



# RA12-120(12V120Ah)

## Specification

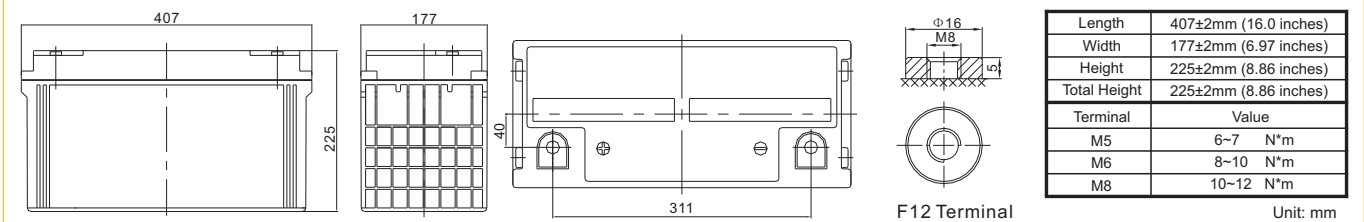
Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	120Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 35.0 Kg (Tolerance ±2.0%)
Internal Resistance	Approx. 4.5 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1200A (5 sec)
Short Circuit Current	2220A
Design Life	12 years (Float charging)
Recommended Maximum Charging Current	36 A
Reference Capacity	C3 93.0AH C5 107.0AH 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



### Constant Current Discharge Characteristics : A (25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	280.0	216.0	127.2	74.6	44.7	32.8	26.7	22.5	15.0	12.8	6.56
1.65V	271.7	210.4	124.4	73.2	44.1	32.4	26.3	22.3	14.9	12.7	6.51
1.70V	260.7	202.9	120.7	71.4	43.2	31.8	25.9	21.9	14.7	12.5	6.44
1.75V	246.6	193.2	115.9	69.0	42.0	31.0	25.3	21.4	14.4	12.3	6.34
1.80V	228.5	180.8	109.6	65.9	40.5	30.0	24.5	20.8	14.1	12.0	6.22
1.85V	205.8	165.0	101.6	61.8	38.6	28.7	23.5	20.0	13.6	11.6	6.06

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

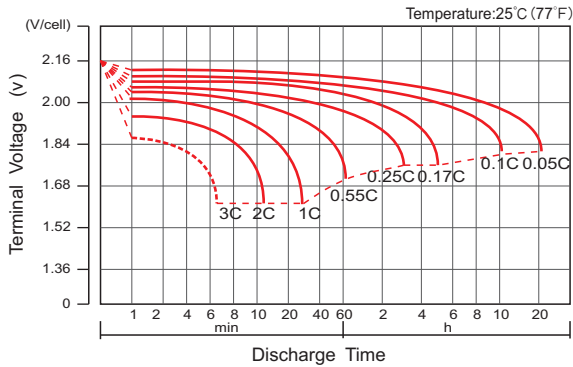
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	483	383	234	142	86.0	63.6	52.0	44.0	29.8	25.5	13.1
1.65V	481	381	233	140	85.4	63.2	51.6	43.8	29.6	25.3	13.0
1.70V	467	371	227	137	83.9	62.2	50.8	43.2	29.2	25.0	12.9
1.75V	450	358	220	133	82.1	61.0	49.9	42.4	28.8	24.6	12.7
1.80V	424	340	210	128	79.5	59.2	48.5	41.3	28.1	24.1	12.5
1.85V	389	315	197	121	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.

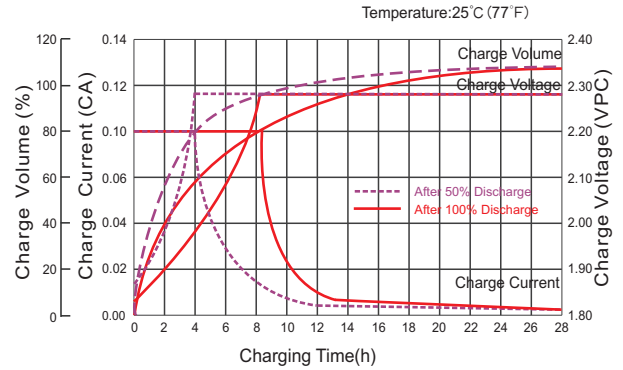
# RA12-120(12V120Ah)



