

# FT12-160G(12V160Ah)

**RITAR®**

## Specification

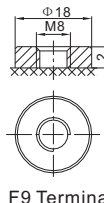
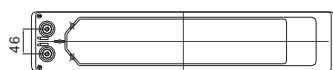
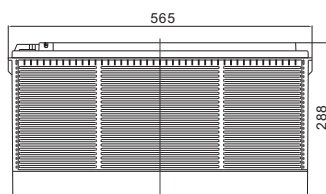
Cells Per Unit	6
Voltage Per Unit	12
Capacity	160Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 47.0 Kg (Tolerance ± 1.5%)
Internal Resistance	Approx. 5.8 mΩ
Terminal	F9(M8)
Max. Discharge Current	1600A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	30.0 A
Reference Capacity	C3 109.2AH C5 121.0AH C10 139.0AH C20 160.0AH
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: -40°C~60°C Charge: -20°C~50°C Storage: -40°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.



FTG (Deep Cycle GEL) series is pure GEL battery with 15 years floating design life, it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented Gel electrolyte, the FTG series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and can deliver 450 cycles at 100% DOD. Suitable for solar & wind system, CATV, marine, RV and deep discharge UPS, and telecommunication, etc.



## Dimensions



Length	565±2mm (22.2 inches)
Width	110±2mm (4.33 inches)
Height	288±2mm (11.3 inches)
Total Height	288±2mm (11.3 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

F9 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	218.9	146.7	89.4	53.5	37.0	30.3	24.8	17.1	14.5	8.80
1.65V	214.4	145.4	89.0	53.1	36.8	30.2	24.7	17.0	14.3	8.48
1.70V	211.1	144.5	88.2	52.7	36.6	30.0	24.5	16.8	14.2	8.24
1.75V	203.3	142.3	87.4	52.3	36.4	29.8	24.2	16.7	14.0	8.00
1.80V	189.6	137.4	85.3	51.4	35.4	29.1	23.8	16.4	13.9	7.52
1.85V	172.0	129.9	81.0	49.1	33.9	27.6	22.8	15.7	13.5	7.20

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

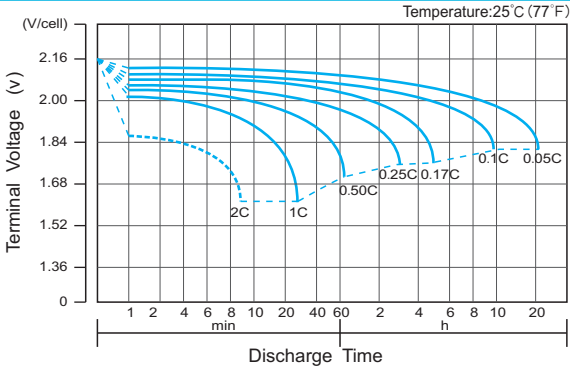
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	401	279	172	105	73.4	60.2	49.3	34.0	28.8	15.6
1.65V	395	276	172	105	73.4	60.2	49.2	33.9	28.6	15.3
1.70V	390	276	171	104	73.1	60.0	49.0	33.6	28.3	15.0
1.75V	377	272	169	103	72.8	59.5	48.5	33.4	28.1	14.7
1.80V	352	264	166	102	70.8	58.1	47.6	32.8	27.8	14.4
1.85V	321	250	159	98.1	67.7	55.3	45.5	31.4	27.0	13.6

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

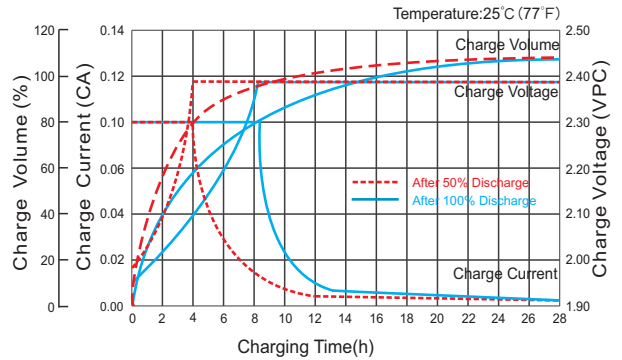
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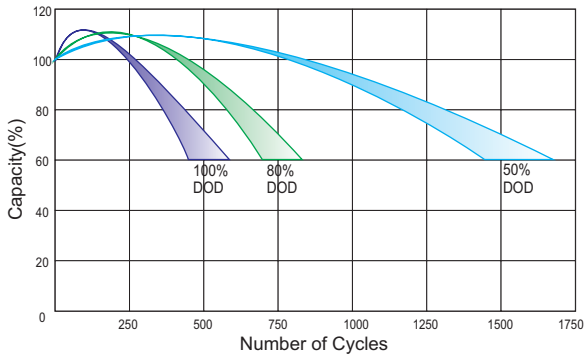
## Discharge Characteristics Curve



