



# HT12-90(12V90Ah)

## Specification

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	90Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 31.0 Kg (Tolerance ±2.0%)
Internal Resistance	Approx. 5.2 mΩ
Terminal	F15(M6)/F12(M8)
Max. Discharge Current	1000A (5 sec)
Design Life	15 years (Float charging)
Recommended Maximum Charging Current	27 A
Reference Capacity	C3 67.7AH C5 78.0AH C10 90.0AH C20 95.2AH
Standby Use Voltage	13.6 V~13.8 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: -10°C~60°C Storage: -20°C~60°C
Normal Operating Temperature Range	35°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.



HT series is High-temperature series battery with 15 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 HT series battery maintains high consistency for better performance and reliable standby service life. It is designed for using under high temperature conditions.



## Dimensions

Length	328±2mm (12.9 inches)
Width	172±2mm (6.77 inches)
Height	215±2mm (8.46 inches)
Total Height	220±2mm (8.66 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	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	210.0	161.5	94.43	55.41	33.20	23.88	19.40	16.38	11.06	9.58	4.92
1.65V	203.8	157.3	92.35	54.39	32.71	23.57	19.16	16.19	10.94	9.49	4.88
1.70V	195.6	151.7	89.61	53.03	32.07	23.14	18.84	15.94	10.80	9.37	4.83
1.75V	184.9	144.5	86.02	51.24	31.21	22.58	18.41	15.60	10.60	9.21	4.76
1.80V	171.4	135.2	81.37	48.91	30.09	21.84	17.85	15.16	10.33	9.00	4.67
1.85V	154.4	123.4	75.43	45.90	28.62	20.88	17.11	14.58	9.99	8.71	4.54

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

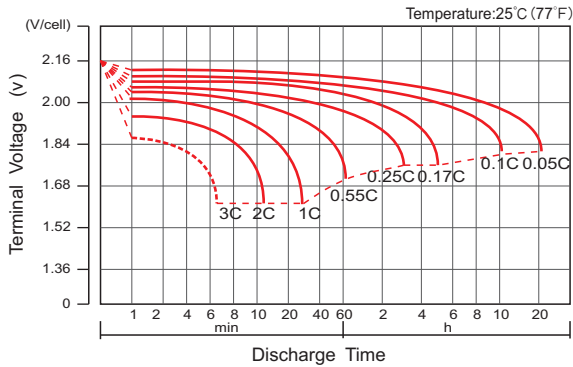
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	362.4	286.6	174.1	105.2	63.86	46.30	37.80	32.04	21.91	19.12	9.83
1.65V	360.9	285.0	172.8	104.3	63.39	45.97	37.53	31.83	21.76	18.98	9.77
1.70V	350.2	277.3	168.6	102.1	62.33	45.25	36.98	31.40	21.49	18.75	9.68
1.75V	337.2	267.9	163.5	99.1	60.95	44.35	36.29	30.85	21.14	18.45	9.55
1.80V	317.9	254.2	156.2	95.05	59.05	43.06	35.30	30.08	20.66	18.04	9.37
1.85V	291.5	235.3	146.3	89.84	56.48	41.35	33.98	29.02	20.02	17.50	9.14

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

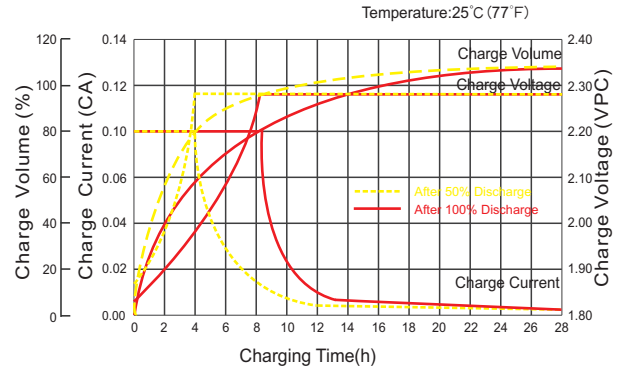
# HT12-90(12V90Ah)



