

FT12-100DA(12V100Ah)

RITAR®

Specification

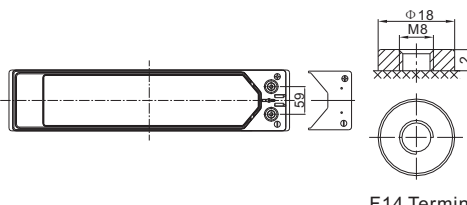
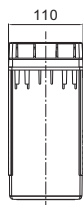
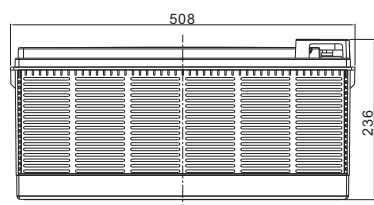
Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 29.0 Kg (Tolerance ±2%)
Internal Resistance	Approx. 5.2 mΩ
Terminal	F14(M8)
Max. Discharge Current	1000A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	30.0 A
Reference Capacity	C3 70.5AH C5 80.5AH C10 94.5AH C20 100.0AH
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	508±2mm (20.0 inches)
Width	110±2mm (4.33 inches)
Height	236±2mm (9.29 inches)
Total Height	236±2mm (9.29 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

F14 Terminal

Unit: mm

Constant Current Discharge Characteristics : A(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	164.7	96.3	57.1	34.2	24.6	20.0	16.9	11.5	10.1	5.17
1.65V	160.4	94.2	56.0	33.7	24.3	19.7	16.7	11.4	10.0	5.13
1.70V	154.7	91.4	54.6	33.0	23.8	19.4	16.4	11.2	9.85	5.07
1.75V	147.3	87.7	52.8	32.1	23.3	19.0	16.1	11.0	9.68	5.00
1.80V	137.8	83.0	50.4	31.0	22.5	18.4	15.6	10.8	9.45	4.90
1.85V	125.8	76.9	47.3	29.5	21.5	17.6	15.0	10.4	9.16	4.77

Constant Power Discharge Characteristics : WPC(25°C)

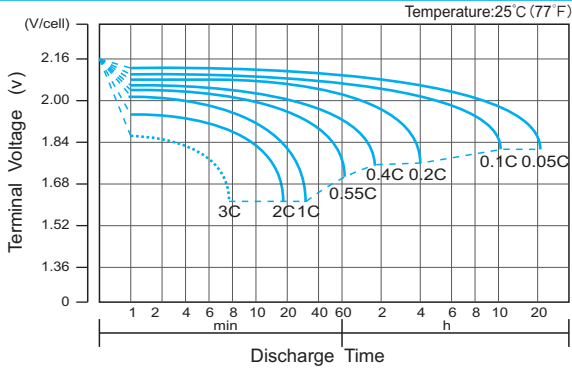
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	292	177	108	65.8	47.7	38.9	33.0	22.8	20.1	10.3
1.65V	291	176	107	65.3	47.3	38.7	32.8	22.6	19.9	10.3
1.70V	283	172	105	64.2	46.6	38.1	32.3	22.4	19.7	10.2
1.75V	273	167	102	62.8	45.7	37.4	31.8	22.0	19.4	10.0
1.80V	259	159	98	60.8	44.4	36.4	31.0	21.5	19.0	9.85
1.85V	240	149	92.5	58.2	42.6	35.0	29.9	20.8	18.4	9.60

(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)



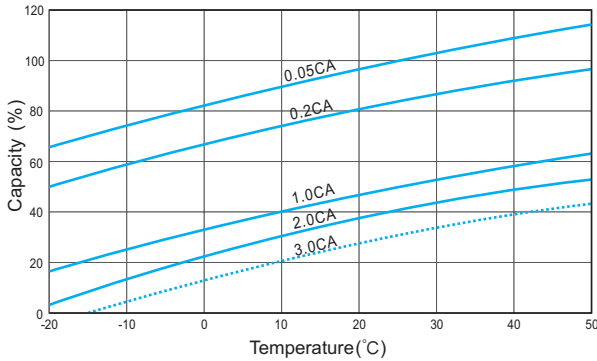
Cycle Life in Relation to Depth of Discharge



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.