

DG12-85(12V85Ah)



Specification

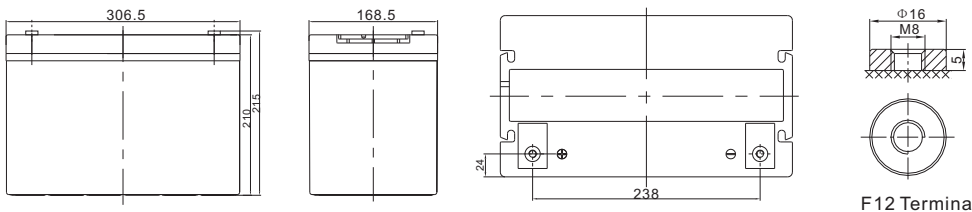
Cells Per Unit	6
Voltage Per Unit	12
Capacity	85Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 26.0 Kg (Tolerance ±2%)
Internal Resistance	Approx. 6mΩ
Terminal	F15(M6)/F11 (M6)
Max. Discharge Current	850A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	17A
Reference Capacity	C3 57.9AH C5 67.0AH C10 74.6AH C20 85.0AH
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 charge 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



Length	306.5±1mm (12.1 inches)
Width	168.5±1mm (6.63 inches)
Height	210±1mm (8.27 inches)
Total Height	215±1mm (8.46 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

F 12 Terminal

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	157.6	123.3	81.1	47.5	28.4	19.6	16.3	13.7	9.35	7.75	4.68
1.65V	149.9	120.8	79.7	47.3	28.2	19.5	16.2	13.6	9.27	7.68	4.51
1.70V	144.6	118.9	79.0	46.9	28.0	19.4	16.1	13.5	9.20	7.60	4.38
1.75V	135.0	114.5	79.2	46.4	27.8	19.3	16.0	13.4	9.12	7.53	4.25
1.80V	124.6	106.8	78.6	45.3	27.3	18.8	15.6	13.1	8.97	7.46	4.00
1.85V	112.6	96.9	74.3	43.1	26.1	18.0	14.8	12.6	8.59	7.23	3.83

Constant Power Discharge Characteristics : WPC(25°C)

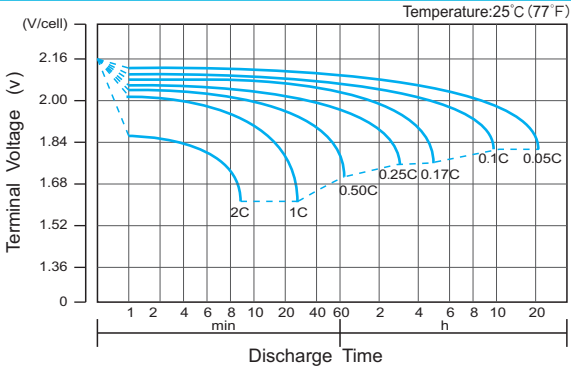
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	280	224	152	91.5	55.8	38.9	32.3	27.2	18.6	15.4	8.27
1.65V	271	220	150	91.3	55.5	38.9	32.2	27.1	18.5	15.3	8.12
1.70V	264	218	150	90.6	55.2	38.8	32.2	27.0	18.4	15.2	7.97
1.75V	249	210	151	89.8	54.8	38.6	31.9	26.7	18.2	15.1	7.82
1.80V	232	197	150	88.1	54.1	37.6	31.2	26.2	17.9	14.9	7.67
1.85V	212	179	142	84.3	52.1	35.9	29.6	25.1	17.2	14.5	7.22

(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)



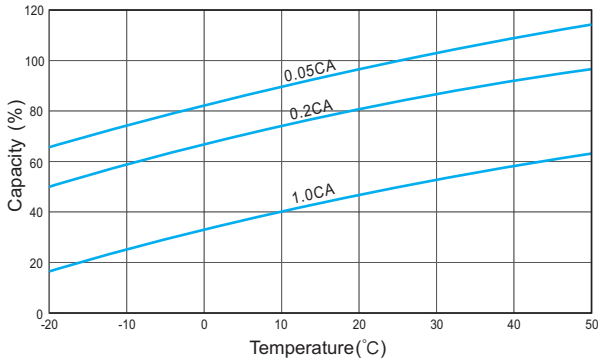
Cycle Life in Relation to Depth of Discharge



Relationship Between Charging Voltage and Temperature



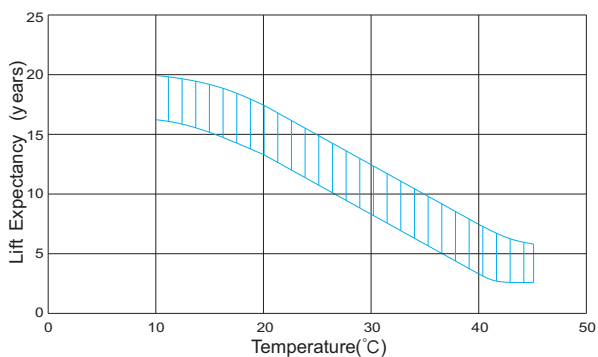
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



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

