

DG12-55(12V55Ah)



Specification

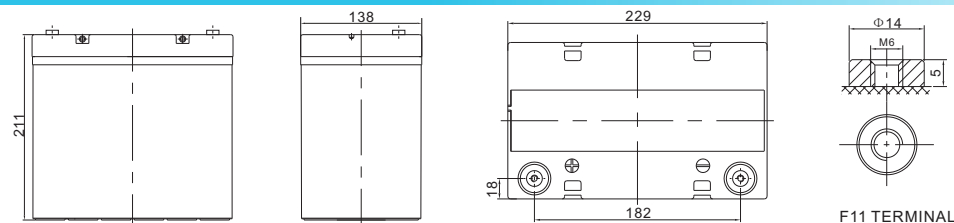


DG (Deep Cycle GEL) series is pure GEL battery with 15 years floating design life , it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented Gel electrolyte, the DG series offers excellent recovery capability after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



Cells Per Unit	6
Voltage Per Unit	12
Capacity	55Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 17.0 Kg (Tolerance ±3%)
Internal Resistance	Approx. 8.6mΩ
Terminal	F15(M6)/F11 (M6)
Max. Discharge Current	550A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	11A
Reference Capacity	C3 37.5AH C5 43.3AH C10 48.2AH C20 55.0AH
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.

Dimensions



Length	229±1mm (9.02 inches)
Width	138±1mm (5.43 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	101.9	79.77	52.46	30.74	18.39	12.70	10.52	8.85	6.05	5.02	3.03
1.65V	97.00	78.14	51.59	30.60	18.25	12.65	10.47	8.80	6.00	4.97	2.92
1.70V	93.58	76.91	51.13	30.32	18.11	12.55	10.42	8.75	5.95	4.92	2.83
1.75V	87.37	74.09	51.24	30.03	17.97	12.50	10.32	8.65	5.90	4.87	2.75
1.80V	80.61	69.09	50.85	29.33	17.65	12.16	10.08	8.49	5.80	4.82	2.59
1.85V	72.88	62.68	48.07	27.86	16.87	11.63	9.59	8.13	5.56	4.68	2.48

Constant Power Discharge Characteristics : WPC(25°C)

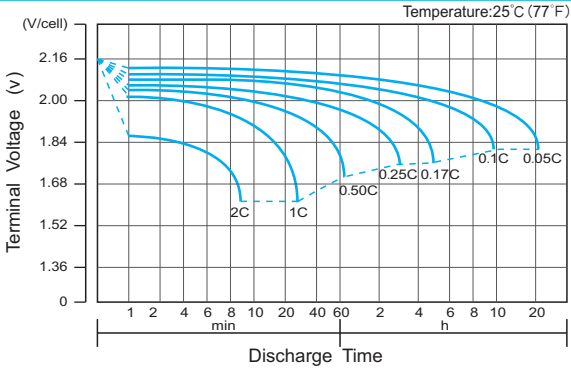
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	181	145	98.1	59.2	36.1	25.2	20.9	17.6	12.0	9.99	5.35
1.65V	175	143	97.0	59.1	35.9	25.2	20.9	17.6	12.0	9.93	5.26
1.70V	171	141	97.2	58.6	35.7	25.1	20.8	17.5	11.9	9.84	5.16
1.75V	161	136	97.5	58.1	35.5	25.0	20.6	17.3	11.8	9.74	5.06
1.80V	150	127	96.9	57.0	35.0	24.3	20.2	17.0	11.6	9.65	4.96
1.85V	137	116	92.1	54.6	33.7	23.3	19.2	16.3	11.1	9.36	4.67

