



# RT12120(12V12Ah)

## Specification

Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	12Ah@20hour-rate to 1.75V per cell @25°C
Weight	Approx. 3.50 Kg (Tolerance ±5.0%)
Internal Resistance	≤17 mΩ (Full Charge Condition @25°C)
Terminal	Default F2,F1 Optional
Max. Discharge Current	120A (5 sec)
Short Circuit Current	590A
Design Life	6~8 years
Max. Charging Current	3.6 A
Reference Capacity	C <sub>3</sub> 9.00Ah C <sub>5</sub> 10.2Ah C <sub>10</sub> 11.2Ah C <sub>20</sub> 12.0Ah
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

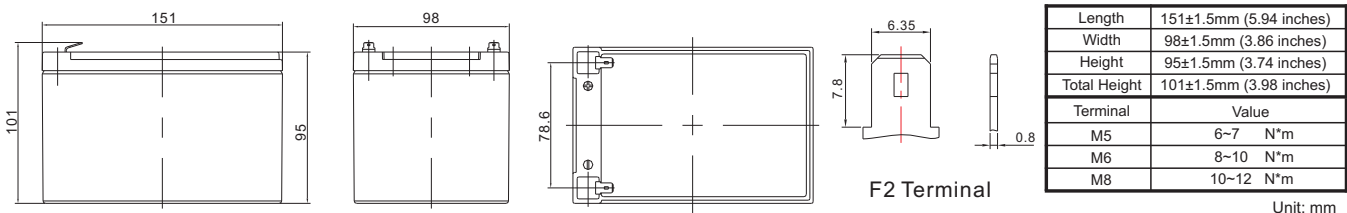
ISO 45001



MH 28539

BSTXD210316008517EC

## 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	45.53	32.18	23.26	13.36	7.332	4.502	3.384	2.732	2.264	1.457	1.183	0.625
1.65V	42.34	30.41	22.24	12.83	7.080	4.358	3.280	2.658	2.205	1.441	1.169	0.615
1.70V	38.20	27.99	20.83	12.26	6.850	4.214	3.190	2.586	2.148	1.418	1.151	0.607
1.75V	34.23	25.62	19.38	11.72	6.600	4.067	3.095	2.520	2.094	1.399	1.136	0.600
1.80V	30.05	23.19	17.90	11.20	6.347	3.921	2.999	2.447	2.040	1.375	1.122	0.594
1.85V	23.85	18.96	14.85	9.646	5.693	3.593	2.773	2.275	1.902	1.291	1.056	0.564

### Constant Power Discharge Characteristics : W/Cell (25°C)

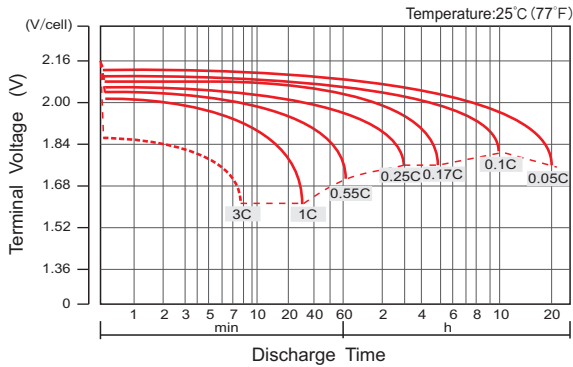
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	75.47	54.70	40.66	24.27	13.78	8.532	6.463	5.245	4.363	2.845	2.326	1.230
1.65V	71.00	52.68	39.45	23.54	13.38	8.300	6.290	5.122	4.266	2.819	2.301	1.213
1.70V	65.51	49.39	37.50	22.73	13.03	8.070	6.146	5.002	4.169	2.782	2.269	1.199
1.75V	60.00	46.02	35.41	21.95	12.63	7.825	5.988	4.892	4.079	2.749	2.242	1.186
1.80V	53.81	42.39	33.16	21.19	12.21	7.583	5.826	4.769	3.988	2.708	2.216	1.176
1.85V	43.61	35.26	27.90	18.43	11.02	6.985	5.410	4.449	3.731	2.548	2.089	1.118

(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.

