DG2-250(2V250Ah)

RITAR®

Specification

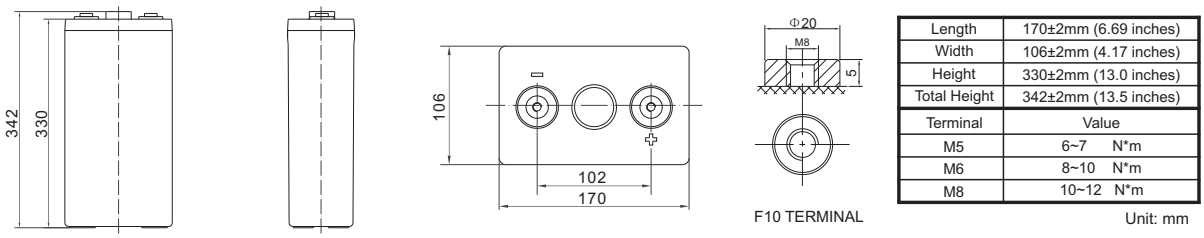
Cells Per Unit	1
Voltage Per Unit	2
Capacity	250Ah@10hr-rate to 1.80V per cell @25℃
Weight	Approx. 15.1 Kg (Tolerance±3.0%)
Internal Resistance	Approx. 0.86 mΩ
Terminal	F10(M8)
Max. Discharge Current	1250A (5 sec)
Design Life	20 years (floating charge)
Maximum Charging Current	50.0 A
Reference Capacity	C3 195.0AH C5 216.5AH C10 250.0AH C20 266.0AH
Float Charging Voltage	2.27 V~2.30 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	2.37 V~2.40 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -40℃~60℃ Charge: -20℃~50℃ Storage: -40℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 2% at 20℃.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 20 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 it can offers 2 times cyclic life than the standard series. It is suitable for solar & wind system, marine, deep discharge UPS etc.

ISO 9001 ISO 14001 OHSAS 18001

MH 28539

Dimensions



Length	170±2mm (6.69 inches)
Width	106±2mm (4.17 inches)
Height	330±2mm (13.0 inches)
Total Height	342±2mm (13.5 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℃)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.60V	315.8	244.5	163.5	100.3	73.3	56.3	45.0	40.8	33.3	26.0	14.0
1.65V	300.3	234.8	161.5	96.8	70.3	55.0	44.5	39.8	31.8	25.8	13.8
1.70V	280.0	221.3	158.5	95.3	68.5	53.8	43.8	38.8	31.3	25.5	13.5
1.75V	248.5	199.0	145.8	90.0	65.0	52.0	43.3	36.8	30.3	25.3	13.3
1.80V	214.0	181.3	137.5	85.8	62.5	50.0	42.5	36.3	29.8	25.0	13.0
1.85V	181.0	163.3	127.0	81.0	59.5	48.8	40.0	34.3	28.3	24.3	12.3

Constant Power Discharge Characteristics : WPC(25℃)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.60V	552.8	445.5	304.5	187.8	136.5	99.0	89.3	78.5	63.3	51.8	28.0
1.65V	538.3	443.0	302.8	185.0	133.8	97.5	88.5	77.5	62.8	51.3	27.5
1.70V	508.5	419.3	299.8	182.3	131.8	97.3	87.5	75.8	61.8	51.0	27.0
1.75V	452.8	378.0	281.3	172.8	127.0	92.3	86.3	72.0	59.8	50.5	26.5
1.80V	392.0	344.8	267.5	164.8	121.8	92.0	84.8	71.0	58.8	50.0	26.0
1.85V	334.3	310.8	248.0	156.0	116.0	85.3	80.0	67.3	55.8	48.5	24.5

(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 C_{10} should reach 95% after the first cycle and 100% after the third cycle.

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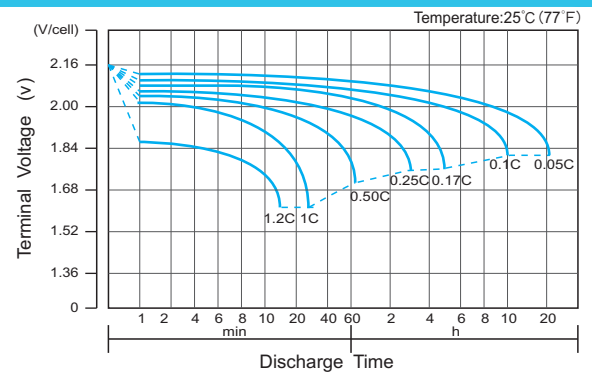
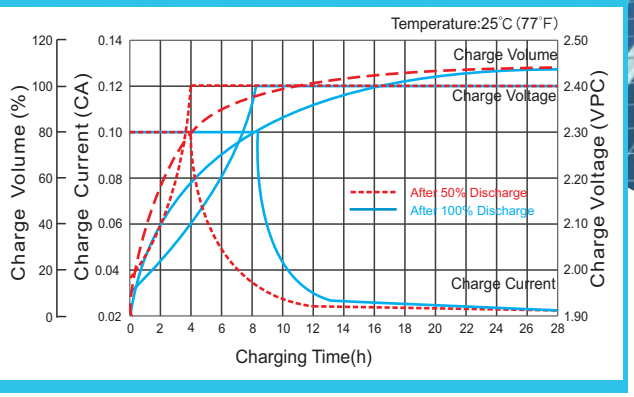
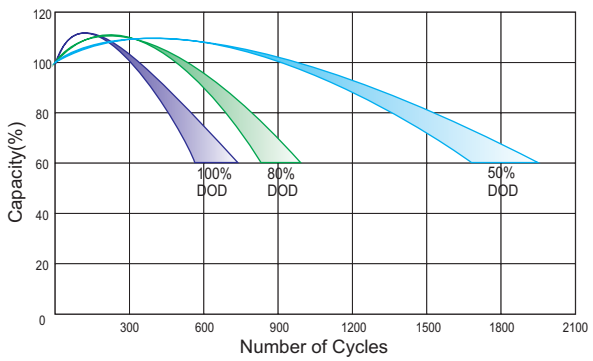
Discharge Characteristics Curve



