

FT12-110D (12V110Ah)

RITAR®

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	110Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 33.0 Kg (Tolerance ±2%)
Internal Resistance	Approx. 5.0 mΩ
Terminal	F9(M8)
Max. Discharge Current	1100A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	33.0 A
Reference Capacity	C3 76.8AH C5 88.5AH C10 104.0AH C20 110.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V~14.4 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 charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



FTD (Front Terminal Deep Cycle) series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharge. By using strong grids, thick plate and special active material are designed for repeated deep-discharge applications. The FTD series battery offers 30% more cyclic life than the standby series. And the dimensions are designed for 19" and 23" cabinet installation. It is suitable for telecom, solar and wind renewable energy storage, mobility and medical equipment, RV, telecom, broadband and cable TV, UPS systems etc.



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°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	179.9	107.0	62.8	37.6	27.1	22.0	18.6	12.7	11.1	5.69
1.65V	175.2	104.6	61.6	37.1	26.7	21.7	18.3	12.5	11.0	5.64
1.70V	169.0	101.5	60.1	36.3	26.2	21.3	18.1	12.4	10.8	5.58
1.75V	160.9	97.5	58.0	35.4	25.6	20.9	17.7	12.1	10.6	5.50
1.80V	150.5	92.2	55.4	34.1	24.7	20.2	17.2	11.8	10.4	5.39
1.85V	137.4	85.5	52.0	32.4	23.7	19.4	16.5	11.4	10.1	5.25

Constant Power Discharge Characteristics : WPC(25°C)

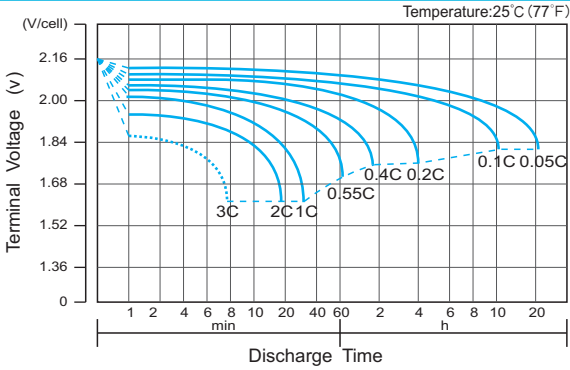
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	319	197	119	72.3	52.5	42.8	36.3	25.1	22.1	11.4
1.65V	317	196	118	71.8	52.1	42.5	36.1	24.9	21.9	11.3
1.70V	309	191	116	70.6	51.3	41.9	35.6	24.6	21.7	11.2
1.75V	298	185	112	69.0	50.2	41.1	34.9	24.2	21.3	11.0
1.80V	283	177	108	66.9	48.8	40.0	34.1	23.6	20.9	10.8
1.85V	262	166	102	64.0	46.8	38.5	32.9	22.9	20.2	10.6

(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 Cycle Use(IU)



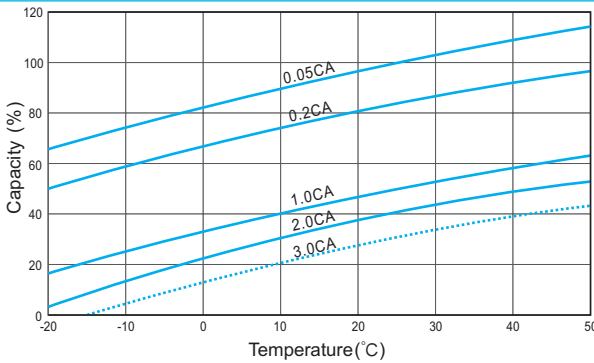
Cycle Life in Relation to Depth of Discharge



Relationship Between Charging Voltage and Temperature



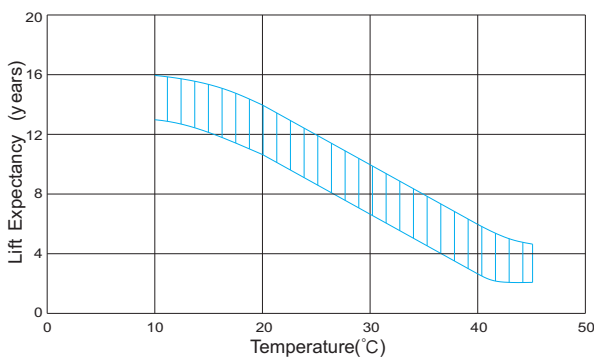
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20°C)



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