

# DG12-180(12V180Ah)



## Specification

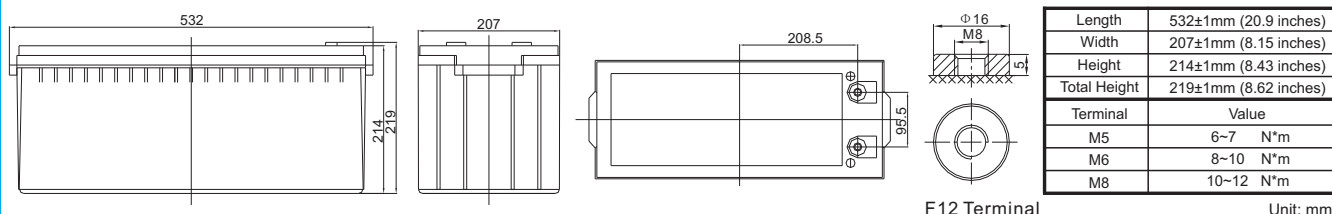
Cells Per Unit	6
Voltage Per Unit	12
Capacity	180Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 53.0 Kg (Tolerance ± 1.5%)
Internal Resistance	Approx. 5.5 mΩ
Terminal	F16(M8)/F12(M8)
Max. Discharge Current	1800A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	36.0A
Reference Capacity	C3 123.0AH C5 136.5AH C10 156.0AH 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: -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.



DG (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 DG 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



### Constant Current Discharge Characteristics : A(25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	306.8	246.3	165.0	100.6	60.2	41.6	34.1	27.9	19.2	16.3	9.90
1.65V	291.9	241.2	163.6	100.2	59.8	41.5	33.9	27.8	19.1	16.1	9.54
1.70V	281.6	237.4	162.6	99.2	59.3	41.1	33.8	27.6	18.9	15.9	9.27
1.75V	263.0	228.7	160.1	98.3	58.8	41.0	33.5	27.3	18.8	15.8	9.00
1.80V	242.6	213.3	154.5	96.0	57.8	39.9	32.7	26.8	18.4	15.6	8.46
1.85V	219.3	193.5	146.1	91.2	55.2	38.1	31.1	25.6	17.7	15.2	8.10

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

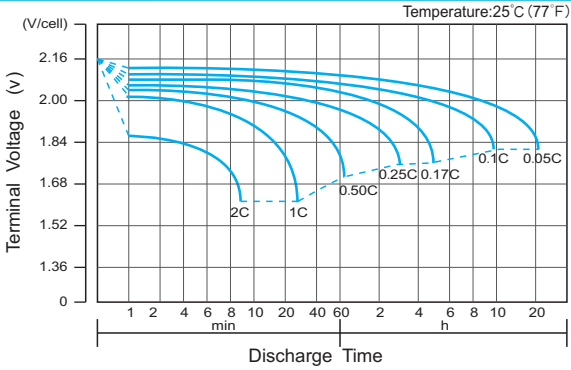
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	545	452	314	194	118	82.6	67.8	55.5	38.3	32.4	17.5
1.65V	528	444	310	193	118	82.6	67.7	55.4	38.1	32.2	17.2
1.70V	514	439	311	192	117	82.2	67.5	55.2	37.8	31.9	16.9
1.75V	484	424	307	190	116	81.9	66.9	54.5	37.5	31.6	16.6
1.80V	452	396	297	187	115	79.7	65.4	53.5	36.9	31.3	16.2
1.85V	413	361	281	179	110	76.2	62.2	51.2	35.3	30.3	15.3

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

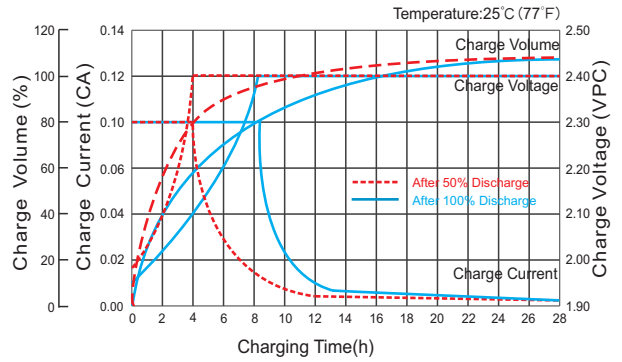
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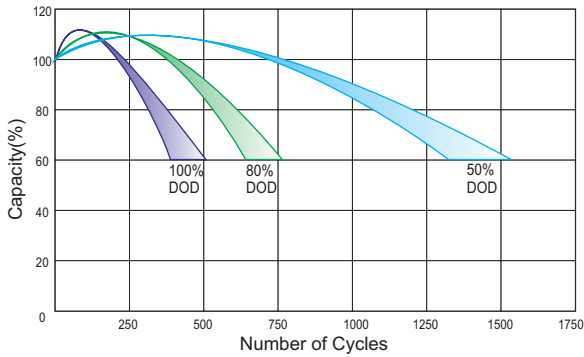
## Discharge Characteristics Curve



