

# FT12-55D(12V55Ah)



## Specification

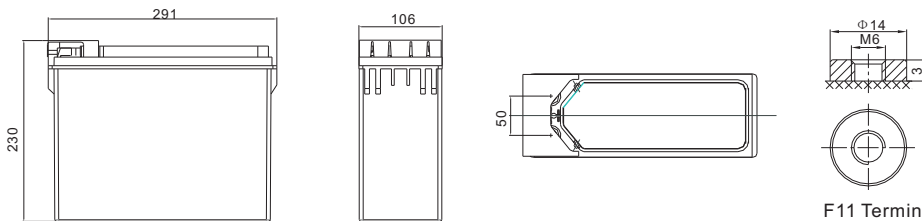
Cells Per Unit	6
Voltage Per Unit	12
Capacity	55Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 18.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 7.5 mΩ
Terminal	F11(M6)
Max. Discharge Current	550A (5 sec)
Design Life	15 years (floating charge)
Max. Charging Current	16.5 A
Reference Capacity	C3 42.0AH C5 47.4AH C10 52.4AH C20 55.0AH
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	291±2mm (11.5 inches)
Width	106±2mm (4.17 inches)
Height	230±2mm (9.06 inches)
Total Height	230±2mm (9.06 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	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	129.5	99.5	59.3	33.4	19.9	15.5	12.2	10.3	6.63	5.50	2.85
1.65V	119.3	93.0	56.2	32.3	19.2	15.0	11.8	10.0	6.58	5.45	2.84
1.70V	110.6	87.5	53.3	31.2	18.7	14.4	11.4	9.74	6.48	5.34	2.80
1.75V	101.5	81.9	51.2	30.3	18.0	14.0	11.1	9.47	6.37	5.29	2.75
1.80V	92.3	75.0	49.3	28.9	17.4	13.8	10.9	9.35	6.27	5.24	2.72
1.85V	72.2	62.1	41.8	25.8	15.9	12.8	10.2	8.61	5.90	4.92	2.70

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

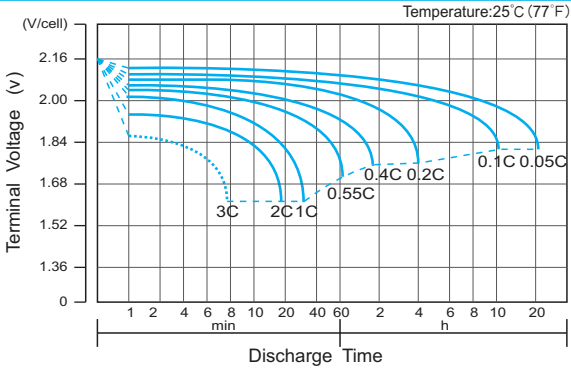
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	220.6	173.5	107.7	62.7	37.6	29.4	23.4	19.6	12.9	10.8	5.69
1.65V	212.4	168.7	105.2	61.6	36.6	28.7	22.9	19.0	12.8	10.7	5.64
1.70V	198.2	159.7	100.2	59.8	35.7	27.6	22.1	18.6	12.7	10.5	5.59
1.75V	184.5	150.7	96.7	58.2	34.4	26.9	21.6	18.1	12.5	10.4	5.49
1.80V	170.0	139.3	93.5	55.8	33.6	26.8	21.2	17.9	12.3	10.3	5.44
1.85V	134.8	117.1	80.2	50.1	31.0	25.0	19.9	16.6	11.6	9.70	5.39

(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 C<sub>20</sub> should reach 95% after the first cycle and 100% after the third cycle.

