



RT12220(12V22Ah)

Specification

Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	22Ah@20hour-rate to 1.75V per cell @25°C
Weight	Approx. 5.6 Kg (Tolerance $\pm 5.0\%$)
Internal Resistance	$\leq 13 \text{ m}\Omega$ (Full Charge Condition @25°C)
Terminal	Default F13-BP(M5), F3(M5) Optional
Max. Discharge Current	220A (5 sec)
Short Circuit Current	830A
Design Life	6~8 years
Max. Charging Current	6.6 A
Reference Capacity	C ₃ 16.5Ah C ₅ 18.7Ah C ₁₀ 20.6Ah C ₂₀ 22.0Ah
Standby Use Voltage	13.7 V~13.9 V @ 25°C Temperature Compensation: $-3\text{mV}/^\circ\text{C}/\text{Cell}$
Cycle Use Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: $-4\text{mV}/^\circ\text{C}/\text{Cell}$
Operating Temperature Range	Discharge: $-20^\circ\text{C}\sim 60^\circ\text{C}$ Charge: $0^\circ\text{C}\sim 50^\circ\text{C}$ Storage: $-20^\circ\text{C}\sim 60^\circ\text{C}$
Normal Operating Temperature Range	$25^\circ\text{C} \pm 5^\circ\text{C}$
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

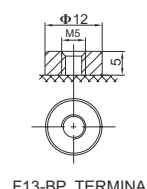
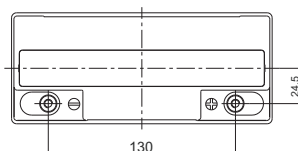
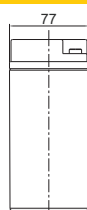
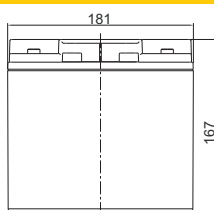


MH 28539



BSTXD210316008517EC

Dimensions



F13-BP TERMINAL

Length	181 $\pm$ 1.5mm (7.13 inches)
Width	77 $\pm$ 1.5mm (3.03 inches)
Height	167 $\pm$ 1.5mm (6.57 inches)
Total Height	167 $\pm$ 1.5mm (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	79.30	56.04	40.51	23.27	12.77	8.253	6.204	5.009	4.150	2.671	2.169	1.145
1.65V	73.74	52.96	38.73	22.34	12.33	7.990	6.013	4.873	4.042	2.641	2.143	1.127
1.70V	66.53	48.75	36.28	21.35	11.93	7.726	5.849	4.741	3.937	2.600	2.110	1.114
1.75V	59.61	44.63	33.76	20.41	11.49	7.456	5.675	4.619	3.838	2.564	2.083	1.100
1.80V	52.34	40.40	31.17	19.51	11.05	7.189	5.499	4.487	3.739	2.521	2.056	1.089
1.85V	41.54	33.01	25.87	16.80	9.915	6.587	5.084	4.170	3.487	2.366	1.936	1.034

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

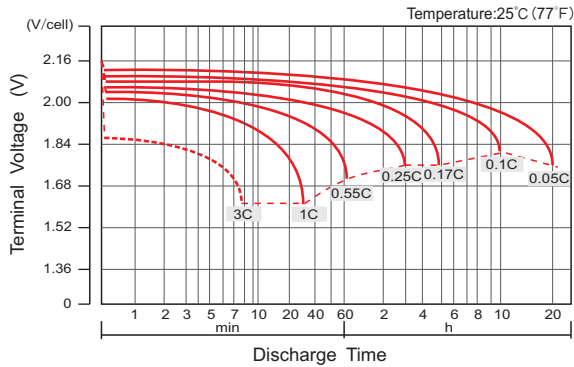
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	131.5	95.26	70.82	42.26	24.00	15.64	11.85	9.616	8.000	5.216	4.264	2.255
1.65V	123.7	91.75	68.71	41.00	23.31	15.22	11.53	9.391	7.821	5.169	4.218	2.223
1.70V	114.1	86.02	65.32	39.58	22.69	14.80	11.27	9.170	7.644	5.100	4.160	2.199
1.75V	104.5	80.16	61.67	38.22	21.99	14.35	10.98	8.969	7.478	5.040	4.110	2.174
1.80V	93.71	73.83	57.75	36.90	21.27	13.90	10.68	8.743	7.311	4.965	4.063	2.156
1.85V	75.95	61.41	48.60	32.10	19.20	12.81	9.918	8.157	6.840	4.672	3.830	2.050

(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.