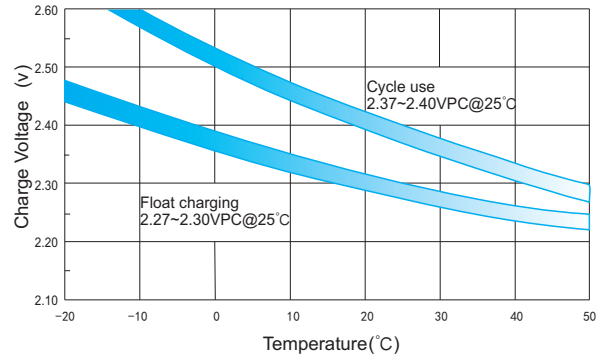
## Charge Characteristic Curve for Cycle Use(IU)



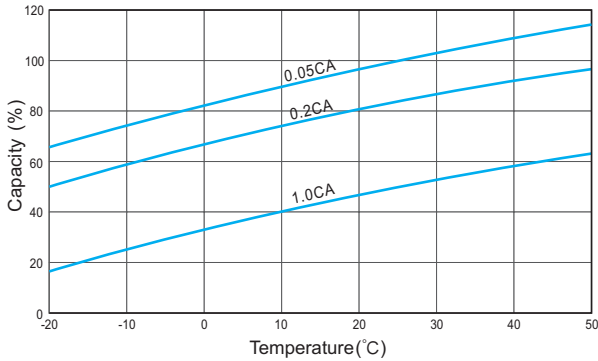
## Cycle Life in Relation to Depth of Discharge



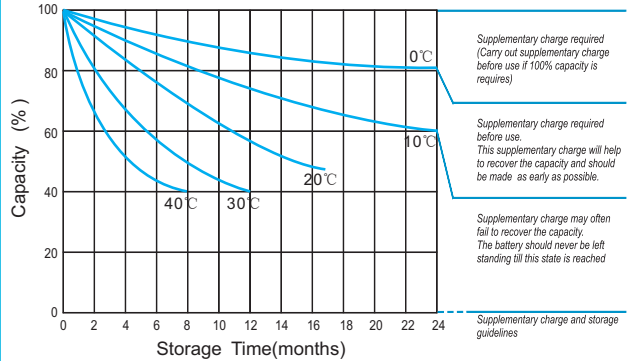
## Relationship Between Charging Voltage and Temperature



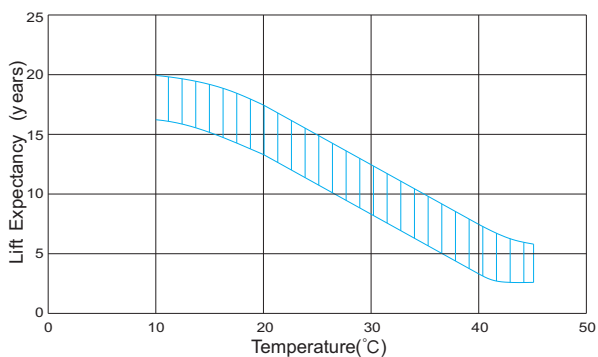
## Temperature Effects on Capacity



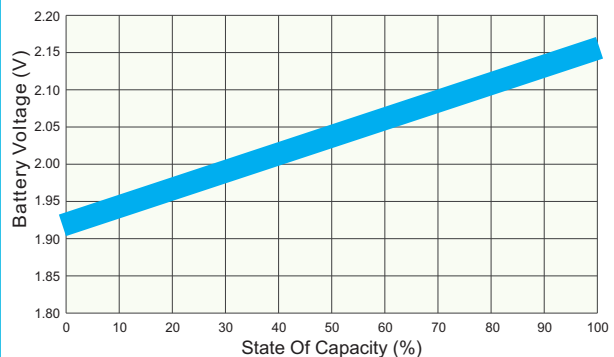
## Storage Characteristics



## 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.**  
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[www.MooreU.com](http://www.MooreU.com)