



# FT12-105(12V105Ah)

## Specification

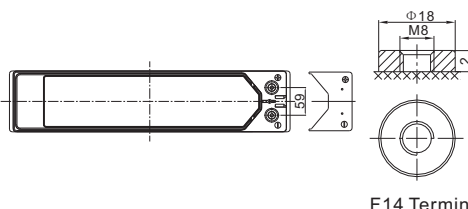
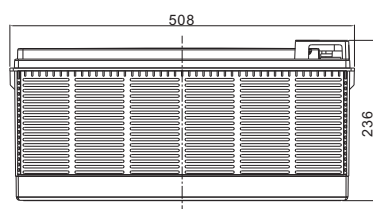
Cells Per Unit	6
Voltage Per Unit	12V
Nominal Capacity	105Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 32.5 Kg (Tolerance ±5.0%)
Internal Resistance	≤6.5 mΩ (Full Charge Condition @25°C)
Terminal	Default F14(M8)
Max. Discharge Current	1050A (5 sec)
Design Life	12 years
Max. Charging Current	31.5 A
Reference Capacity	C <sub>3</sub> 78.9Ah C <sub>5</sub> 89.0Ah C <sub>10</sub> 105.0Ah C <sub>20</sub> 111.2Ah
Float Charging Voltage	13.5 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 charge batteries before using.
Container Material	A.B.S. UL94-V0



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/EPS, applications.



## Dimensions



Length	508±2mm (20.0 inches)
Width	110±2mm (4.33 inches)
Height	236±2mm (9.29 inches)
Total Height	236±2mm (9.29 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	190.7	113.8	64.2	38.2	29.6	23.3	19.8	13.3	11.1	5.79
1.65V	182.3	109.3	62.0	37.0	28.7	22.6	19.3	13.2	10.9	5.70
1.70V	170.8	104.4	59.9	35.8	27.9	22.0	18.8	13.0	10.8	5.63
1.75V	158.9	99.8	57.7	34.5	27.1	21.5	18.3	12.8	10.6	5.56
1.80V	146.7	95.4	55.5	33.3	26.3	20.9	17.8	12.6	10.5	5.51
1.85V	121.8	82.2	49.8	30.5	24.3	19.4	16.6	11.8	9.88	5.23

### Constant Power Discharge Characteristics : W/Cell (25°C)

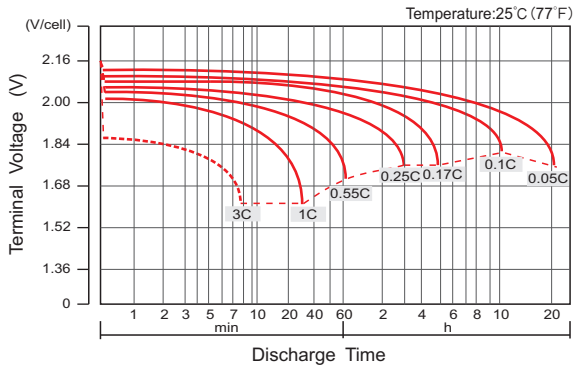
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	333.4	206.7	120.6	72.4	56.6	44.7	38.2	26.0	21.8	11.4
1.65V	323.5	200.6	117.1	70.5	55.0	43.6	37.3	25.8	21.5	11.2
1.70V	307.5	193.6	114.0	68.5	53.8	42.6	36.5	25.4	21.2	11.1
1.75V	290.3	187.0	110.5	66.4	52.4	41.7	35.7	25.1	21.0	11.0
1.80V	271.8	180.5	106.9	64.4	51.0	40.6	34.9	24.7	20.7	10.9
1.85V	228.8	157.0	96.4	59.3	47.3	37.9	32.6	23.3	19.6	10.4

(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>10</sub> should reach 95% after the first cycle and 100% after the third cycle.

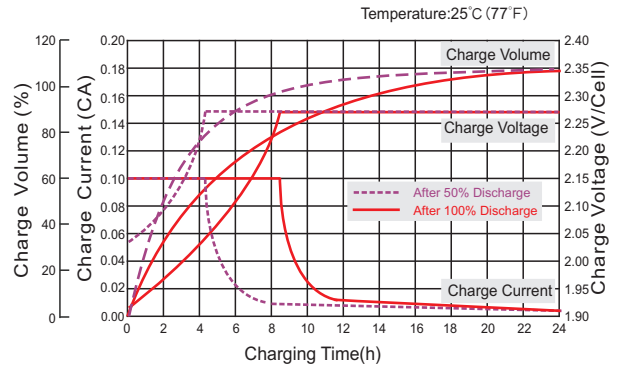
# FT12-105(12V105Ah)



