

FT12-180D(12V180Ah)



Specification

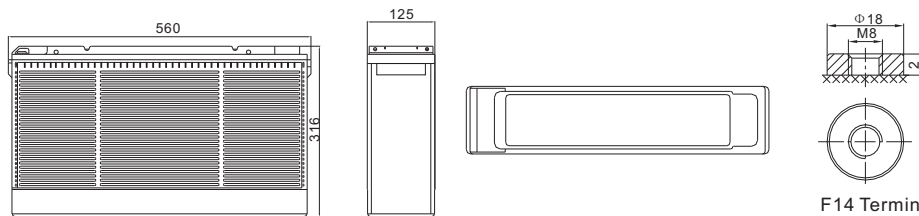
Cells Per Unit	6
Voltage Per Unit	12
Capacity	180Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 52.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 4.0 mΩ
Terminal	F14(M8)
Max. Discharge Current	1800A (5 sec)
Design Life	15 years (floating charge)
Max. Charging Current	54 A
Reference Capacity	C3 137.7AH C5 155.0AH C10 171.0AH C20 180.0AH
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	560±2mm (22.1 inches)
Width	125±2mm (4.92 inches)
Height	316±2mm (12.4 inches)
Total Height	316±2mm (12.4 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

F14 Terminal

Unit: mm

Constant Current Discharge Characteristics : A(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	309.3	192.1	109.3	65.1	50.7	39.8	33.8	21.7	18.0	9.33
1.65V	289.2	182.0	105.6	62.9	49.2	38.6	32.8	21.5	17.8	9.28
1.70V	272.0	172.6	102.2	61.2	47.1	37.4	31.9	21.2	17.5	9.16
1.75V	254.8	165.7	99.0	58.9	45.9	36.4	31.0	20.8	17.3	9.00
1.80V	233.3	159.6	94.6	56.9	45.0	35.5	30.6	20.5	17.1	8.91
1.85V	193.0	135.4	84.4	52.0	41.9	33.3	28.2	19.3	16.1	8.83

Constant Power Discharge Characteristics : WPC(25°C)

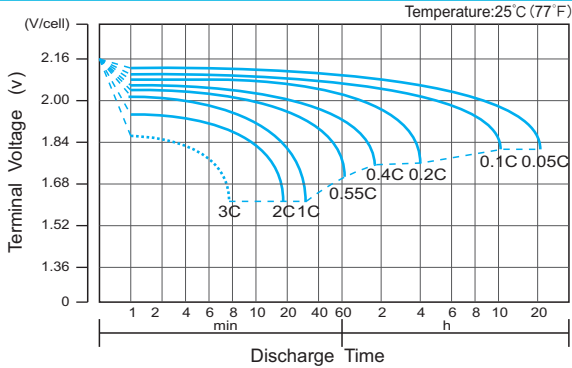
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	539.5	349.1	205.2	123.1	96.3	76.7	64.1	42.3	35.3	18.6
1.65V	524.6	340.9	201.7	119.8	93.9	74.8	62.3	42.0	35.0	18.5
1.70V	496.5	324.5	195.8	116.8	90.3	72.4	60.8	41.5	34.3	18.3
1.75V	468.7	313.2	190.4	112.6	88.1	70.7	59.4	40.8	33.9	18.0
1.80V	433.2	303.0	182.6	110.1	87.6	69.4	58.6	40.1	33.6	17.8
1.85V	364.0	259.9	164.0	101.3	81.7	65.3	54.2	37.9	31.7	17.6

(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)



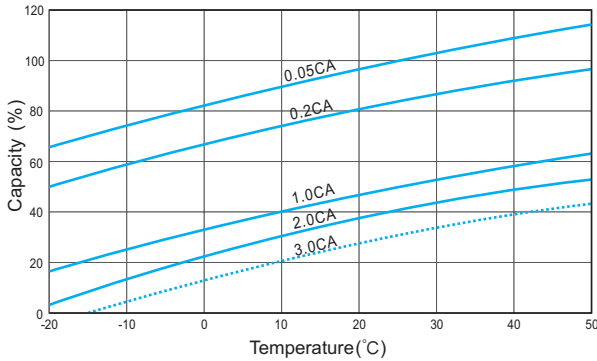
Cycle Life in Relation to Depth of Discharge



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.