



# RT6100 (6V10Ah)

## Specification

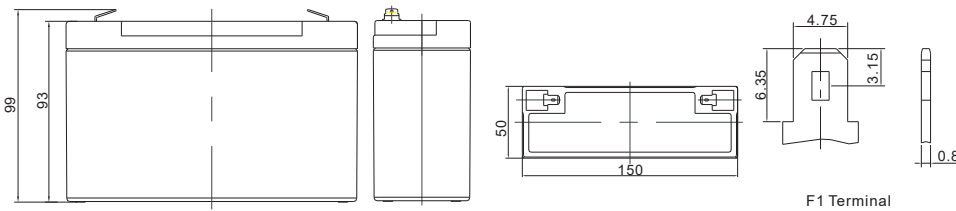
Cells Per Unit	3
Voltage Per Unit	6
Nominal Capacity	10.0Ah@20hour-rate to 1.75V per cell @25
Weight	Approx. 1.62 Kg (Tolerance ±5.0%)
Internal Resistance	Approx. 12.5 mΩ
Terminal	F1/F2
Max. Discharge Current	100A (5 sec)
Short Circuit Current	500A
Design Life	6~8 years (Float charging)
Max. Charging Current	3.00 A
Reference Capacity	C3 7.74AH C5 8.73AH C10 9.35AH C20 10.0AH
Standby Use Voltage	6.85 V~6.94 V @ 25 Temperature Compensation: -3mV / Cell
Cycle Use Voltage	7.30 V~7.40 V @ 25 Temperature Compensation: -4mV / Cell
Operating Temperature Range	Discharge: -20 ~60 Charge: 0 ~50 Storage: -20 ~60
Normal Operating Temperature Range	25 ±5
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25 and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25. 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	150±1.5mm (5.91 inches)
Width	50±1.5mm (1.96 inches)
Height	93±1.5mm (3.66 inches)
Total Height	99±1.5mm (3.90 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	37.94	26.81	19.38	11.13	6.110	3.751	2.820	2.277	1.886	1.214	0.986	0.521
1.65V	35.28	25.34	18.53	10.69	5.900	3.632	2.733	2.215	1.837	1.200	0.974	0.512
1.70V	31.83	23.33	17.36	10.22	5.708	3.512	2.659	2.155	1.790	1.182	0.959	0.506
1.75V	28.52	21.35	16.15	9.764	5.500	3.389	2.579	2.100	1.745	1.166	0.947	0.500
1.80V	25.04	19.33	14.91	9.333	5.289	3.268	2.500	2.039	1.700	1.146	0.935	0.495
1.85V	19.88	15.80	12.38	8.038	4.744	2.994	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	62.90	45.58	33.89	20.22	11.48	7.110	5.386	4.371	3.636	2.371	1.938	1.025
1.65V	59.17	43.90	32.88	19.62	11.15	6.916	5.242	4.268	3.555	2.349	1.917	1.010
1.70V	54.60	41.16	31.25	18.94	10.86	6.725	5.122	4.168	3.475	2.318	1.891	0.999
1.75V	50.00	38.35	29.51	18.29	10.52	6.521	4.990	4.077	3.399	2.291	1.868	0.988
1.80V	44.84	35.32	27.63	17.66	10.18	6.319	4.855	3.974	3.323	2.257	1.847	0.980
1.85V	36.34	29.38	23.25	15.36	9.185	5.821	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



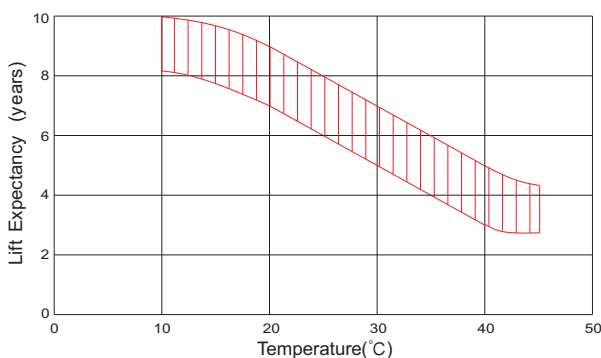
## Temperature Effects On Capacity



## 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.