

DC12-150MG(12V150Ah)



Specification

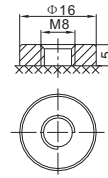
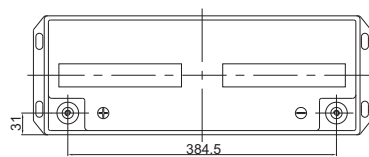
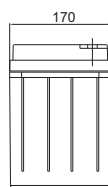
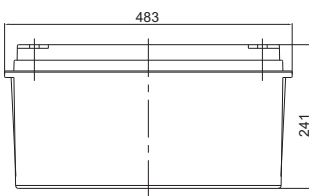
Cells Per Unit	6
Voltage Per Unit	12
Capacity	150Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 44.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 6.5 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1500A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	45.0 A
Reference Capacity	C3 114.7AH C5 129.2AH C10 142.9AH C20 150.0AH
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 charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



DC-MG (Deep Cycle GEL) series is hybrid GEL battery with 12 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-MG series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and can deliver 380 cycles at 100% DOD. Suitable for solar & wind system, CATV, marine, RV and deep discharge UPS, and telecommunication, etc.



Dimensions



F12 Terminal

Length	483±2mm (19.0 inches)
Width	170±2mm (6.69 inches)
Height	241±2mm (9.49 inches)
Total Height	241±2mm (9.49 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	327.8	263.0	161.7	91.10	54.25	42.26	33.15	28.20	18.09	15.00	7.774
1.65V	301.9	246.0	153.2	88.00	52.44	40.96	32.16	27.31	17.94	14.86	7.732
1.70V	279.8	231.3	145.3	85.18	51.04	39.23	31.17	26.57	17.66	14.57	7.635
1.75V	256.7	216.6	139.5	82.50	49.08	38.22	30.32	25.84	17.37	14.43	7.500
1.80V	233.6	198.4	134.4	78.83	47.40	37.50	29.61	25.50	17.09	14.29	7.427
1.85V	182.8	164.1	113.9	70.37	43.35	34.90	27.77	23.47	16.09	13.43	7.358

Constant Power Discharge Characteristics : WPC(25°C)

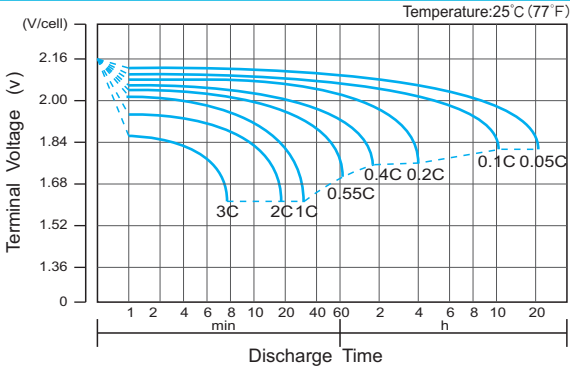
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	558.2	458.8	293.9	171.0	102.6	80.25	63.89	53.38	35.25	29.42	15.52
1.65V	537.5	446.1	287.0	168.1	99.81	78.25	62.33	51.93	34.97	29.13	15.38
1.70V	501.6	422.2	273.2	163.2	97.32	75.25	60.35	50.63	34.54	28.57	15.24
1.75V	466.8	398.5	263.6	158.7	93.86	73.39	58.93	49.48	33.98	28.29	14.97
1.80V	430.1	368.4	255.1	152.2	91.73	72.98	57.80	48.81	33.41	28.00	14.83
1.85V	341.2	309.5	218.8	136.7	84.46	68.08	54.40	45.15	31.58	26.45	14.69

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C₂₀ should reach 95% after the first cycle and 100% after the third cycle.

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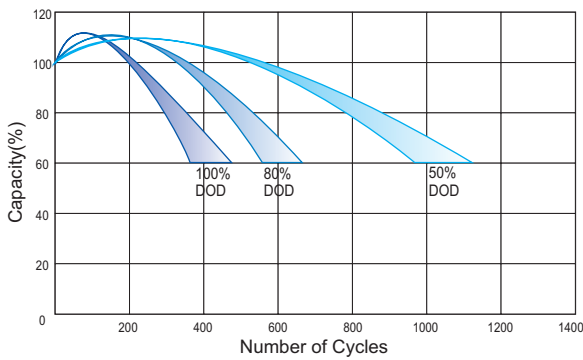
Discharge Characteristics Curve



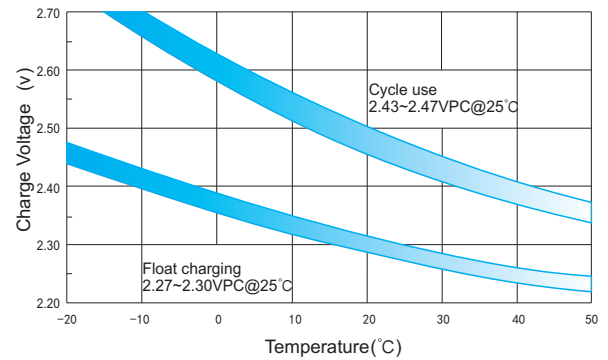
Charge Characteristic Curve for Cycle Use(IU)



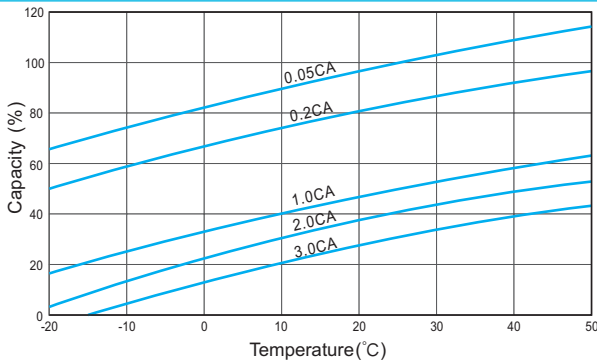
Cycle Life in Relation to Depth of Discharge



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.