



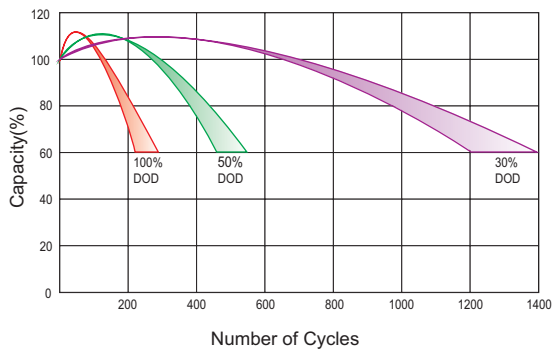
## Discharge Characteristics Curve



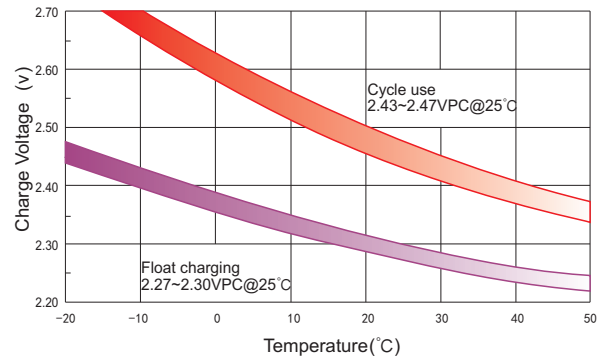
## Charge Characteristic Curve For Standby Use



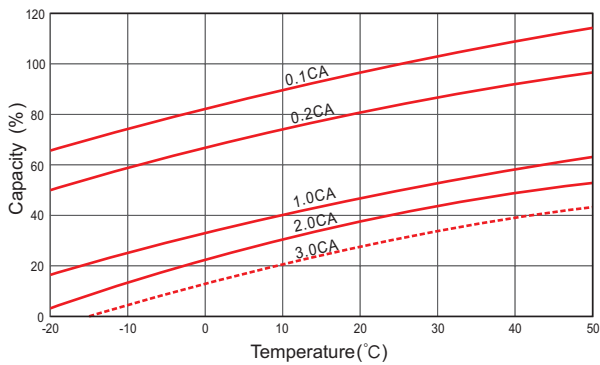
## Cycle Life In Relation To Depth Of Discharge



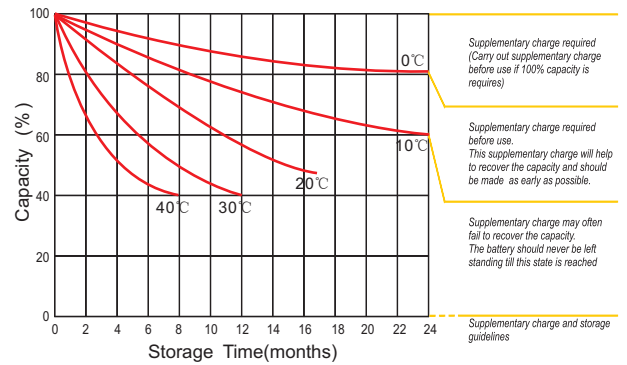
## Relationship Between Charging Voltage And Temperature



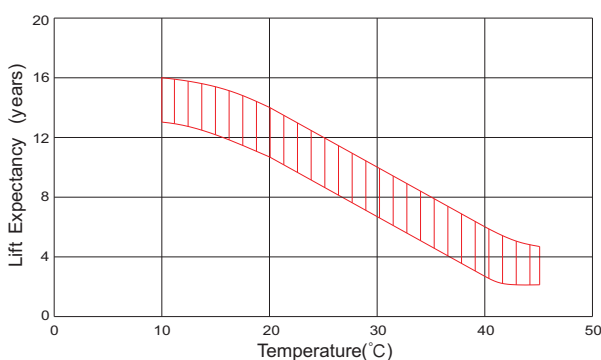
## Temperature Effects On Capacity



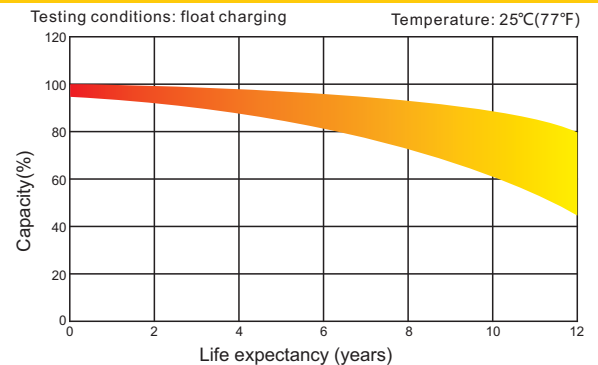
## Storage Characteristics



## Effect Of Temperature On Long Term Life



## Life Characteristics Of Standby Use



For Battery Sales + EPA Battery Recycling and AC / DC Power Services, please contact:  
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