

FT12-105D(12V105Ah)



Specification

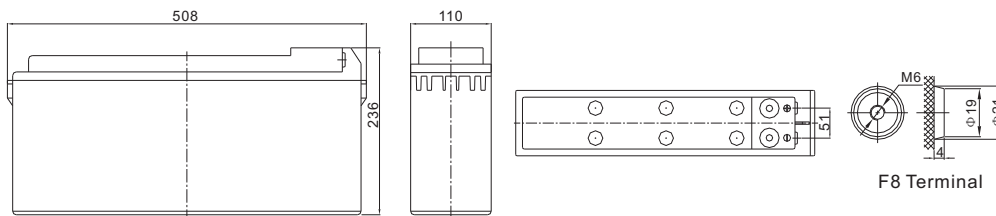
Cells Per Unit	6
Voltage Per Unit	12
Capacity	105Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 32.5 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 6.5 mΩ
Terminal	F14(M8)/F8(M6)
Max. Discharge Current	1050A (5 sec)
Design Life	15 years (floating charge)
Max. Charging Current	31.5 A
Reference Capacity	C3 80.4AH C5 90.5AH C10 100.0AH C20 105.0AH
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

Unit: mm

Constant Current Discharge Characteristics : A(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	189.9	113.2	63.8	38.0	29.6	23.2	19.7	12.7	10.5	5.44
1.65V	177.6	107.2	61.6	36.7	28.7	22.5	19.1	12.6	10.4	5.41
1.70V	167.0	101.7	59.6	35.7	27.5	21.8	18.6	12.4	10.2	5.34
1.75V	156.4	97.7	57.8	34.4	26.8	21.2	18.1	12.2	10.1	5.25
1.80V	143.3	94.1	55.2	33.2	26.3	20.7	17.9	12.0	10.0	5.20
1.85V	118.5	79.8	49.3	30.3	24.4	19.4	16.4	11.3	9.40	5.15

Constant Power Discharge Characteristics : WPC(25°C)

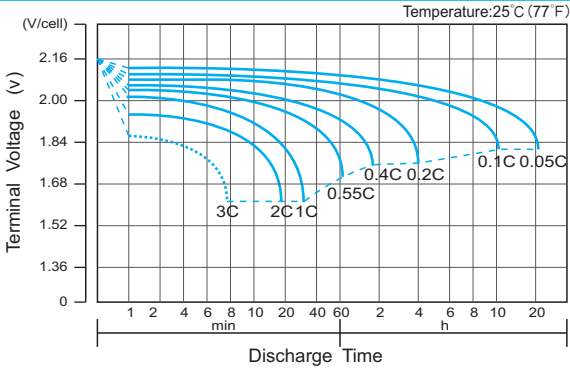
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	331.3	205.7	119.7	71.8	56.2	44.7	37.4	24.7	20.6	10.9
1.65V	322.1	200.9	117.7	69.9	54.8	43.6	36.4	24.5	20.4	10.8
1.70V	304.9	191.2	114.2	68.1	52.7	42.2	35.4	24.2	20.0	10.7
1.75V	287.8	184.5	111.1	65.7	51.4	41.3	34.6	23.8	19.8	10.5
1.80V	266.0	178.5	106.5	64.2	51.1	40.5	34.2	23.4	19.6	10.4
1.85V	223.5	153.1	95.7	59.1	47.7	38.1	31.6	22.1	18.5	10.3

(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 C₂₀ 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)



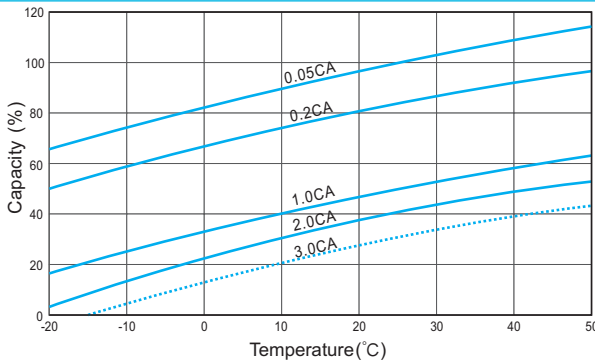
Cycle Life in Relation to Depth of Discharge



Relationship Between Charging Voltage and Temperature



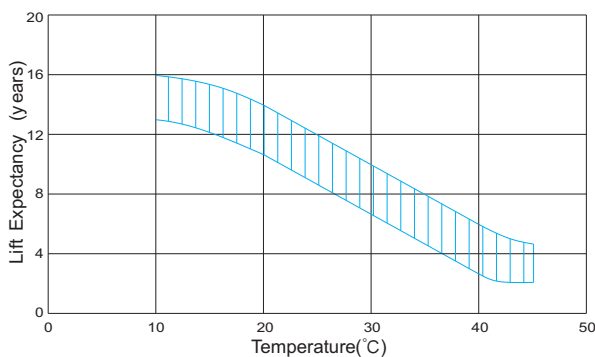
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



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



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