FT12-110G(12V110Ah)

RITAR®

Specification

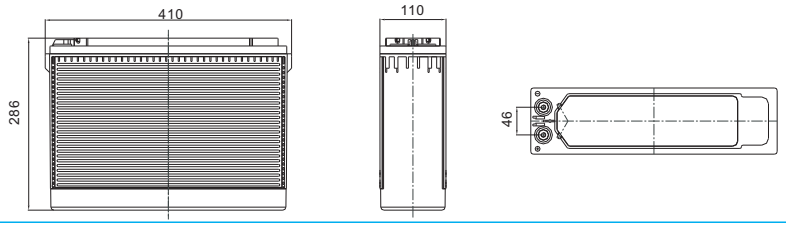
Cells Per Unit	6
Voltage Per Unit	12
Capacity	110Ah@20hr-rate to 1.75V per cell @25℃
Weight	Approx. 31.2 Kg (Tolerance±3.0%)
Internal Resistance	Approx. 7.2 mΩ
Terminal	F9(M8)
Max. Discharge Current	1100A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	22.0 A
Reference Capacity	C3 75.0AH C5 84.5AH C10 96.8AH C20 110.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.2 V~14.4 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -40℃~60℃ Charge: -20℃~50℃ Storage: -40℃~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 2% at 20℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

FTG (Deep Cycle GEL) series is pure GEL battery with 15 years floating design life , it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented Gel electrolyte, the FTG series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and can deliver 450 cycles at 100% DOD. Suitable for solar & wind system, CATV, marine, RV and deep discharge UPS, and telecommunication, etc.

ISO 9001 ISO 14001 OHSAS 18001

MH 28539

Dimensions



Length	410±2mm (16.1 inches)
Width	110±2mm (4.33 inches)
Height	286±2mm (11.3 inches)
Total Height	286±2mm (11.3 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℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	174.5	140.2	91.1	59.7	36.5	27.4	21.8	18.3	12.4	10.2	5.73
1.65V	164.9	134.0	87.4	57.7	35.3	26.5	21.2	17.8	12.2	10.1	5.63
1.70V	151.8	125.5	83.6	55.8	34.2	25.8	20.7	17.4	12.1	9.94	5.57
1.75V	139.0	116.8	79.9	53.8	33.0	25.0	20.1	16.9	11.9	9.80	5.50
1.80V	125.8	107.8	76.3	51.7	31.8	24.3	19.6	16.5	11.7	9.68	5.44
1.85V	102.8	89.5	65.8	46.4	29.1	22.4	18.2	15.4	11.0	9.11	5.17

Constant Power Discharge Characteristics : WPC(25℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	337.1	278.5	188.0	127.6	78.6	59.4	47.6	40.1	27.5	22.8	12.8
1.65V	320.8	267.6	182.0	124.1	76.5	57.9	46.5	39.2	27.2	22.5	12.6
1.70V	304.4	256.8	176.0	120.6	74.4	56.5	45.4	38.3	26.9	22.3	12.5
1.75V	283.7	242.5	170.0	116.9	72.1	55.0	44.4	37.5	26.5	22.0	12.4
1.80V	261.3	227.0	164.1	113.1	69.9	53.5	43.3	36.7	26.2	21.7	12.2
1.85V	217.3	191.1	142.8	102.1	64.4	49.7	40.4	34.3	24.6	20.5	11.6

(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_{20} should reach 95% after the first cycle and 100% after the third cycle.

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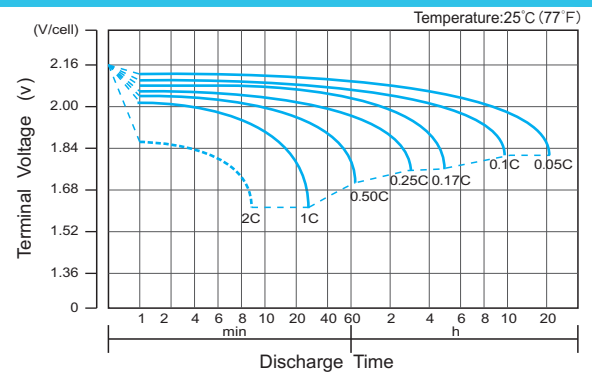
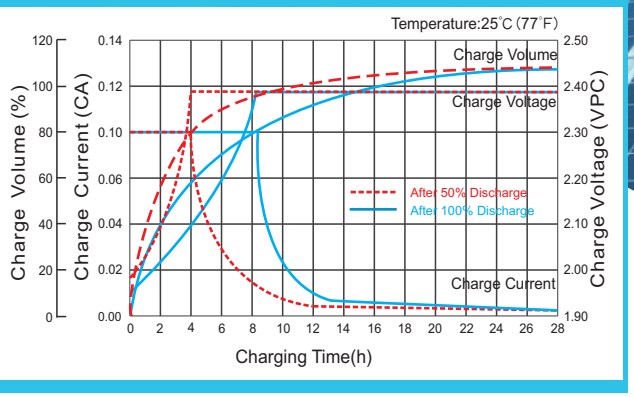
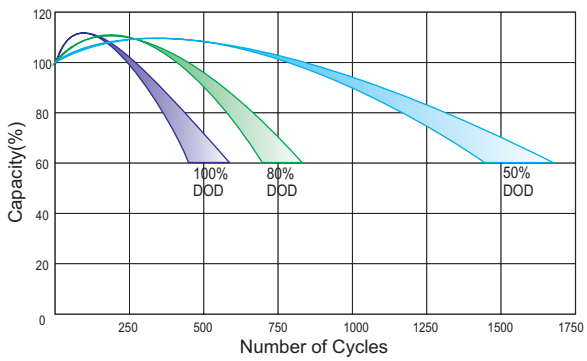
Discharge Characteristics Curve