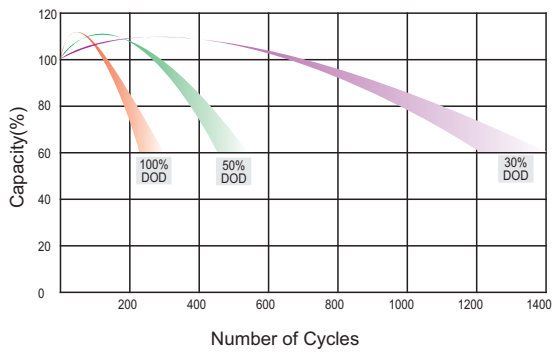
## Discharge Characteristics Curve



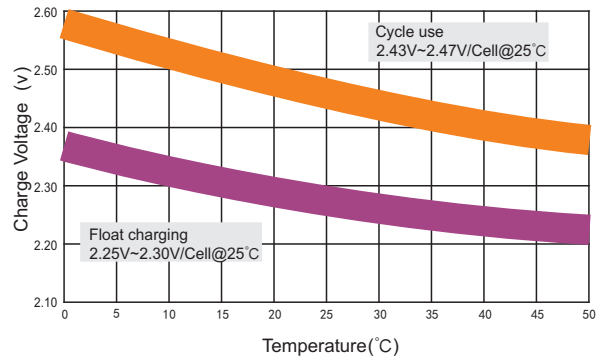
## Charge Characteristic Curve For Standby Use(IU)



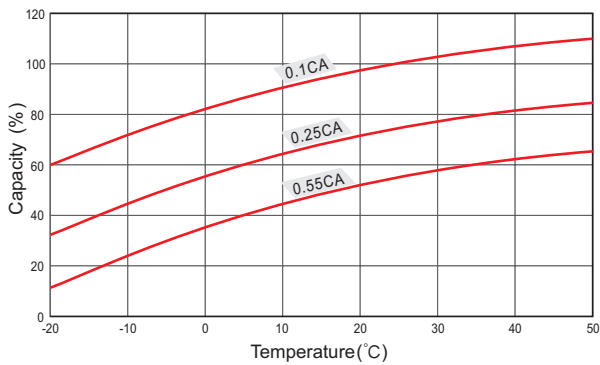
## Cycle Life In Relation To Depth Of Discharge



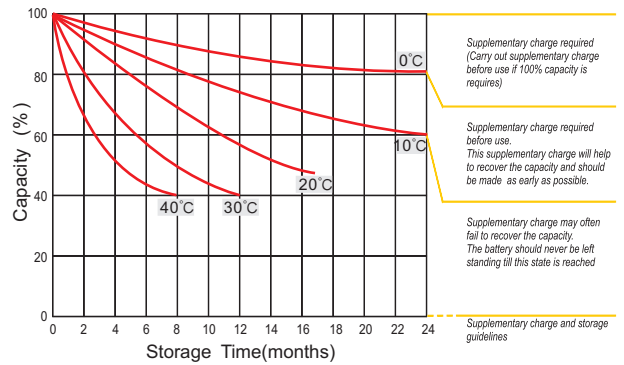
## Relationship Between Charging Voltage And Temperature



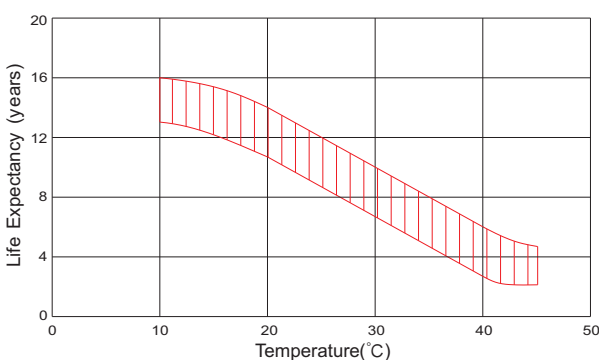
## Temperature Effects On Capacity



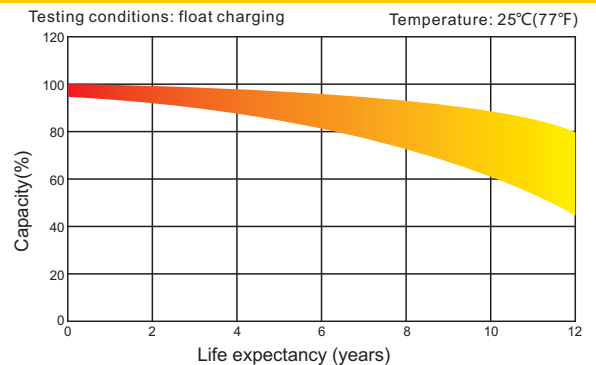
## Storage Characteristics



## Effect Of Temperature On Long Term Life



## 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.