



# RT12100S (12V10Ah)

## Specification

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	10Ah@20hour-rate to 1.75V per cell @25°C
Weight	Approx. 3.10 Kg (Tolerance ±5.0%)
Internal Resistance	Approx. 20 mΩ
Terminal	F1/F2
Max. Discharge Current	100A (5 sec)
Short Circuit Current	475A
Design Life	6~8 years (Float charging)
Max. Charging Current	3 A
Reference Capacity	C3 7.71AH C5 8.73AH C10 9.35AH C20 10.0AH
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.



ISO 9001



ISO 14001



OHSAS 18001

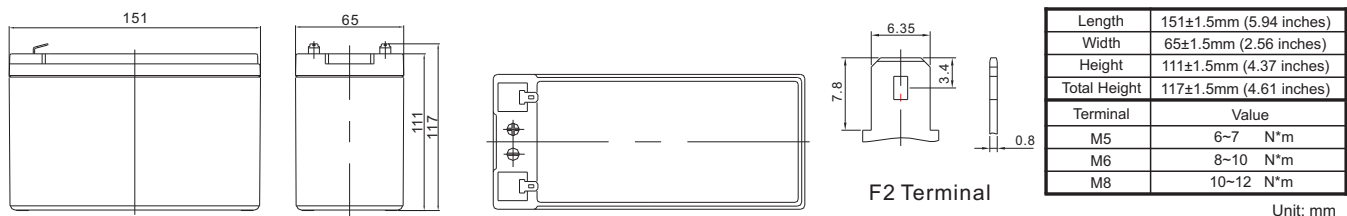


MH 28539



G4M20206-0910-E-16

## Dimensions



### Constant Current Discharge Characteristics : A (25°C)

F.V./Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	36.04	26.01	19.19	11.02	6.049	3.714	2.820	2.277	1.886	1.214	0.986	0.521
1.65V	33.52	24.58	18.35	10.58	5.841	3.595	2.733	2.215	1.837	1.200	0.974	0.512
1.70V	30.24	22.63	17.18	10.11	5.651	3.477	2.659	2.155	1.790	1.182	0.959	0.506
1.75V	27.10	20.71	15.99	9.667	5.445	3.355	2.579	2.100	1.745	1.166	0.947	0.500
1.80V	23.79	18.75	14.77	9.239	5.236	3.235	2.500	2.039	1.700	1.146	0.935	0.495
1.85V	18.88	15.32	12.25	7.958	4.697	2.964	2.311	1.896	1.585	1.076	0.880	0.470

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

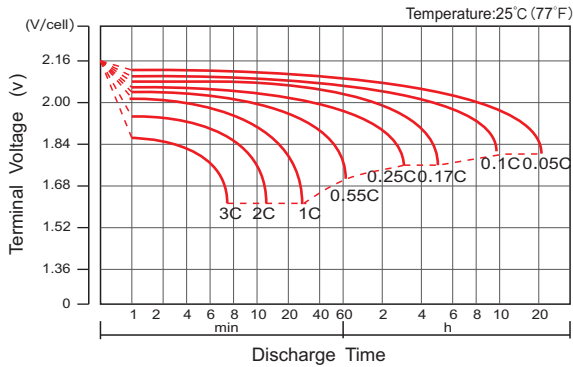
F.V./Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	59.75	44.21	33.55	20.02	11.37	7.039	5.386	4.371	3.636	2.371	1.938	1.025
1.65V	56.21	42.58	32.55	19.42	11.04	6.847	5.242	4.268	3.555	2.349	1.917	1.010
1.70V	51.87	39.92	30.94	18.75	10.75	6.658	5.122	4.168	3.475	2.318	1.891	0.999
1.75V	47.50	37.20	29.21	18.10	10.42	6.455	4.990	4.077	3.399	2.291	1.868	0.988
1.80V	42.60	34.26	27.35	17.48	10.08	6.256	4.855	3.974	3.323	2.257	1.847	0.980
1.85V	34.52	28.50	23.02	15.20	9.093	5.763	4.508	3.708	3.109	2.124	1.741	0.932

(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>20</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



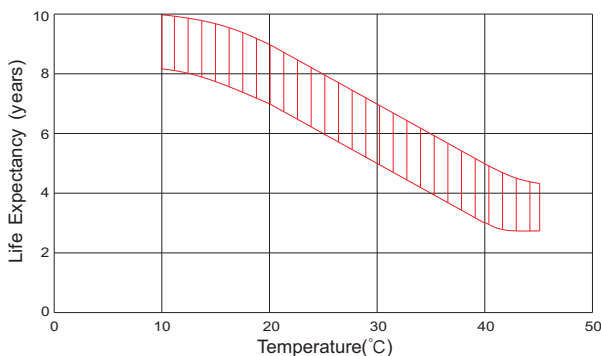
## Temperature Effects On Capacity



## 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.