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

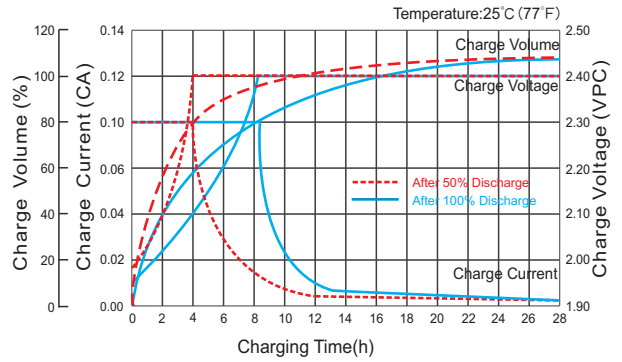
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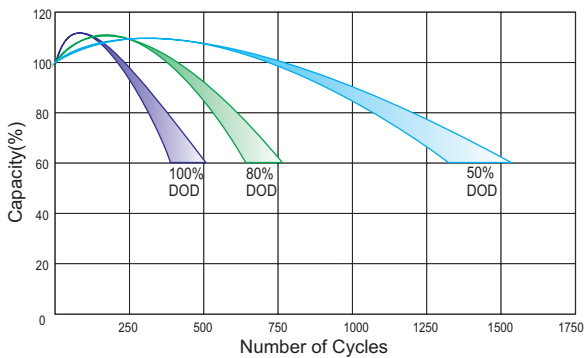
Discharge Characteristics Curve



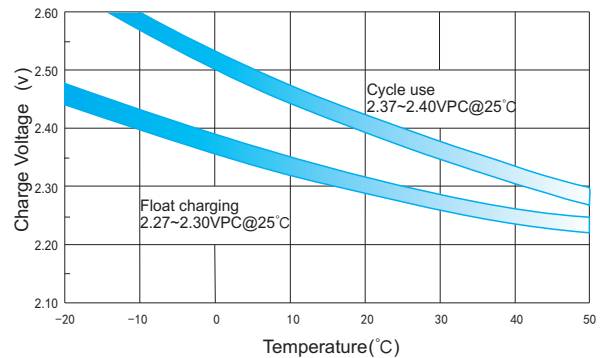
Charge Characteristic Curve for Cycle Use(IU)



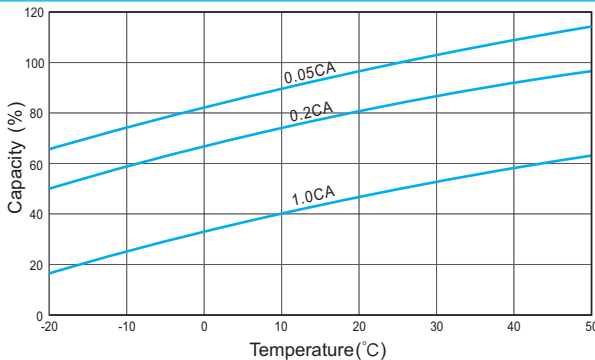
Cycle Life in Relation to Depth of Discharge



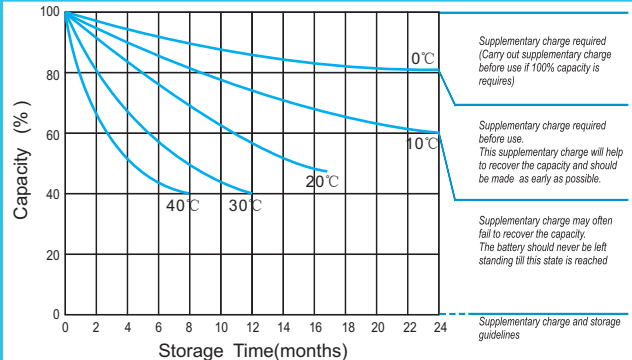
Relationship Between Charging Voltage and Temperature



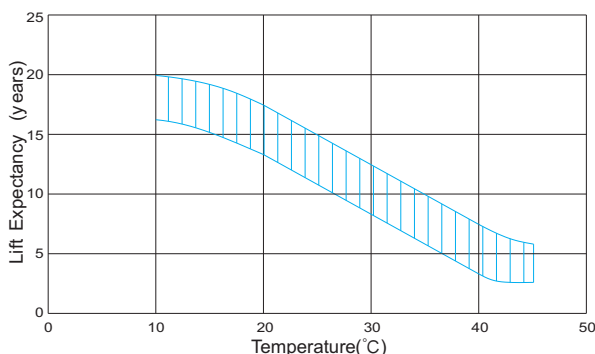
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



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

