

# FT12-150D (12V150Ah)

**RITAR®**

## Specification

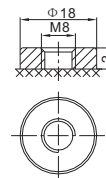
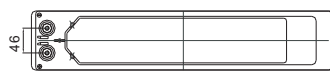
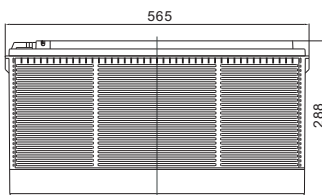
Cells Per Unit	6
Voltage Per Unit	12
Capacity	150Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 43.5 Kg (Tolerance ± 1.5%)
Internal Resistance	Approx. 4.0 mΩ
Terminal	F9(M8)
Max. Discharge Current	1500A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	45 A
Reference Capacity	C3 105.6AH C5 121.5AH C10 142.0AH C20 150.0AH
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



F9 Terminal

Length	565±2mm (22.2 inches)
Width	110±2mm (4.33 inches)
Height	288±2mm (11.3 inches)
Total Height	288±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	247.7	147.3	86.5	51.8	37.3	30.3	25.6	17.4	15.1	7.76
1.65V	241.3	144.1	84.9	51.0	36.8	29.9	25.3	17.2	15.0	7.69
1.70V	232.7	139.8	82.7	50.0	36.1	29.4	24.9	17.0	14.8	7.61
1.75V	221.6	134.2	80.0	48.7	35.2	28.7	24.3	16.7	14.5	7.50
1.80V	207.3	127.0	76.3	46.9	34.1	27.9	23.7	16.3	14.2	7.35
1.85V	189.3	117.7	71.6	44.7	32.6	26.7	22.7	15.7	13.7	7.16

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

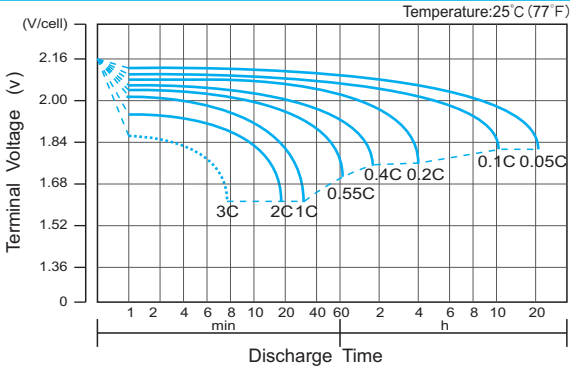
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	440	272	164	100	72.3	59.0	50.0	34.5	30.1	15.5
1.65V	437	270	163	98.9	71.7	58.6	49.7	34.3	29.9	15.4
1.70V	425	263	159	97.3	70.6	57.7	49.0	33.9	29.6	15.3
1.75V	411	255	155	95.1	69.2	56.6	48.1	33.3	29.1	15.0
1.80V	390	244	148	92.1	67.2	55.1	46.9	32.6	28.4	14.8
1.85V	361	228	140	88.1	64.5	53.0	45.3	31.6	27.6	14.4

(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)



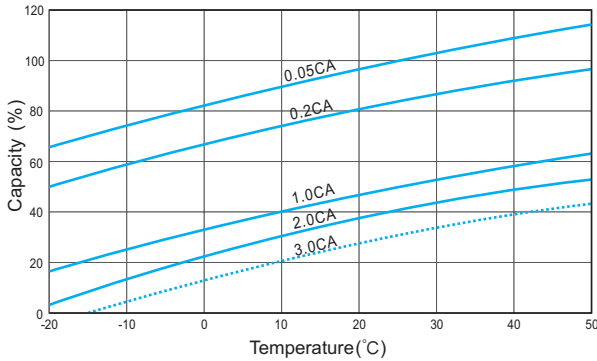
## Cycle Life in Relation to Depth of Discharge



## 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.