



# RA12-240(12V240Ah)

## Specification

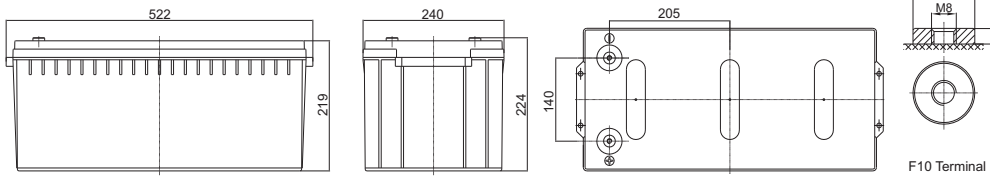
Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	240Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 65.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 3.3 mΩ
Terminal	F16(M8)/F10(M8)/L6
Max. Discharge Current	2400A (5 sec)
Short Circuit Current	4300A
Design Life	12 years (Float charging)
Max. Charging Current	72.0 A
Reference Capacity	C3 185.7AH C5 209.5AH C10 240.0AH C20 254.0AH
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, 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.



## Dimensions



Length	522±2mm (20.6 inches)
Width	240±2mm (9.45 inches)
Height	219±2mm (8.62 inches)
Total Height	224±2mm (8.82 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	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	403.4	257.6	146.6	87.4	67.7	53.2	45.3	30.4	25.3	13.2
1.65V	385.6	247.3	141.6	84.6	65.6	51.8	44.1	30.1	25.0	13.0
1.70V	361.2	236.4	137.0	81.8	63.8	50.4	43.0	29.6	24.6	12.9
1.75V	336.1	225.9	132.0	78.9	61.9	49.1	41.9	29.2	24.3	12.7
1.80V	310.4	215.9	126.9	76.1	60.0	47.7	40.8	28.7	24.0	12.6
1.85V	257.5	186.0	113.9	69.7	55.5	44.3	38.0	27.0	22.6	12.0

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

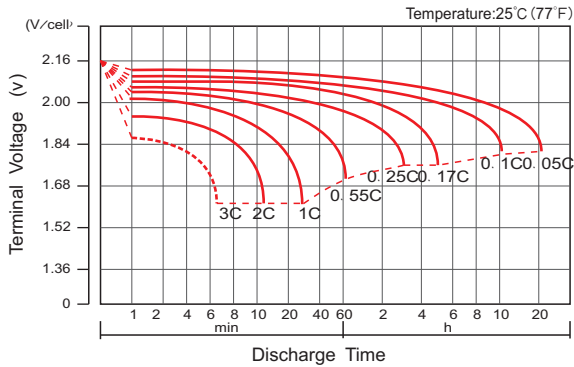
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	705.2	467.9	275.6	165.6	129.3	102.1	87.3	59.4	49.8	26.1
1.65V	684.2	453.9	267.6	161.1	125.8	99.7	85.3	58.9	49.2	25.7
1.70V	650.4	438.2	260.6	156.6	123.0	97.4	83.4	58.1	48.6	25.4
1.75V	614.0	423.1	252.5	151.9	119.8	95.3	81.6	57.4	48.0	25.1
1.80V	575.0	408.5	244.3	147.2	116.5	92.9	79.8	56.6	47.4	24.9
1.85V	483.9	355.3	220.5	135.6	108.2	86.6	74.6	53.2	44.7	23.7

(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 C10 should reach 95% after the first cycle and 100% after the third cycle.

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## Discharge Characteristics Curve



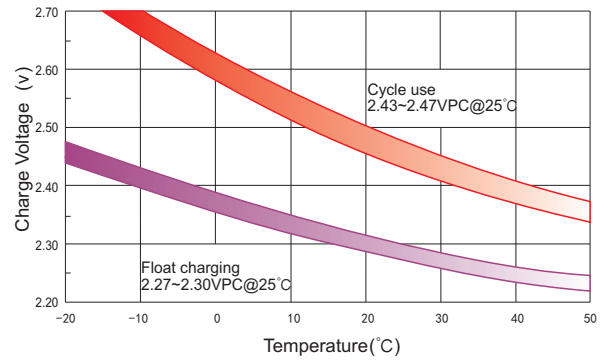
## Charge Characteristic Curve For Standby Use



## Cycle Life In Relation To Depth Of Discharge



## Relationship Between Charging Voltage And Temperature



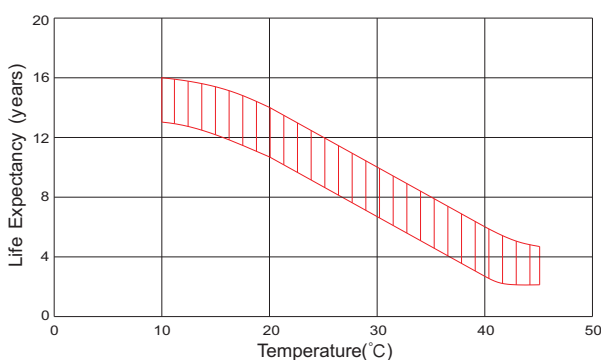
## Temperature Effects On Capacity



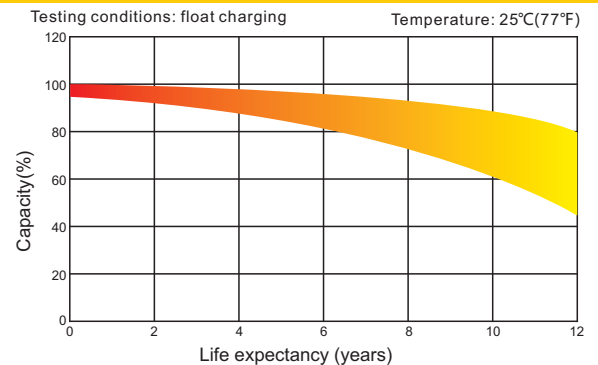
## Storage Characteristics



## 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.