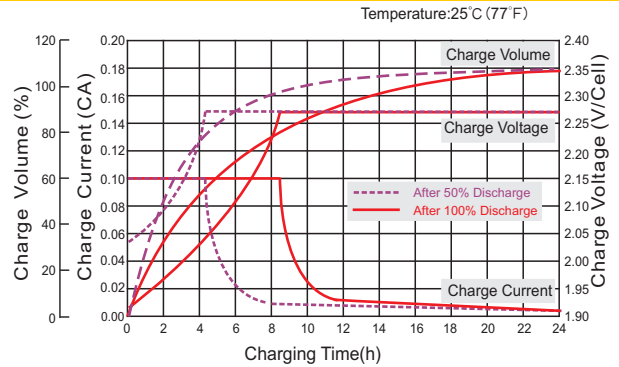
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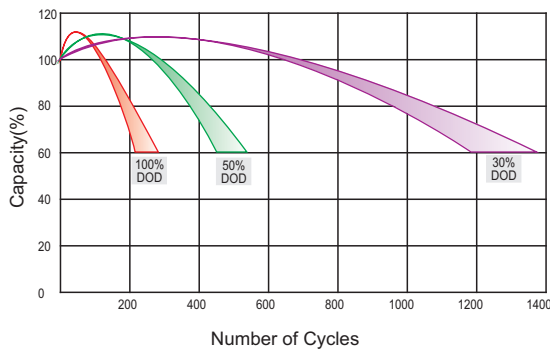
## Discharge Characteristics Curve



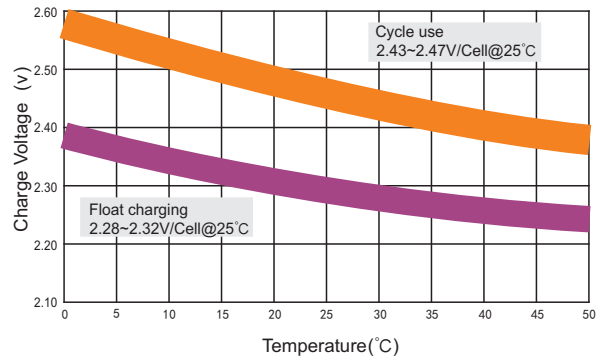
## Charge Characteristic Curve For Standby Use(IU)



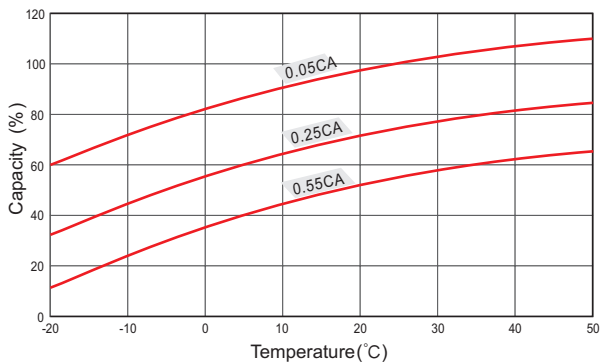
## Cycle Life In Relation To Depth Of Discharge



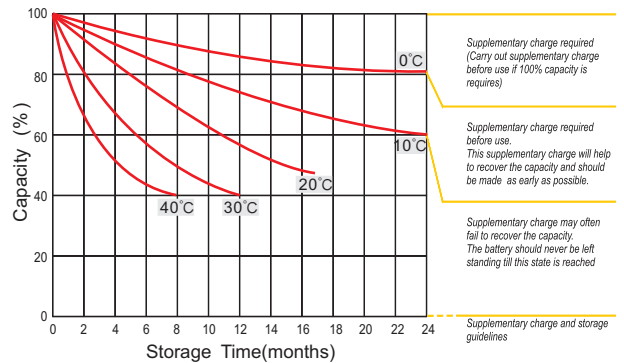
## Relationship Between Charging Voltage And Temperature



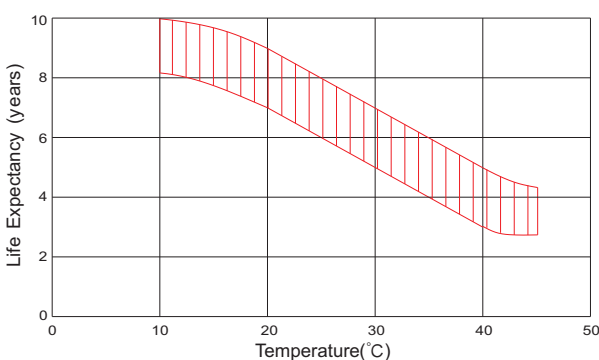
## Temperature Effects On Capacity



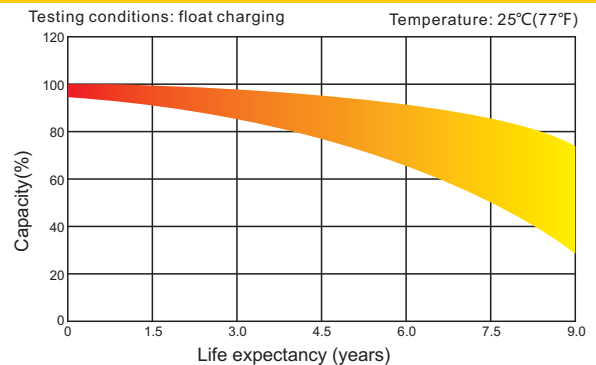
## Storage Characteristics



## 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.