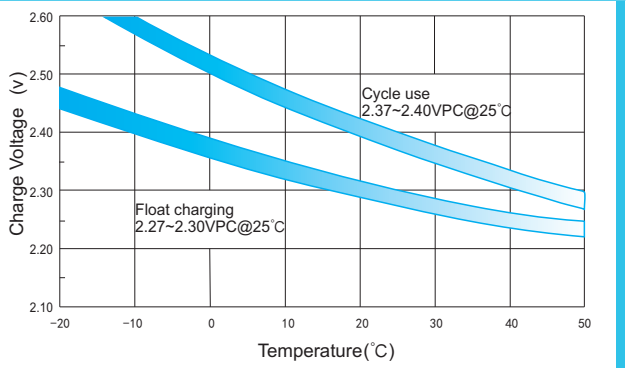
Charge Characteristic Curve for Cycle Use(IU)



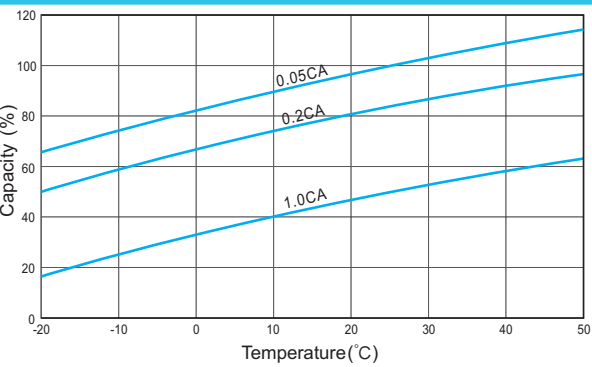
Cycle Life in Relation to Depth of Discharge



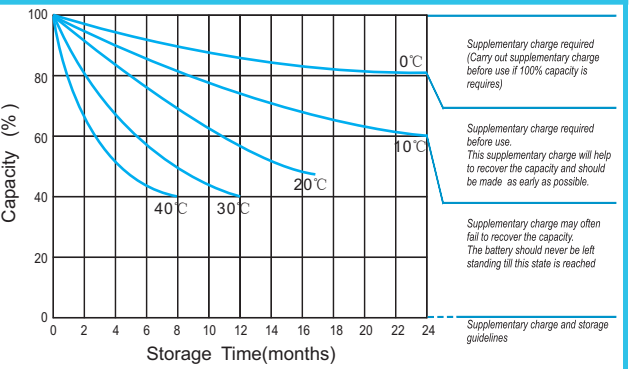
Relationship Between Charging Voltage and Temperature



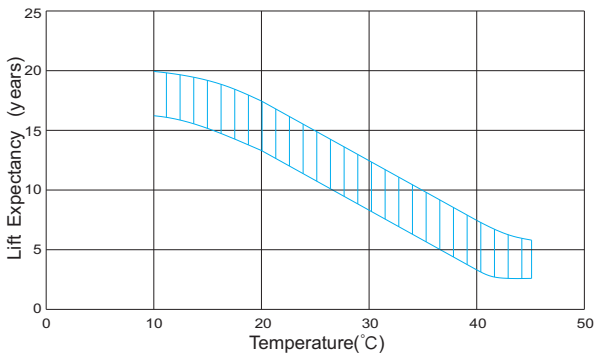
Temperature Effects on Capacity



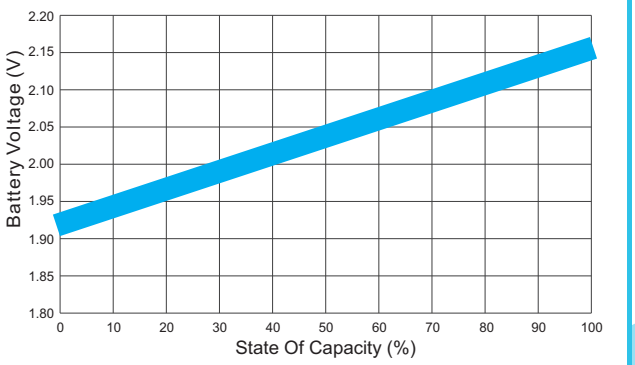
Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20℃)



(Note) All above information shall be changed without prior notice, Ritar reserves the right to explain and update the latest information.

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