



# RA12-180(12V180Ah)

## Specification

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	180Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 53.0 Kg (Tolerance ± 1.5%)
Internal Resistance	Approx. 4 mΩ
Terminal	F16(M8)/F12(M8)
Max. Discharge Current	1800A (5 sec)
Short Circuit Current	2800A
Design Life	12 years (Float charging)
Recommended Maximum Charging Current	54 A
Reference Capacity	C3 139.8AH C5 161.0AH C10 180.0AH C20 190.4AH
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	532±2mm (20.9 inches)
Width	207±2mm (8.15 inches)
Height	214±2mm (8.43 inches)
Total Height	219±2mm (8.62 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	397.9	313.1	188.9	110.8	66.4	49.2	40.0	33.8	22.6	19.2	9.84
1.65V	386.1	304.9	184.7	108.8	65.4	48.6	39.5	33.4	22.3	19.0	9.76
1.70V	370.5	294.2	179.2	106.1	64.1	47.7	38.8	32.9	22.0	18.8	9.66
1.75V	350.4	280.1	172.0	102.5	62.4	46.6	38.0	32.2	21.6	18.4	9.52
1.80V	324.7	262.0	162.7	97.8	60.2	45.0	36.8	31.3	21.1	18.0	9.33
1.85V	292.5	239.2	150.9	91.8	57.2	43.1	35.3	30.1	20.4	17.4	9.08

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

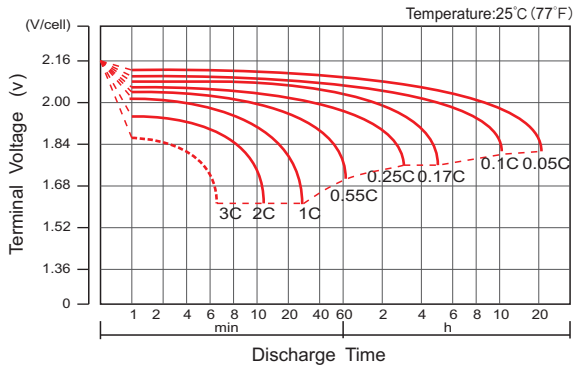
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	687	556	348	210	128	95.5	77.9	66.1	44.7	38.3	19.7
1.65V	684	552	346	209	127	94.8	77.4	65.6	44.4	38.0	19.5
1.70V	664	538	337	204	125	93.3	76.3	64.7	43.9	37.5	19.4
1.75V	639	519	327	198	122	91.4	74.8	63.6	43.1	36.9	19.1
1.80V	602	493	312	190	118	88.8	72.8	62.0	42.2	36.1	18.7
1.85V	552	456	293	180	113	85.3	70.1	59.8	40.9	35.0	18.3

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

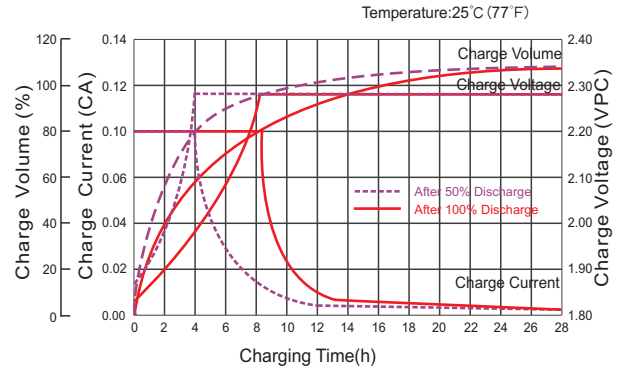
# RA12-180(12V180Ah)



