

# FT12-100DL (12V100Ah)

**RITAR®**

## Specification

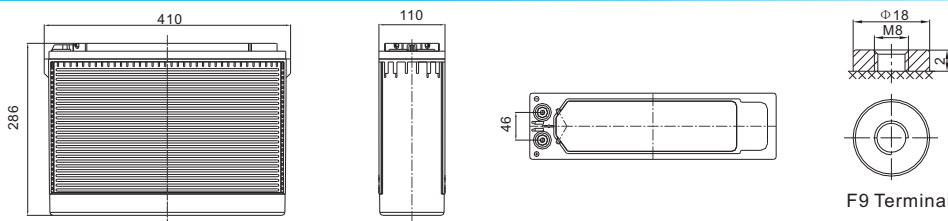
Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 33.0 Kg (Tolerance ±2%)
Internal Resistance	Approx. 4.8 mΩ
Terminal	F9(M8)
Max. Discharge Current	1000A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	30.0 A
Reference Capacity	C3 70.5AH C5 81.0AH 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	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	169.7	99.2	57.6	34.5	24.8	20.2	17.0	11.6	10.1	5.17
1.65V	165.2	97.0	56.6	34.0	24.5	19.9	16.8	11.5	10.0	5.13
1.70V	159.4	94.1	55.2	33.4	24.1	19.6	16.6	11.3	9.85	5.07
1.75V	151.8	90.4	53.3	32.5	23.5	19.2	16.2	11.1	9.68	5.00
1.80V	142.0	85.5	50.9	31.3	22.7	18.6	15.8	10.9	9.45	4.90
1.85V	129.6	79.2	47.7	29.8	21.7	17.8	15.2	10.5	9.16	4.77

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

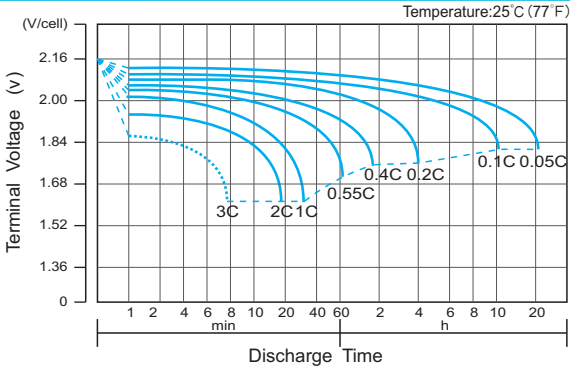
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	30.1	183	109	66.4	48.2	39.3	33.3	23.0	20.1	10.3
1.65V	299	182	108	65.9	47.8	39.0	33.1	22.9	19.9	10.3
1.70V	291	177	106	64.8	47.1	38.5	32.7	22.6	19.7	10.2
1.75V	281	172	103	63.4	46.1	37.7	32.1	22.2	19.4	10.0
1.80V	267	164	99	61.4	44.8	36.7	31.3	21.7	19.0	9.85
1.85V	247	154	93.4	58.8	43.0	35.3	30.2	21.0	18.4	9.60

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

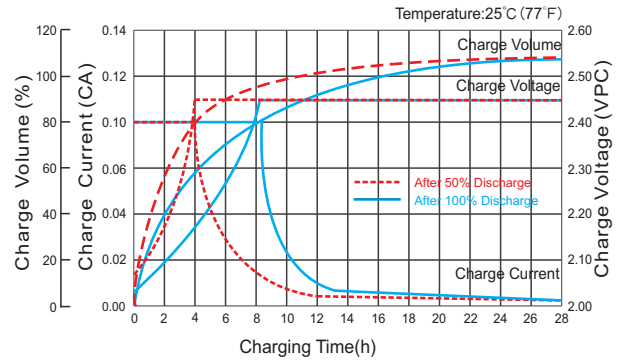
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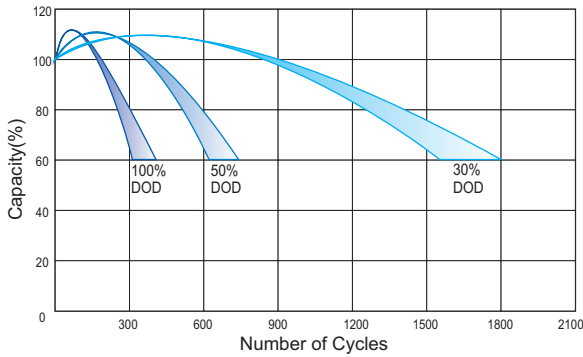
## Discharge Characteristics Curve