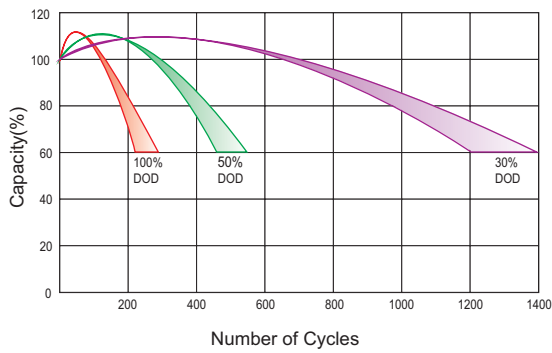
## Discharge Characteristics Curve



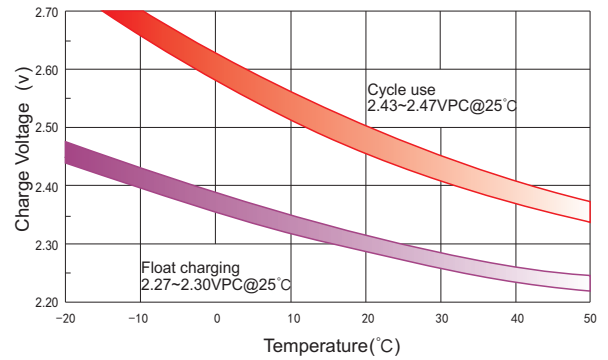
## Charge Characteristic Curve For Standby Use



## Cycle Life In Relation To Depth Of Discharge



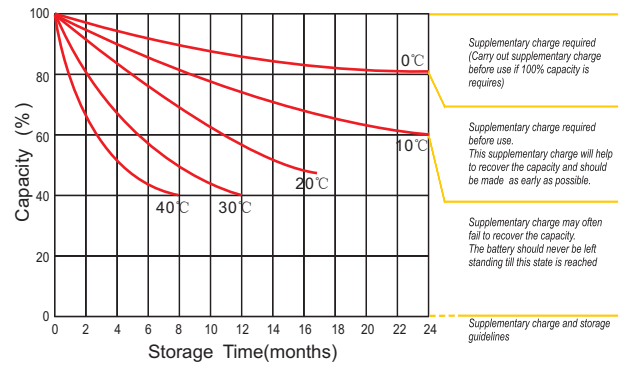
## Relationship Between Charging Voltage And Temperature



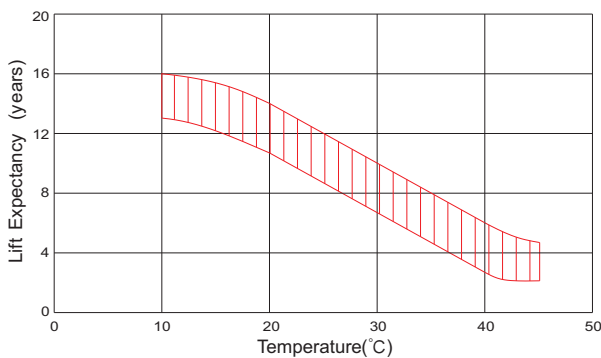
## Temperature Effects On Capacity



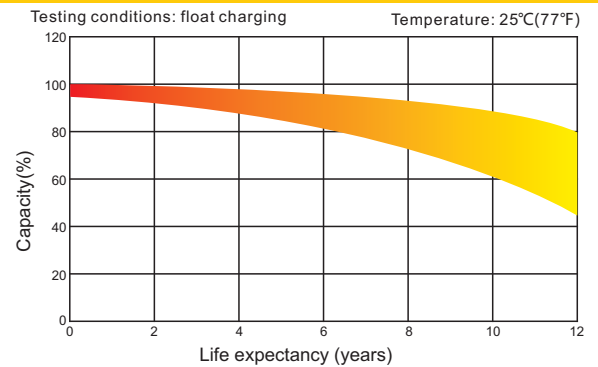
## Storage Characteristics



## Effect Of Temperature On Long Term Life



## Life Characteristics Of Standby Use



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