

# DG12-70S(12V70Ah)



## Specification

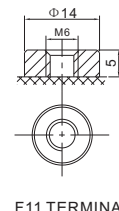
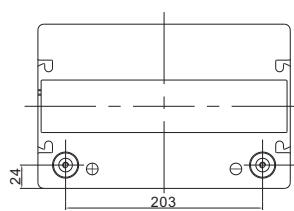
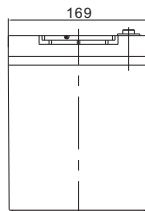
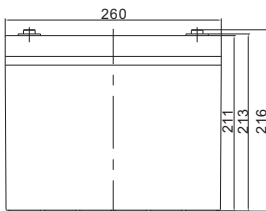
Cells Per Unit	6
Voltage Per Unit	12
Capacity	70Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 21.5 Kg (Tolerance ±2%)
Internal Resistance	Approx. 8mΩ
Terminal	F15(M6)/F11 (M6)
Max. Discharge Current	700A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	14A
Reference Capacity	C3 47.7AH C5 55.0AH C10 61.4AH C20 70.0AH
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	260±1mm (10.2 inches)
Width	169±1mm (6.65 inches)
Height	211±1mm (8.31 inches)
Total Height	216±1mm (8.50 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

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	125.9	99.5	66.1	38.7	23.4	16.2	13.4	11.3	7.70	6.39	3.85
1.65V	119.7	97.5	65.0	38.6	23.2	16.1	13.3	11.2	7.64	6.32	3.71
1.70V	115.5	95.9	64.4	38.2	23.0	16.0	13.3	11.1	7.57	6.26	3.61
1.75V	107.9	92.4	64.6	37.8	22.9	15.9	13.1	11.0	7.51	6.20	3.50
1.80V	99.5	86.2	64.1	36.9	22.5	15.5	12.8	10.8	7.39	6.14	3.29
1.85V	90.0	78.2	60.6	35.1	21.5	14.8	12.2	10.3	7.07	5.96	3.15

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

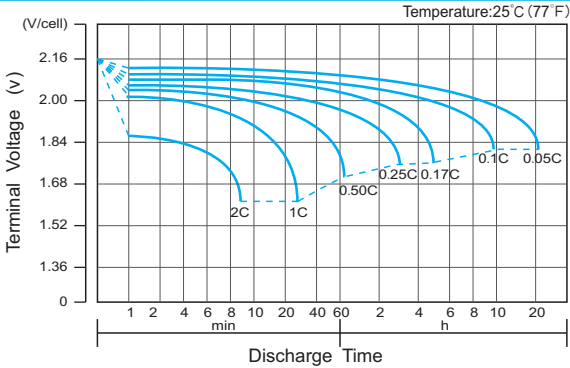
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	223	181	124	74.6	46.0	32.0	26.6	22.4	15.3	12.7	6.81
1.65V	217	178	122	74.4	45.7	32.1	26.6	22.4	15.2	12.6	6.69
1.70V	211	176	123	73.9	45.4	31.9	26.5	22.3	15.1	12.5	6.57
1.75V	199	170	123	73.2	45.1	31.8	26.3	22.0	15.0	12.4	6.44
1.80V	185	159	122	71.8	44.5	30.9	25.7	21.6	14.8	12.3	6.32
1.85V	169	145	116	68.8	42.9	29.6	24.4	20.7	14.1	11.9	5.95

(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)



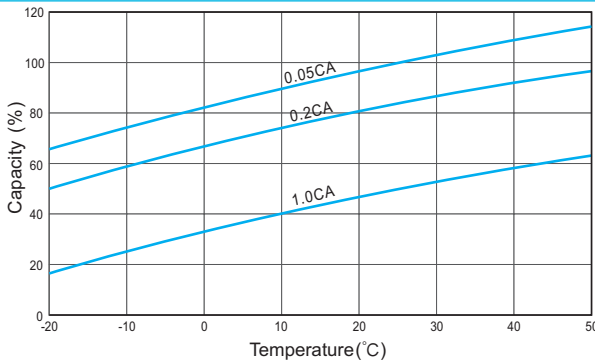
## Cycle Life in Relation to Depth of Discharge



## Relationship Between Charging Voltage and Temperature



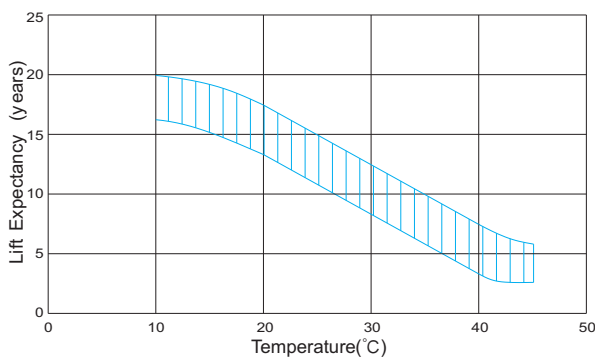
## Temperature Effects on Capacity



## Storage Characteristics



## Effect of Temperature on Long Term Life



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