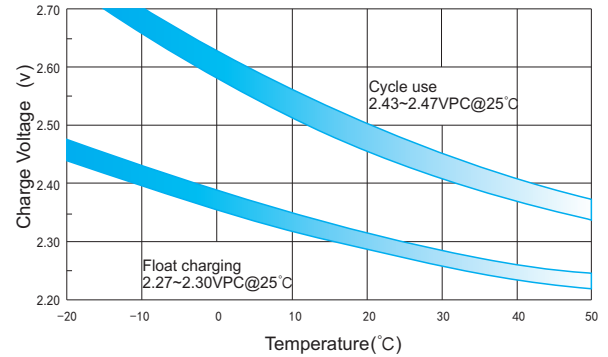
## Charge Characteristic Curve for Cycle Use(IU)



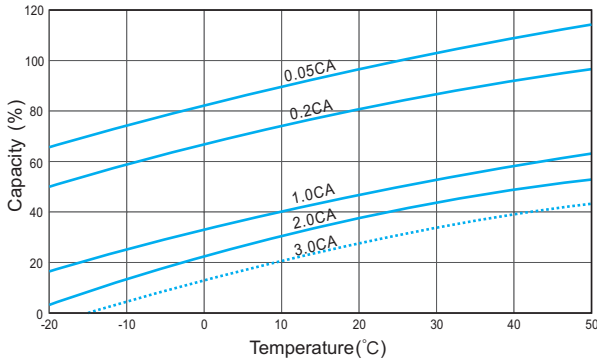
## Cycle Life in Relation to Depth of Discharge



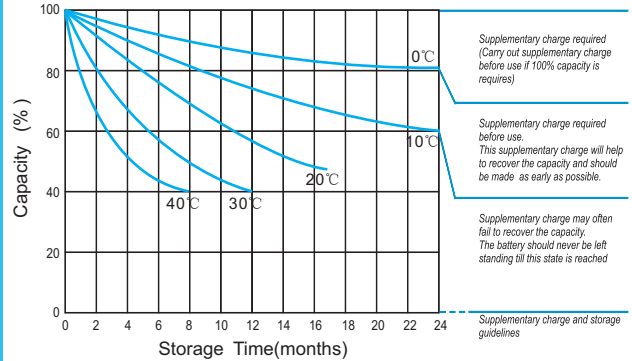
## Relationship Between Charging Voltage and Temperature



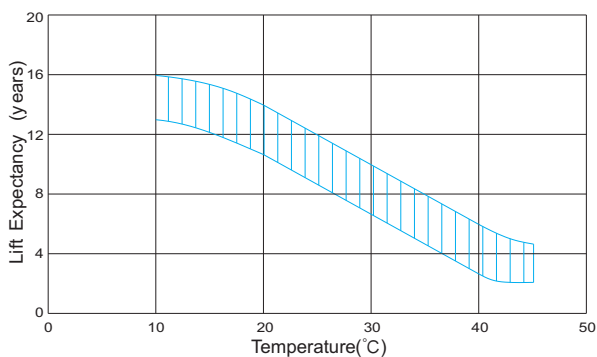
## Temperature Effects on Capacity



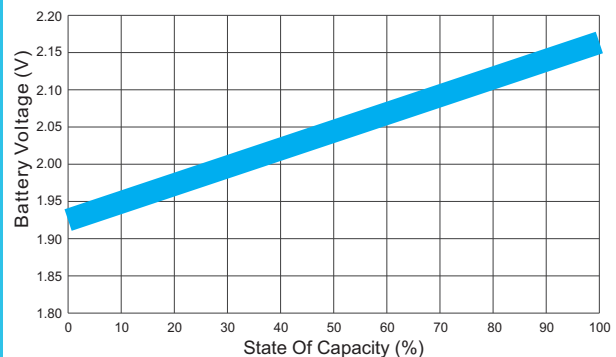
## Storage Characteristics



## Effect of Temperature on Long Term Life



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



For Battery Sales + EPA Battery Recycling and AC / DC Power Services, please contact:  
**Moore & Moore Solutions, Inc.**  
 Phone: 484-302-7009  
 Email: [mr@mooreu.com](mailto:mr@mooreu.com)  
[www.MooreU.com](http://www.MooreU.com)