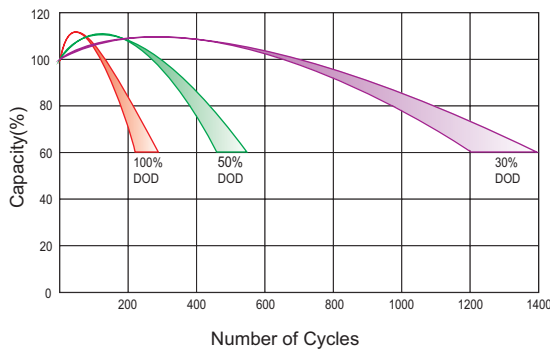
## Discharge Characteristics Curve



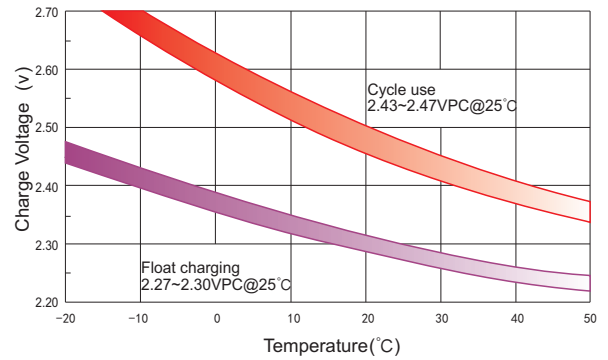
## Charge Characteristic Curve For Standby Use



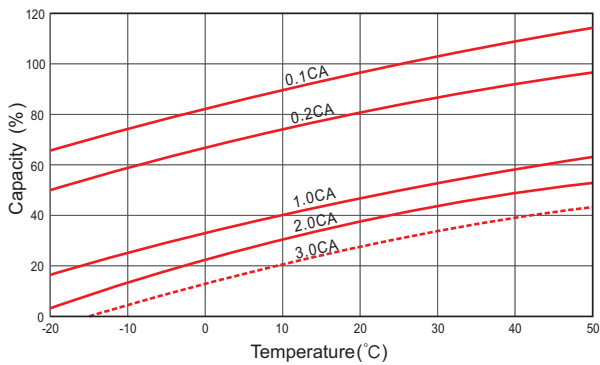
## Cycle Life In Relation To Depth Of Discharge



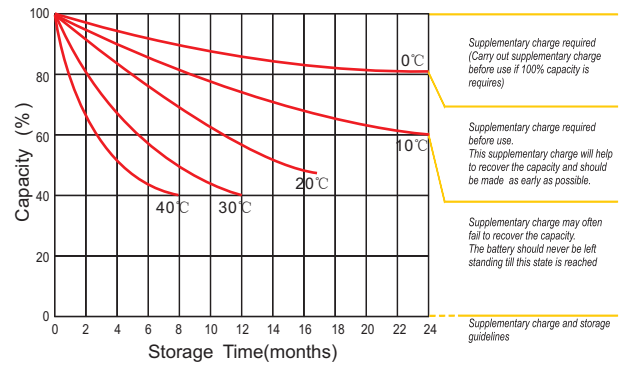
## Relationship Between Charging Voltage And Temperature



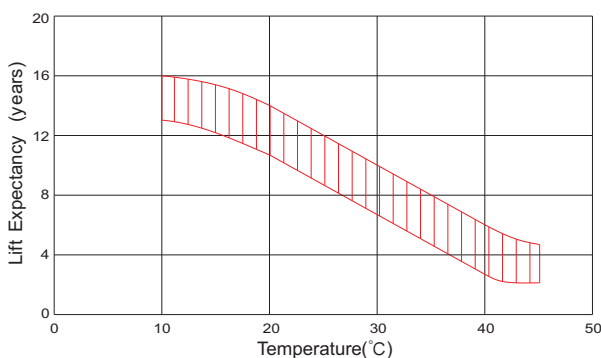
## Temperature Effects On Capacity



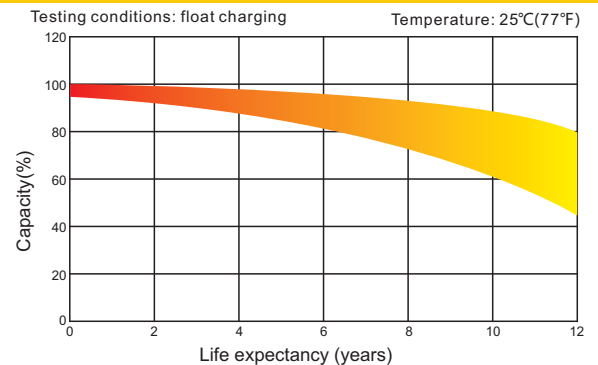
## Storage Characteristics



## Effect Of Temperature On Long Term Life



## Life Characteristics Of Standby Use



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