

# FT12-100D (12V100Ah)

**RITAR®**

## Specification

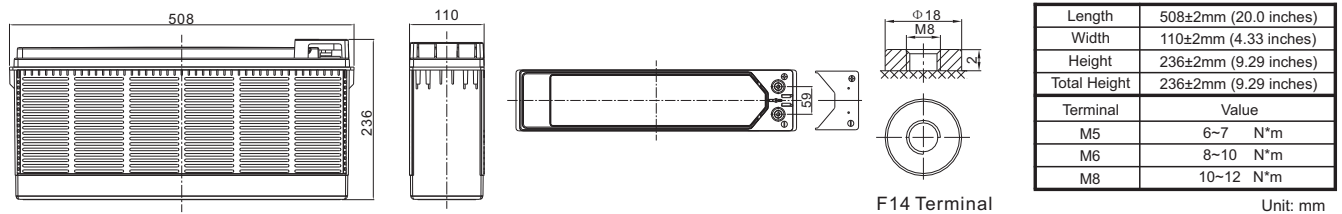
Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 30.0 Kg (Tolerance ±2%)
Internal Resistance	Approx. 5.2 mΩ
Terminal	F14(M8)
Max. Discharge Current	1000A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	30.0 A
Reference Capacity	C3 74.4AH C5 83.5AH C10 95.0AH 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



### Constant Current Discharge Characteristics : A(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	166.3	97.2	57.1	34.2	24.6	20.0	16.9	11.5	10.1	5.17
1.65V	162.0	95.1	56.0	33.7	24.3	19.7	16.7	11.4	10.0	5.13
1.70V	156.3	92.3	54.6	33.0	23.8	19.4	16.4	11.2	9.85	5.07
1.75V	148.8	88.6	52.8	32.1	23.3	19.0	16.1	11.0	9.68	5.00
1.80V	139.2	83.8	50.4	31.0	22.5	18.4	15.6	10.8	9.45	4.90
1.85V	127.1	77.7	47.3	29.5	21.5	17.6	15.0	10.4	9.16	4.77

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

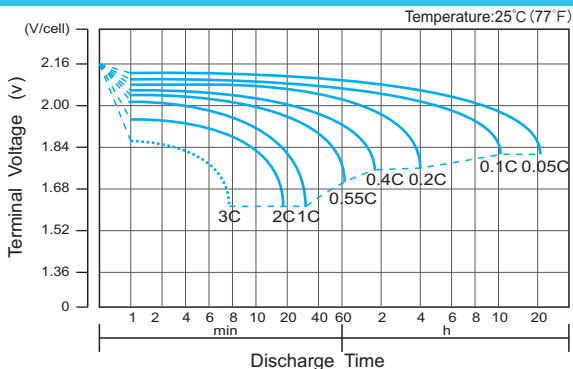
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	295	179	108	65.8	47.7	38.9	33.0	22.8	20.1	10.3
1.65V	293	178	107	65.3	47.3	38.7	32.8	22.6	19.9	10.3
1.70V	286	174	105	64.2	46.6	38.1	32.3	22.4	19.7	10.2
1.75V	276	168	102	62.8	45.7	37.4	31.8	22.0	19.4	10.0
1.80V	262	161	97.9	60.8	44.4	36.4	31.0	21.5	19.0	9.85
1.85V	242	151	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.

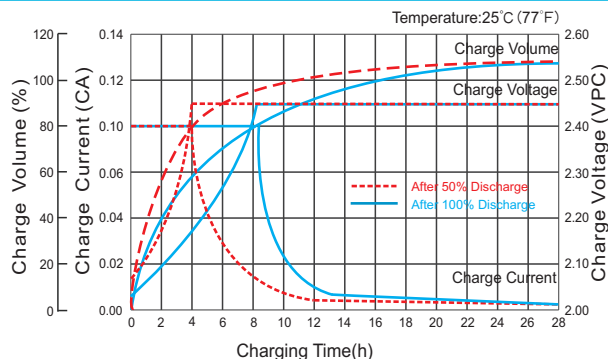
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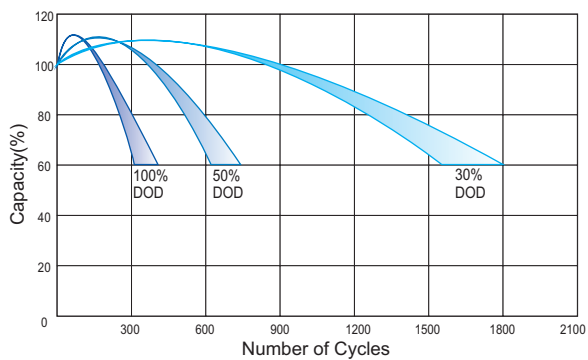
## Discharge Characteristics Curve



