

# DG12-75S(12V75Ah)



## Specification

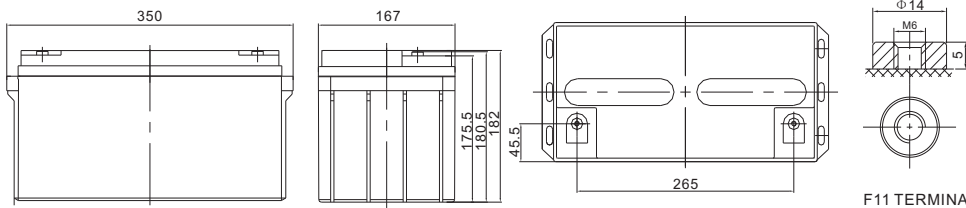
Cells Per Unit	6
Voltage Per Unit	12
Capacity	75Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 22.5Kg (Tolerance ±2%)
Internal Resistance	Approx. 7mΩ
Terminal	F5(M8)/F11 (M6)
Max. Discharge Current	750A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	15A
Reference Capacity	C3 51.0AH C5 59.0AH C10 65.8AH C20 75.0AH
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



Length	350±1mm (13.8 inches)
Width	167±1mm (6.57 inches)
Height	182±1mm (7.17 inches)
Total Height	182±1mm (7.17 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	134.8	106.6	70.8	41.5	25.1	17.3	14.3	12.1	8.25	6.84	4.13
1.65V	128.3	104.4	69.6	41.3	24.9	17.2	14.3	12.0	8.18	6.78	3.98
1.70V	123.8	102.8	69.0	40.9	24.7	17.1	14.2	11.9	8.11	6.71	3.86
1.75V	115.6	99.0	69.2	40.5	24.5	17.0	14.1	11.8	8.05	6.64	3.75
1.80V	106.6	92.3	68.7	39.6	24.1	16.6	13.7	11.6	7.91	6.58	3.53
1.85V	96.4	83.8	64.9	37.6	23.0	15.9	13.1	11.1	7.58	6.38	3.38

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

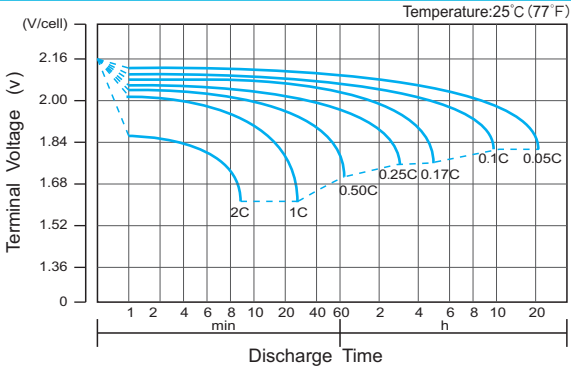
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	239	194	132	79.9	49.3	34.3	28.5	24.0	16.4	13.6	7.29
1.65V	232	191	131	79.7	49.0	34.4	28.5	23.9	16.3	13.5	7.17
1.70V	226	188	131	79.1	48.7	34.2	28.4	23.9	16.2	13.4	7.04
1.75V	213	182	132	78.4	48.3	34.1	28.1	23.6	16.1	13.3	6.90
1.80V	199	170	131	77.0	47.7	33.1	27.5	23.2	15.8	13.2	6.77
1.85V	182	155	124	73.7	46.0	31.7	26.2	22.2	15.2	12.8	6.37

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

# DG12-75S(12V75Ah)



## Discharge Characteristics Curve



## Charge Characteristic Curve for Cycle Use(IU)



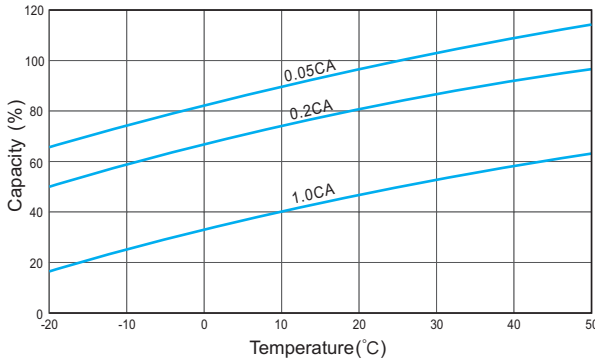
## Cycle Life in Relation to Depth of Discharge



## Relationship Between Charging Voltage and Temperature



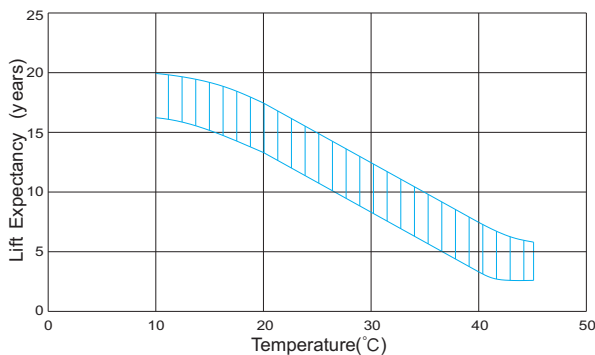
## Temperature Effects on Capacity



## Storage Characteristics



## Effect of Temperature on Long Term Life



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