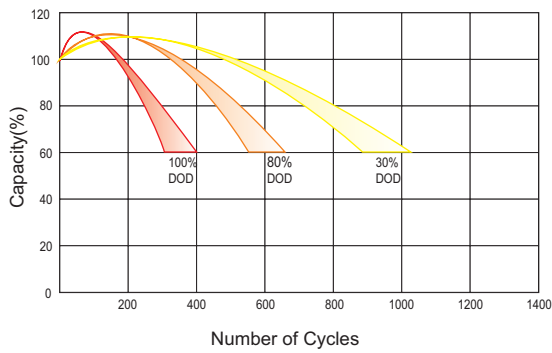
**Discharge Characteristics Curve**



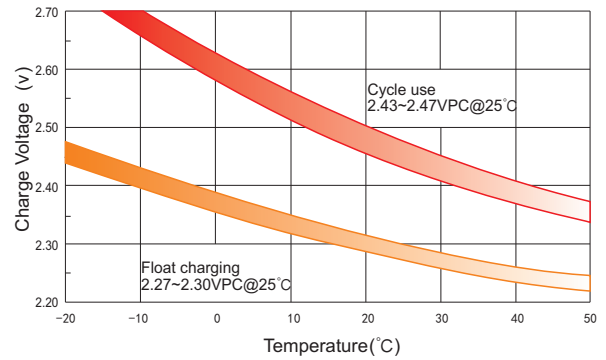
**Charge Characteristic Curve For Standby Use**



**Cycle Life In Relation To Depth Of Discharge**



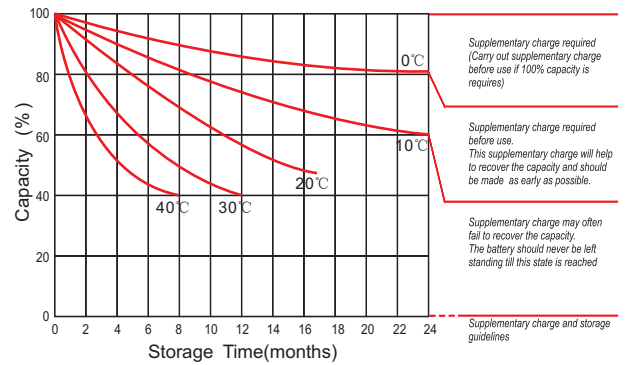
**Relationship Between Charging Voltage And Temperature**



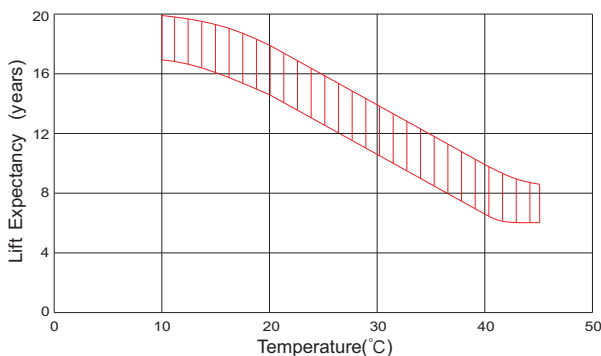
**Temperature Effects On Capacity**



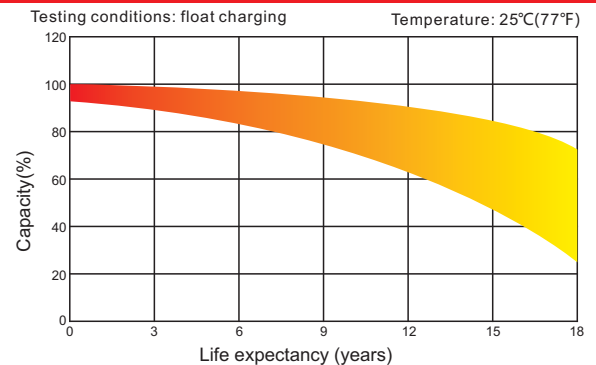
**Storage Characteristics**



**Effect Of Temperature On Long Term Life**



**Life Characteristics Of Standby Use**



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