



RT12180(12V18Ah)

Specification

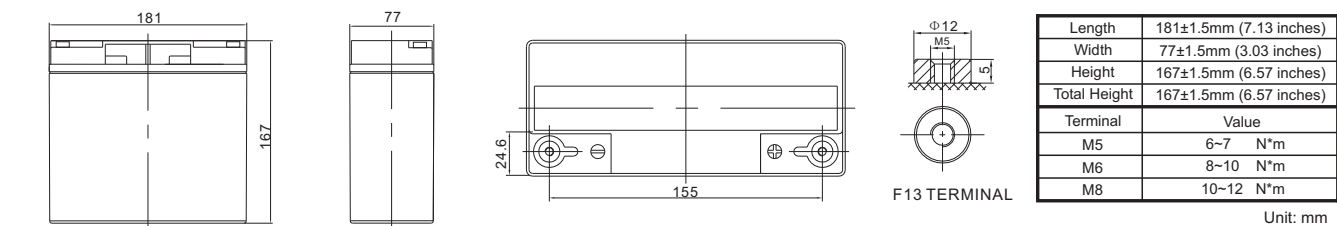


RT series is a general purpose battery with 6~8 years design life in float service. It meets with IEC, JIS, BS and YDT standards. With advanced AGM valve regulated technology and high purity raw material, the RT series battery maintains high consistency for better performance and reliable standby service life. It is suitable for UPS/EPS, Telecom, power grid, medical equipment, emergency light and security system applications.



Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	18Ah@20hour-rate to 1.75V per cell @25°C
Weight	Approx. 5.2 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 14 mΩ
Terminal	F3(M5)/F13(M5)
Max. Discharge Current	180A (5 sec)
Short Circuit Current	750A
Design Life	6~8 years (Float charging)
Recommended Maximum Charging Current	5.4 A
Reference Capacity	C3 14.0AH C5 15.8AH C10 16.9AH C20 18.1AH
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.

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	71.37	46.54	34.34	19.87	11.48	6.774	4.925	3.921	3.310	2.212	1.802	0.937
1.65V	68.79	45.16	33.44	19.43	11.27	6.675	4.859	3.873	3.272	2.190	1.785	0.930
1.70V	65.43	43.34	32.25	18.86	10.99	6.543	4.772	3.808	3.221	2.160	1.762	0.920
1.75V	61.12	40.98	30.71	18.10	10.62	6.369	4.656	3.722	3.154	2.120	1.731	0.906
1.80V	55.69	37.97	28.73	17.12	10.13	6.139	4.504	3.608	3.064	2.068	1.691	0.889
1.85V	49.01	34.21	26.23	15.87	9.510	5.841	4.305	3.460	2.947	1.999	1.638	0.865

Constant Power Discharge Characteristics : WPC (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	122.8	80.30	60.93	36.63	21.79	13.03	9.55	7.64	6.48	4.38	3.59	1.87
1.65V	121.5	79.97	60.58	36.36	21.61	12.93	9.48	7.59	6.43	4.35	3.57	1.86
1.70V	116.9	77.61	58.95	35.48	21.15	12.72	9.33	7.48	6.35	4.30	3.52	1.84
1.75V	111.2	74.72	56.95	34.41	20.54	12.44	9.14	7.34	6.24	4.23	3.47	1.82
1.80V	103.1	70.44	54.03	32.88	19.69	12.05	8.88	7.14	6.08	4.13	3.39	1.79
1.85V	92.31	64.59	50.03	30.78	18.61	11.53	8.53	6.87	5.87	4.01	3.29	1.74

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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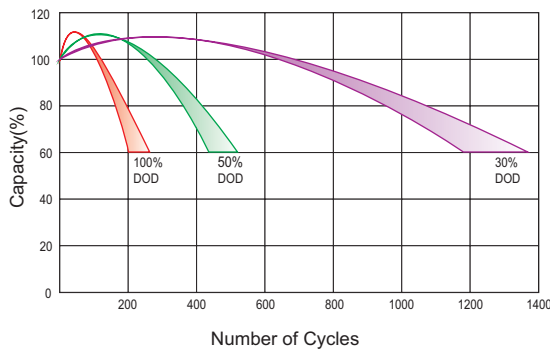
Discharge Characteristics Curve



Charge Characteristic Curve For Standby Use



Cycle Life In Relation To Depth Of Discharge



Relationship Between Charging Voltage And Temperature



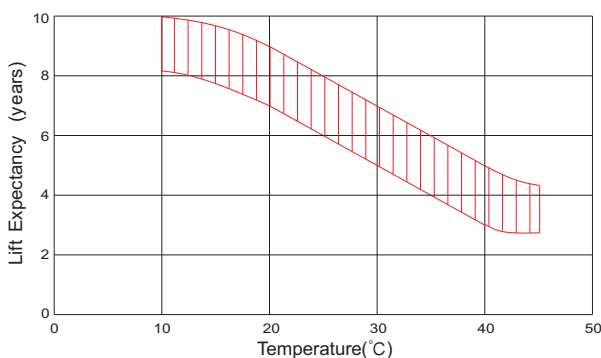
Temperature Effects On Capacity



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.