

DG12-100A(12V100Ah)



Specification

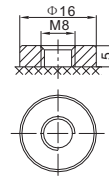
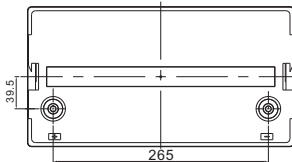
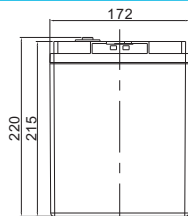
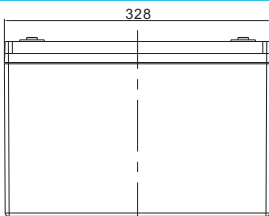
Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 29.0 Kg (Tolerance ±2%)
Internal Resistance	Approx. 5 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1000A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	30.0 A
Reference Capacity	C3 74.4AH C5 83.5AH C10 95.0AH C20 100.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°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-A series is hybrid GEL battery, 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-A 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



F12 Terminal

Length	328±2mm (12.9 inches)
Width	172±2mm (6.77 inches)
Height	215±2mm (8.46 inches)
Total Height	220±2mm (8.66 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	220.9	172.0	99.7	59.3	35.5	26.5	20.9	17.6	12.0	10.2	5.20
1.65V	213.5	166.8	97.6	58.2	34.9	26.1	20.6	17.4	11.9	10.1	5.15
1.70V	203.9	160.1	94.8	56.7	34.1	25.5	20.3	17.1	11.7	10.0	5.09
1.75V	191.1	151.0	91.1	54.6	33.0	24.8	19.7	16.7	11.5	9.77	5.00
1.80V	173.9	138.8	85.9	51.9	31.5	23.8	19.0	16.2	11.1	9.50	4.88
1.85V	150.4	121.9	78.6	47.9	29.3	22.3	17.9	15.4	10.6	9.12	4.70

Constant Power Discharge Characteristics : WPC(25°C)

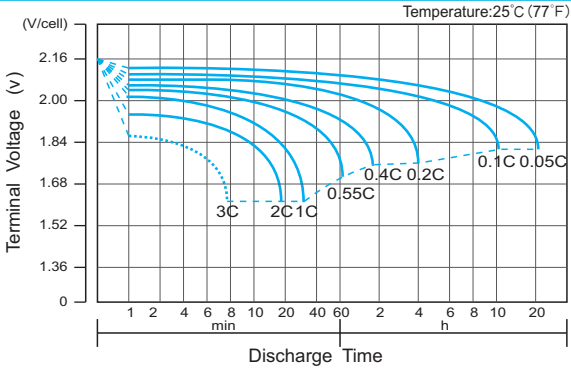
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	395	316	191	117	70.8	53.2	42.3	35.8	24.7	21.1	10.77
1.65V	392	313	189	116	70.1	52.7	41.9	35.5	24.5	20.9	10.69
1.70V	379	303	185	113	68.7	51.7	41.2	35.0	24.2	20.7	10.57
1.75V	361	290	180	110	66.8	50.5	40.3	34.3	23.7	20.3	10.40
1.80V	334	271	171	105	64.1	48.6	39.0	33.3	23.1	19.8	10.16
1.85V	294	241	158	97.2	60.0	45.8	36.9	31.7	22.1	19.0	9.80

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

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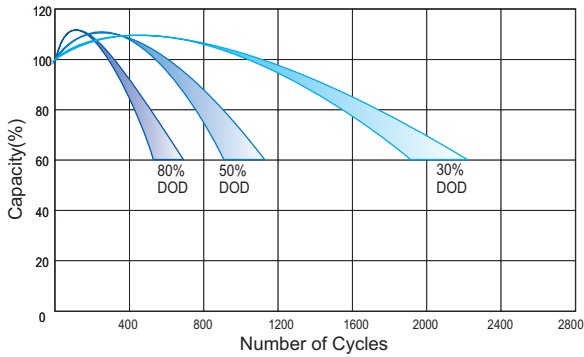
Discharge Characteristics Curve



Charge Characteristic Curve for Cycle Use(IU)



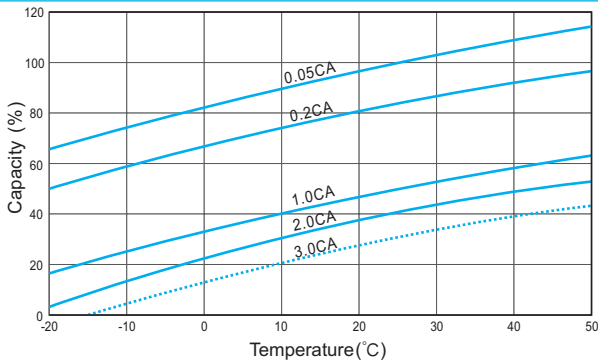
Cycle Life in Relation to Depth of Discharge



Relationship Between Charging Voltage and Temperature



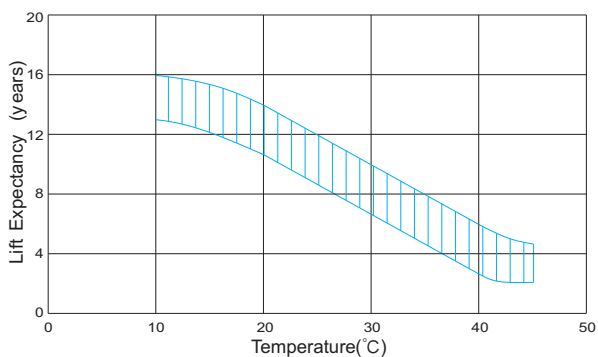
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



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



(Note) All above information shall be changed without prior notice, Ritar reserves the right to explain and update the latest information.