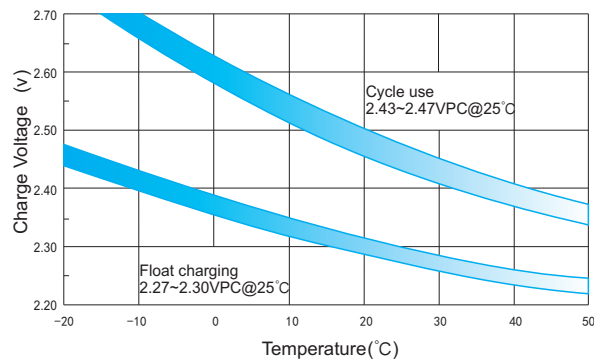
## Charge Characteristic Curve for Cycle Use(IU)



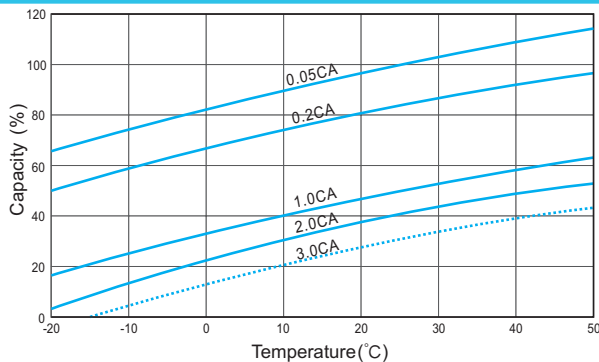
## Cycle Life in Relation to Depth of Discharge



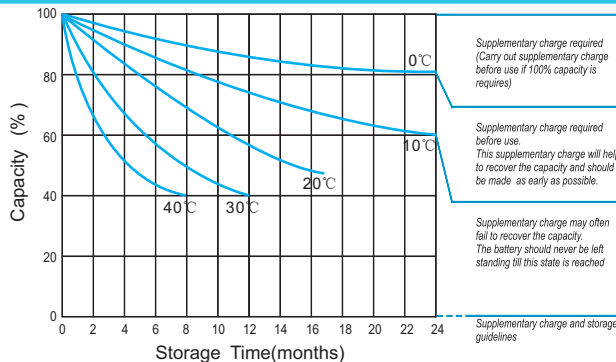
## Relationship Between Charging Voltage and Temperature



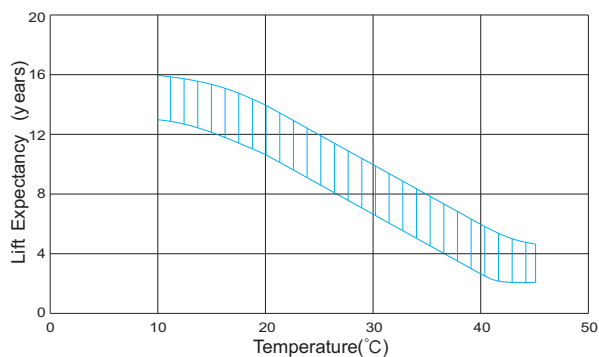
## Temperature Effects on Capacity



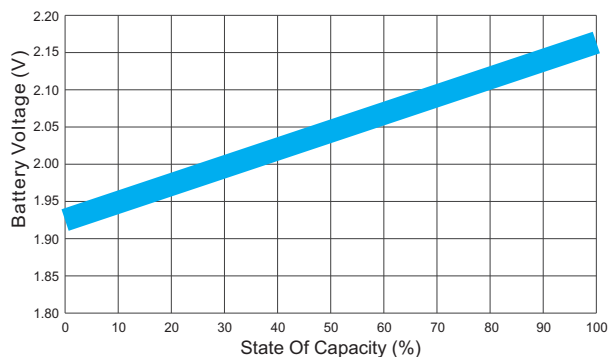
## Storage Characteristics



## 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.