



RT12200(12V20Ah)

Specification

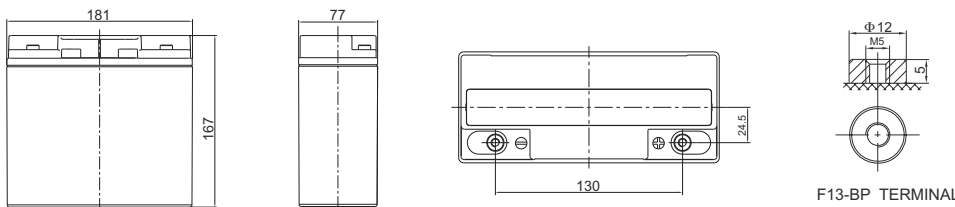
Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	20Ah@20hour-rate to 1.75V per cell @25°C
Weight	Approx. 5.40 Kg (Tolerance ± 5.0%)
Internal Resistance	Approx. 16 mΩ
Terminal	F13-BP(M5)/F3(M5)
Max. Discharge Current	200A (5 sec)
Short Circuit Current	820A
Design Life	6~8 years (Float charging)
Max. Charging Current	6.0 A
Reference Capacity	C3 15.5AH C5 17.4AH C10 18.7AH C20 20.0AH
Standby Use Voltage	13.7 V~13.9 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.



RT series is a general purpose battery with 6~8 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 RT series battery maintains high consistency for better performance and reliable standby service life. It is suitable for UPS/EPS, medical equipment, emergency light and security system applications.



Dimensions



Length	181±2mm (7.13 inches)
Width	77±2mm (3.03 inches)
Height	167±2mm (6.57 inches)
Total Height	167±2mm (6.57 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	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	75.88	53.63	38.77	22.27	12.22	7.503	5.640	4.553	3.773	2.428	1.972	1.041
1.65V	70.56	50.68	37.06	21.38	11.80	7.263	5.466	4.430	3.675	2.401	1.948	1.025
1.70V	63.67	46.65	34.71	20.43	11.42	7.024	5.317	4.310	3.579	2.364	1.919	1.012
1.75V	57.04	42.70	32.30	19.53	11.00	6.778	5.159	4.199	3.489	2.331	1.893	1.000
1.80V	50.09	38.66	29.83	18.67	10.58	6.536	4.999	4.079	3.399	2.291	1.869	0.990
1.85V	39.75	31.59	24.75	16.08	9.488	5.988	4.621	3.791	3.170	2.151	1.760	0.940

Constant Power Discharge Characteristics : WPC (25°C)

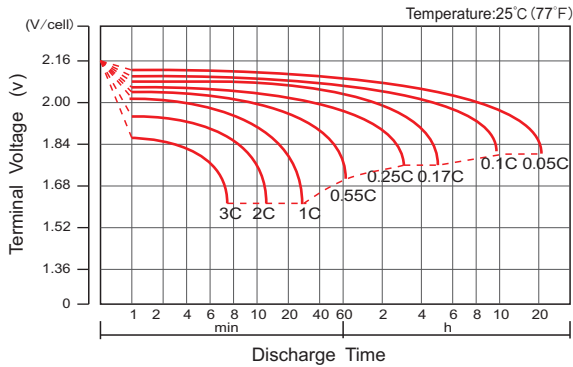
F.V./Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	125.8	91.16	67.77	40.44	22.96	14.22	10.77	8.742	7.272	4.742	3.877	2.050
1.65V	118.3	87.80	65.75	39.23	22.30	13.83	10.48	8.537	7.110	4.699	3.835	2.021
1.70V	109.2	82.32	62.51	37.88	21.71	13.45	10.24	8.336	6.949	4.637	3.782	1.999
1.75V	100.0	76.71	59.01	36.58	21.04	13.04	9.981	8.154	6.798	4.582	3.737	1.977
1.80V	89.68	70.65	55.26	35.31	20.36	12.64	9.710	7.948	6.646	4.514	3.694	1.960
1.85V	72.68	58.76	46.51	30.72	18.37	11.64	9.016	7.415	6.218	4.247	3.482	1.863

(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 C₂₀ 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



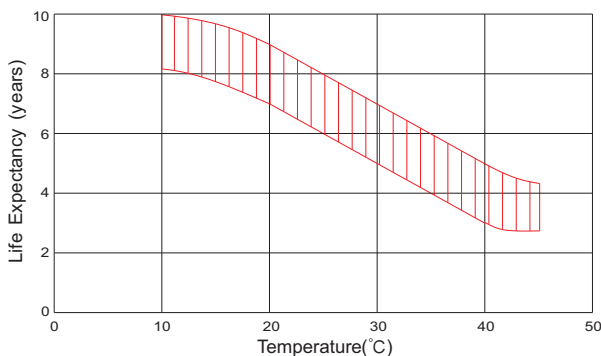
Temperature Effects On Capacity



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.