



# RA12-150(12V150Ah)

## Specification

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	150Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 44.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 4.4 mΩ
Terminal	F5(M8)/F12(M8)
Max. Discharge Current	1500A (5 sec)
Short Circuit Current	2700A
Design Life	12 years (Float charging)
Max. Charging Current	45.0 A
Reference Capacity	C3 116.1AH C5 131.0AH C10 150.0AH C20 159.0AH
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.



ISO 9001



ISO 14001



OHSAS 18001

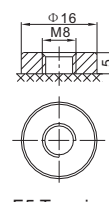
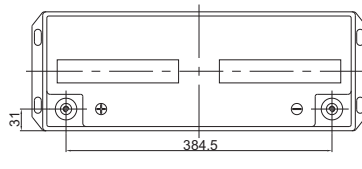
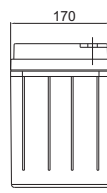
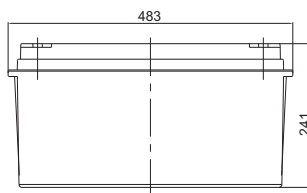


MH 28539



G4M20206-0910-E-16

## Dimensions



F5 Terminal

Length	483±2mm (19.0 inches)
Width	170±2mm (6.69 inches)
Height	241±2mm (9.49 inches)
Total Height	241±2mm (9.49 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	329.5	264.2	162.6	91.6	54.6	42.3	33.3	28.3	19.0	15.8	8.28
1.65V	311.4	252.6	156.1	88.5	52.9	41.0	32.4	27.6	18.8	15.6	8.15
1.70V	286.6	236.6	149.2	85.6	51.1	39.9	31.5	26.8	18.5	15.4	8.05
1.75V	262.4	220.2	142.6	82.5	49.3	38.7	30.7	26.2	18.3	15.2	7.95
1.80V	237.5	203.3	136.3	79.3	47.6	37.5	29.8	25.5	17.9	15.0	7.87
1.85V	194.1	168.7	117.4	71.2	43.6	34.7	27.7	23.8	16.8	14.1	7.47

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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	560.1	461.9	295.4	172.2	103.5	80.8	63.8	54.5	37.1	31.1	16.3
1.65V	539.4	448.1	286.5	167.3	100.7	78.6	62.3	53.3	36.8	30.8	16.1
1.70V	505.7	426.0	276.6	162.8	97.9	76.8	60.9	52.1	36.3	30.3	15.9
1.75V	471.3	402.2	267.1	157.8	94.9	74.9	59.5	51.0	35.9	30.0	15.7
1.80V	434.0	376.6	257.9	152.7	92.0	72.8	58.0	49.9	35.4	29.6	15.6
1.85V	361.0	317.0	224.3	137.8	84.7	67.6	54.2	46.6	33.3	27.9	14.8

(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 C<sub>10</sub> should reach 95% after the first cycle and 100% after the third cycle.

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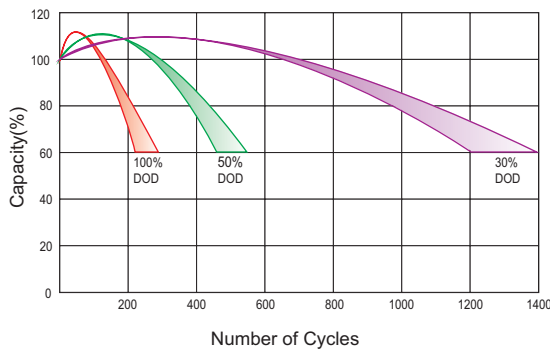
## Discharge Characteristics Curve



## Charge Characteristic Curve For Standby Use



## Cycle Life In Relation To Depth Of Discharge



## Relationship Between Charging Voltage And Temperature



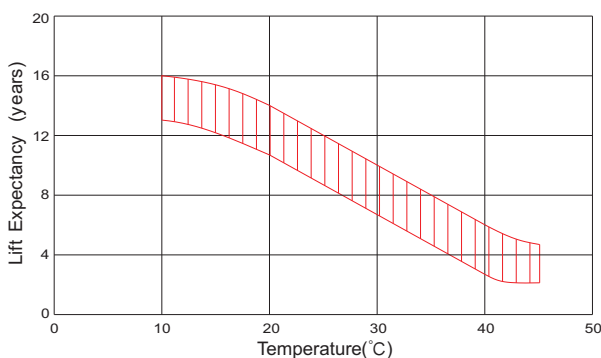
## Temperature Effects On Capacity



## 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.