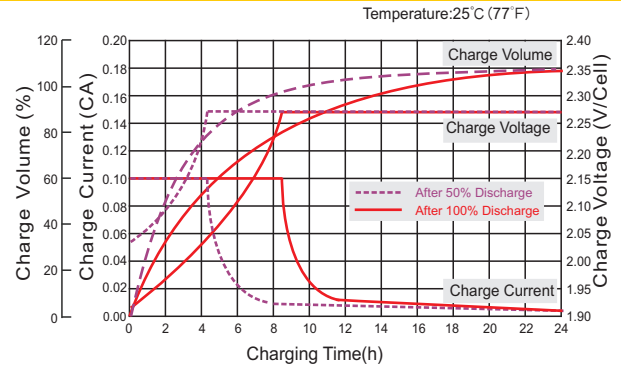
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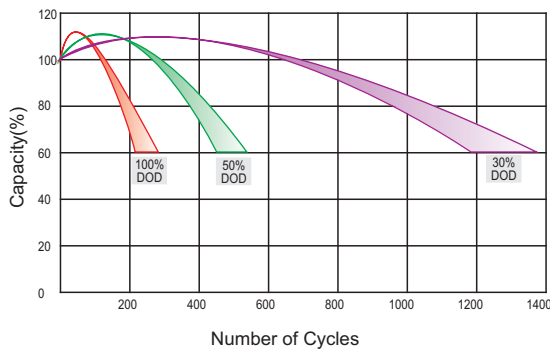
Discharge Characteristics Curve



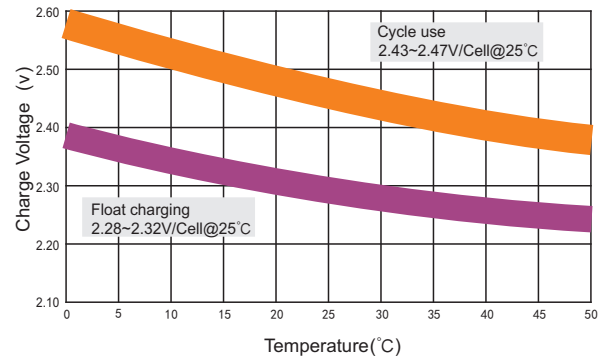
Charge Characteristic Curve For Standby Use(IU)



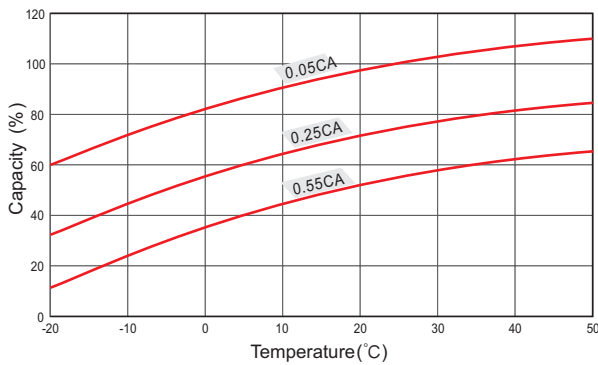
Cycle Life In Relation To Depth Of Discharge



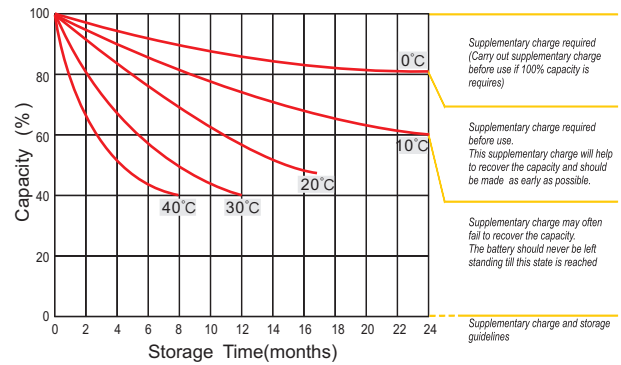
Relationship Between Charging Voltage And Temperature



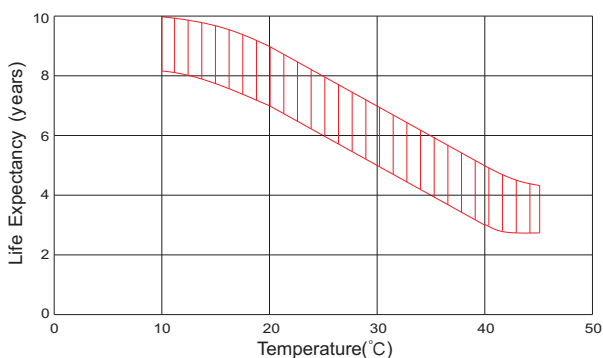
Temperature Effects On Capacity



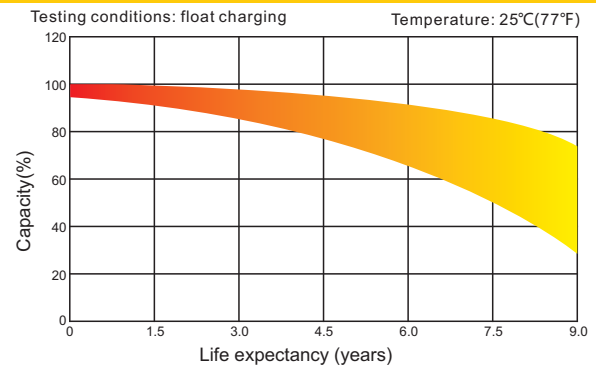
Storage Characteristics



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.