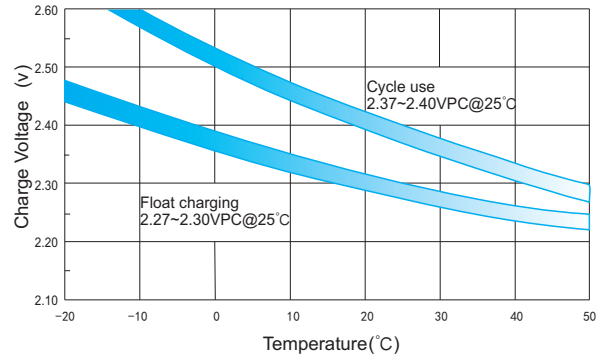
## Charge Characteristic Curve for Cycle Use(IU)



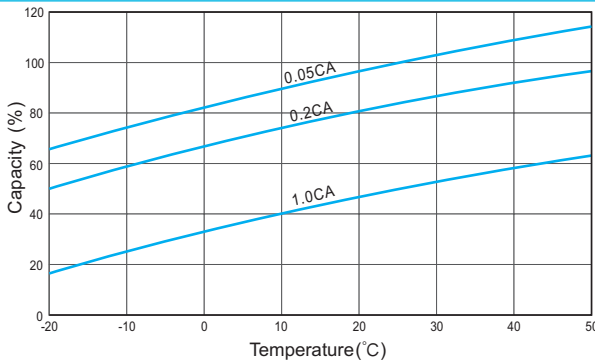
## Cycle Life in Relation to Depth of Discharge



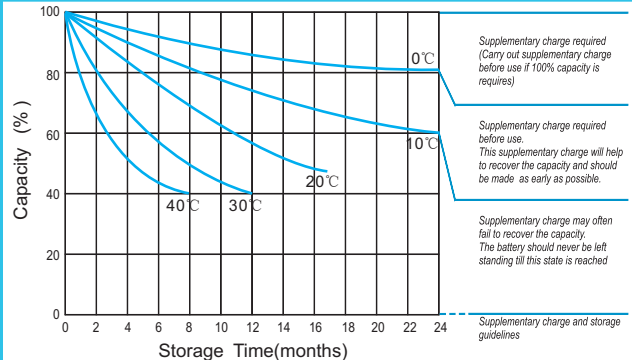
## Relationship Between Charging Voltage and Temperature



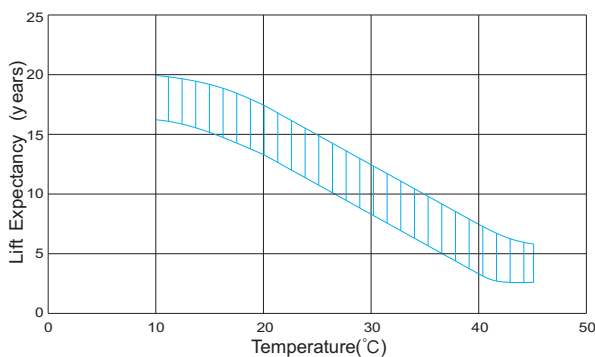
## Temperature Effects on Capacity



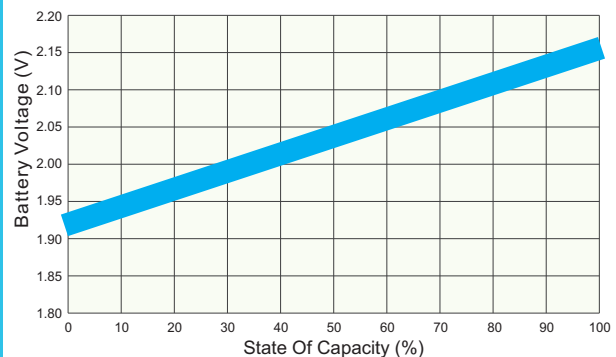
## Storage Characteristics



## 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)