



FT12-100S (12V100Ah)

Specification

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	100Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 31.0 Kg (Tolerance ±3%)
Internal Resistance	Approx. 5.5 mΩ
Terminal	F9(M8)
Max. Discharge Current	1000A (5 sec)
Design Life	12 years (Float charging)
Recommended Maximum Charging Current	30.0 A
Reference Capacity	C3 77.4AH C5 87.0AH C10 100.0AH C20 106.0AH
Standby Use Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 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.



FT (Front Terminal) Series is specially designed for telecom use with 12 years design life in float service. By adopting a new AGM separator and centralized venting system, the battery can be installed in any position while maintaining high reliability. The dimensions of the FT series are designed for 19" and 23" cabinet installation. It is suitable for telecom EPS/UPS applications.



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	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	246.3	185.3	109.5	61.1	36.4	28.2	22.2	18.9	12.7	10.5	5.52
1.65V	232.7	177.1	105.1	59.0	35.2	27.3	21.6	18.4	12.5	10.4	5.43
1.70V	214.2	165.9	100.5	57.1	34.1	26.6	21.0	17.9	12.3	10.3	5.36
1.75V	196.1	154.4	96.0	55.0	32.9	25.8	20.4	17.4	12.2	10.1	5.30
1.80V	177.5	142.5	91.8	52.9	31.7	25.0	19.9	17.0	12.0	10.0	5.25
1.85V	145.1	118.3	79.0	47.4	29.1	23.1	18.5	15.9	11.2	9.41	4.98

Constant Power Discharge Characteristics : WPC (25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	418.6	323.9	198.9	114.8	69.0	53.9	42.6	36.4	24.8	20.7	10.9
1.65V	403.2	314.2	192.9	111.5	67.1	52.4	41.6	35.6	24.5	20.5	10.7
1.70V	378.0	298.7	186.2	108.6	65.3	51.2	40.6	34.8	24.2	20.2	10.6
1.75V	352.2	282.0	179.8	105.2	63.3	49.9	39.7	34.0	23.9	20.0	10.5
1.80V	324.4	264.1	173.6	101.8	61.3	48.6	38.7	33.2	23.6	19.8	10.4
1.85V	269.8	222.2	151.0	91.9	56.5	45.1	36.1	31.1	22.2	18.6	9.87

(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 C₁₀ should reach 95% after the first cycle and 100% after the third cycle.

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Discharge Characteristics Curve



Charge Characteristic Curve For Standby Use



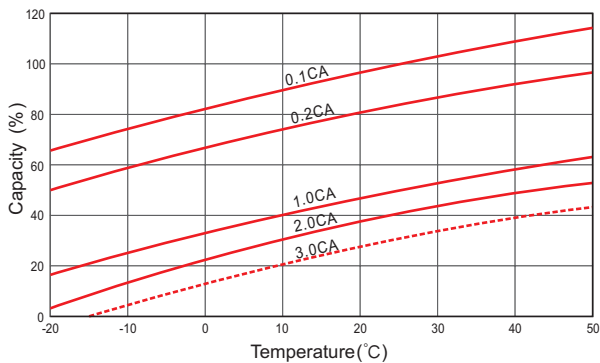
Cycle Life In Relation To Depth Of Discharge



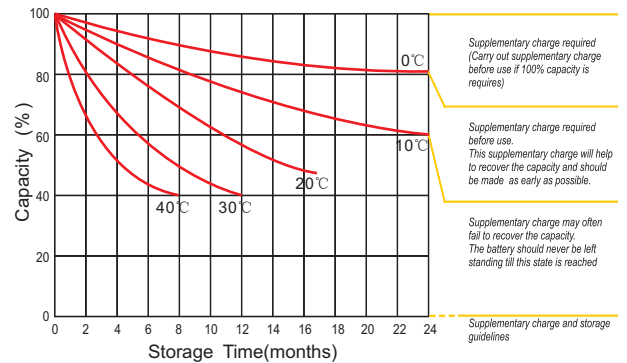
Relationship Between Charging Voltage And Temperature



Temperature Effects On Capacity



Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use



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