

# DG12-65(12V65Ah)



## Specification

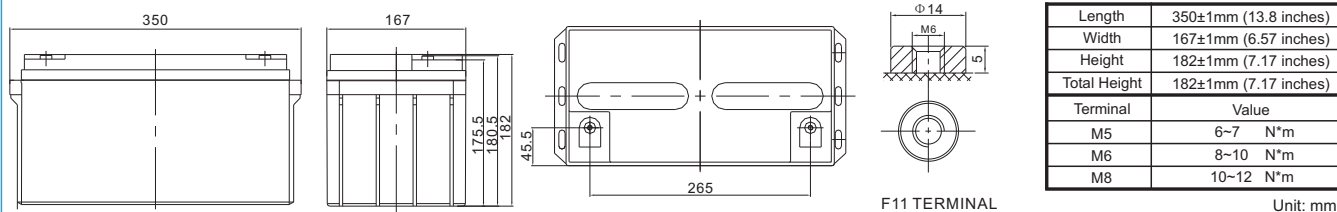


DG (Deep Cycle GEL ) series is pure GEL battery with 15 years floating design life , it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented Gel electrolyte, the DG series offers excellent recovery capability after 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.



<b>Cells Per Unit</b>	6
<b>Voltage Per Unit</b>	12
<b>Capacity</b>	65Ah@20hr-rate to 1.75V per cell @25°C
<b>Weight</b>	Approx. 21.0 Kg (Tolerance ±2%)
<b>Internal Resistance</b>	Approx. 8mΩ
<b>Terminal</b>	F5(M8)/F11 (M6)
<b>Max. Discharge Current</b>	650A (5 sec)
<b>Design Life</b>	15 years (floating charge)
<b>Maximum Charging Current</b>	13A
<b>Reference Capacity</b>	C3 44.4AH C5 51.0AH C10 57.0AH C20 65.0AH
<b>Float Charging Voltage</b>	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
<b>Cycle Use Voltage</b>	14.2 V~14.4 V @ 25°C Temperature Compensation: -4mV/°C/Cell
<b>Operating Temperature Range</b>	Discharge: -40°C~60°C Charge: -20°C~50°C Storage: -40°C~60°C
<b>Normal Operating Temperature Range</b>	25°C ±5°C
<b>Self Discharge</b>	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.
<b>Container Material</b>	A.B.S. UL94-HB, UL94-V0 Optional.

## Dimensions



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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	120.5	94.3	62.0	36.3	21.7	15.0	12.4	10.5	7.15	5.93	3.58
1.65V	114.6	92.3	61.0	36.2	21.6	14.9	12.4	10.4	7.09	5.87	3.45
1.70V	110.6	90.9	60.4	35.8	21.4	14.8	12.3	10.3	7.03	5.81	3.35
1.75V	103.3	87.6	60.6	35.5	21.2	14.8	12.2	10.2	6.97	5.76	3.25
1.80V	95.27	81.7	60.1	34.7	20.9	14.4	11.9	10.0	6.86	5.70	3.06
1.85V	86.13	74.1	56.8	32.9	19.9	13.7	11.3	9.60	6.57	5.53	2.93

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

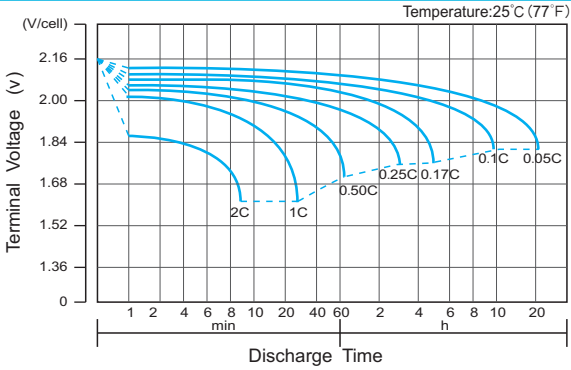
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	214	171	116	70.0	42.7	29.8	24.7	20.8	14.2	11.8	6.32
1.65V	207	169	115	69.8	42.5	29.8	24.7	20.8	14.2	11.7	6.21
1.70V	202	167	115	69.3	42.2	29.6	24.6	20.7	14.1	11.6	6.10
1.75V	190	161	115	68.6	41.9	29.5	24.4	20.4	13.9	11.5	5.98
1.80V	177	150	114	67.4	41.4	28.7	23.8	20.1	13.7	11.4	5.87
1.85V	162	137	109	64.5	39.8	27.5	22.7	19.2	13.1	11.1	5.52

(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)



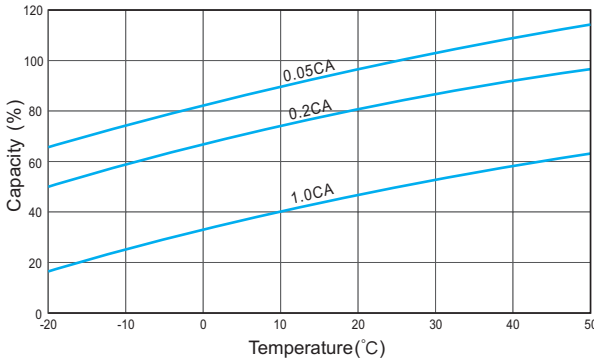
## Cycle Life in Relation to Depth of Discharge



## Relationship Between Charging Voltage and Temperature



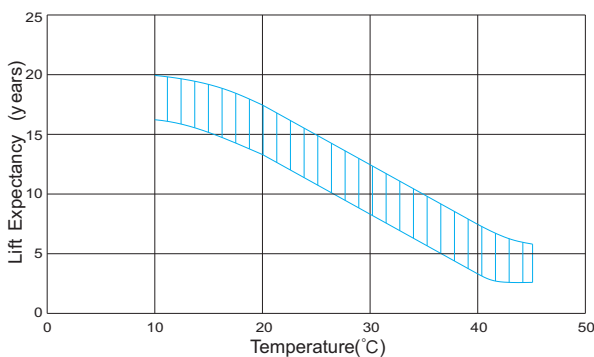
## Temperature Effects on Capacity



## Storage Characteristics



## Effect of Temperature on Long Term Life



## Relationship of OCV And State of Charge(20°C)