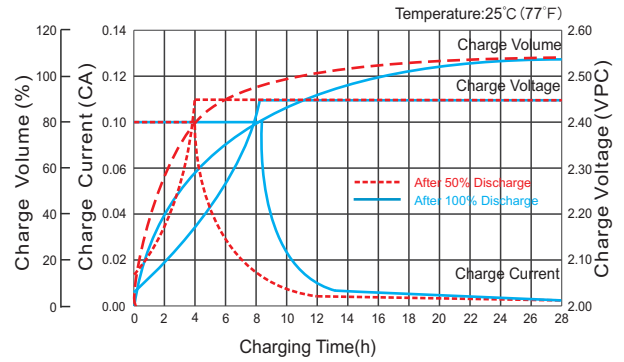
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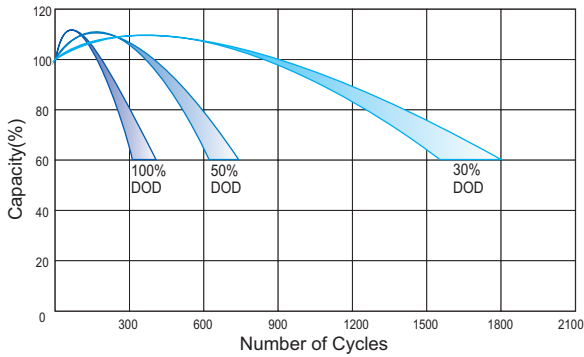
## Discharge Characteristics Curve



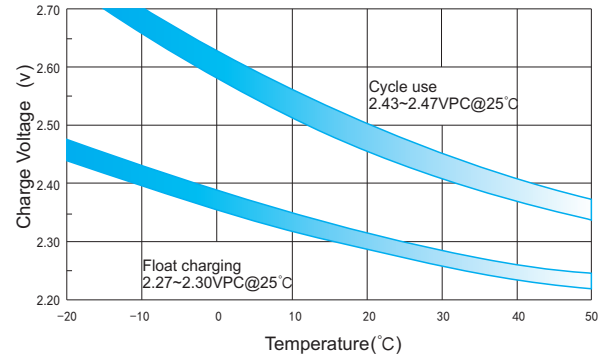
## Charge Characteristic Curve for Cycle Use(IU)



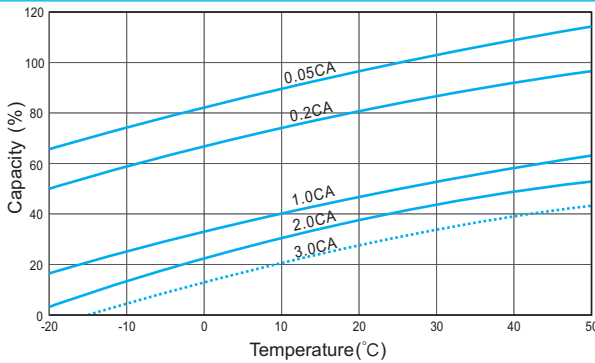
## Cycle Life in Relation to Depth of Discharge



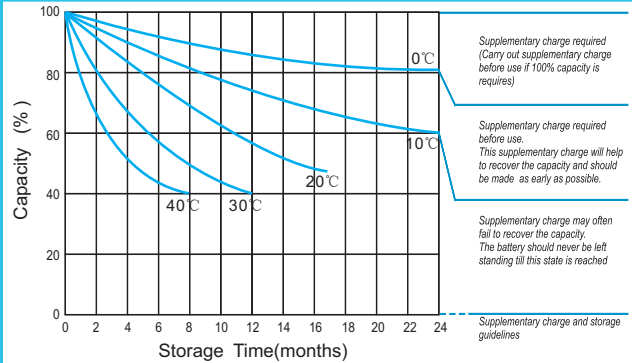
## Relationship Between Charging Voltage and Temperature



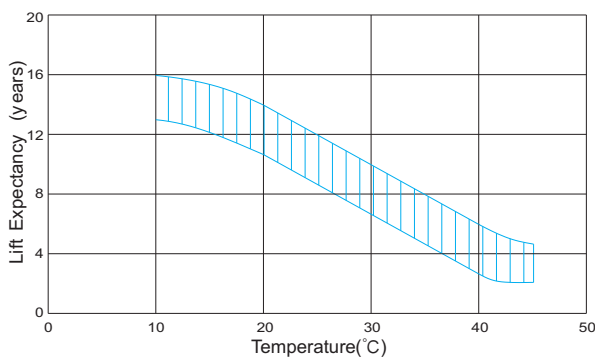
## Temperature Effects on Capacity



## 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.