



RA12-160(12V160Ah)

Specification

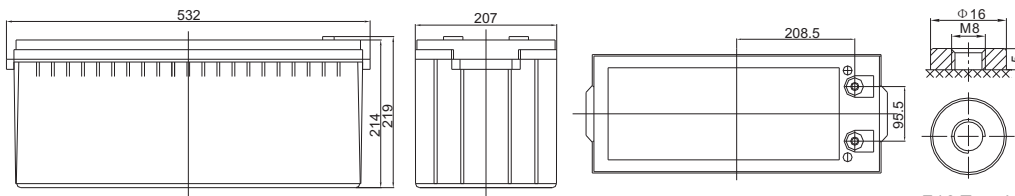
Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	160Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 48.5 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 4.5 mΩ
Terminal	F16(M8)/F12(M8)
Max. Discharge Current	1600A (5 sec)
Short Circuit Current	2550A
Design Life	12 years (Float charging)
Max. Charging Current	48.0 A
Reference Capacity	C3 123.9AH C5 139.5AH C10 160.0AH C20 169.6AH
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	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

F12 Terminal

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	351.5	281.8	173.5	97.8	58.2	45.1	35.5	30.2	20.3	16.9	8.83
1.65V	332.1	269.4	166.5	94.4	56.4	43.7	34.5	29.4	20.1	16.7	8.69
1.70V	305.7	252.4	159.2	91.3	54.5	42.5	33.6	28.6	19.7	16.4	8.58
1.75V	279.9	234.8	152.1	88.0	52.6	41.3	32.7	27.9	19.5	16.2	8.48
1.80V	253.3	216.8	145.4	84.6	50.7	40.0	31.8	27.2	19.1	16.0	8.40
1.85V	207.0	179.9	125.2	75.9	46.5	37.0	29.5	25.4	18.0	15.1	7.97

Constant Power Discharge Characteristics : WPC (25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	597.4	492.7	315.1	183.7	110.4	86.2	68.1	58.2	39.6	33.2	17.4
1.65V	575.4	478.0	305.6	178.4	107.4	83.9	66.5	56.9	39.3	32.8	17.1
1.70V	539.5	454.4	295.1	173.7	104.4	82.0	64.9	55.6	38.7	32.4	16.9
1.75V	502.7	429.0	284.9	168.4	101.2	79.9	63.5	54.4	38.3	32.0	16.8
1.80V	463.0	401.7	275.1	162.9	98.1	77.7	61.9	53.2	37.7	31.6	16.6
1.85V	385.1	338.1	239.3	147.0	90.4	72.1	57.8	49.8	35.5	29.8	15.8

(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 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



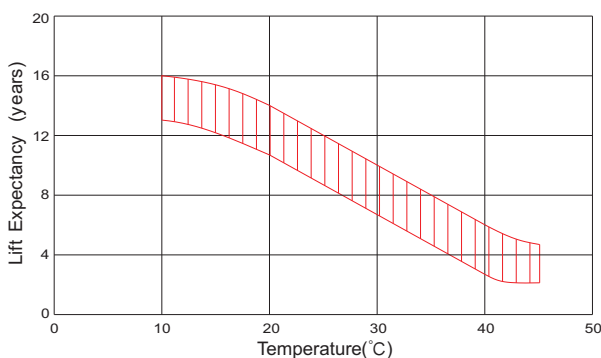
Temperature Effects On Capacity



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.