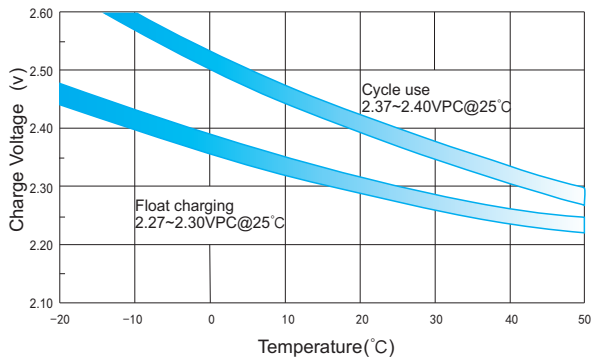
Charge Characteristic Curve for Cycle Use(IU)



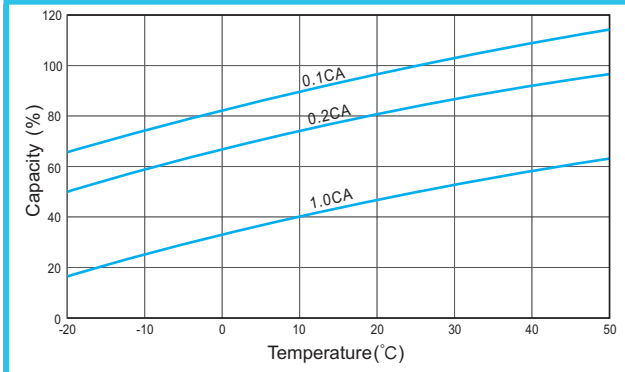
Cycle Life in Relation to Depth of Discharge



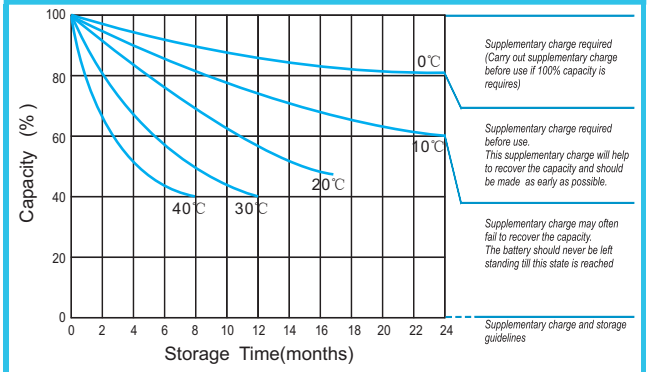
Relationship Between Charging Voltage and Temperature



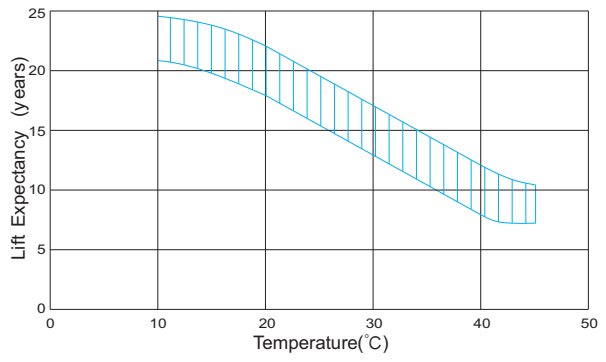
Temperature Effects on Capacity



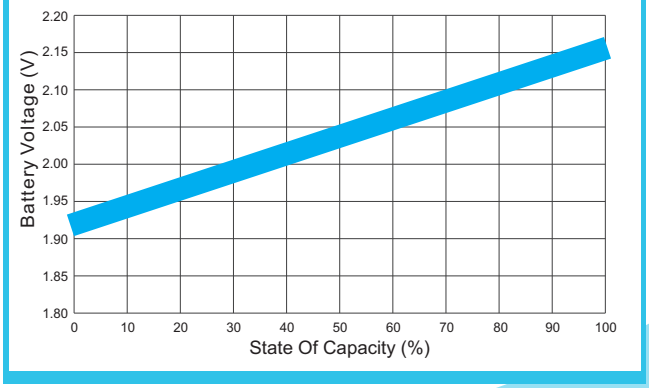
Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20℃)



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

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