

DG2-650(2V650Ah)



Specification

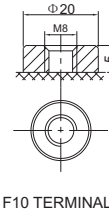
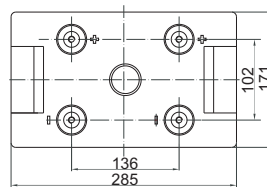
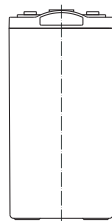
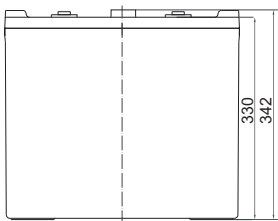


DG (Deep Cycle GEL) series is pure GEL battery with 20 years floating design life , it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented GEL electrolyte, the DG series offers excellent recovery capability after 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.



Cells Per Unit	1
Voltage Per Unit	2
Capacity	650Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 40.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 0.65 mΩ
Terminal	F10(M8)
Max. Discharge Current	2600A (5 sec)
Design Life	20 years (floating charge)
Maximum Charging Current	130.0 A
Reference Capacity	C3 507.0AH C5 562.5AH C10 650.0AH C20 690.0AH
Float Charging Voltage	2.27 V~2.30 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.37 V~2.40 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 2% at 20°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Dimensions



Length	285±2mm (11.2 inches)
Width	171±2mm (6.73 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°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.60V	821.0	635.7	425.1	260.7	190.5	146.3	117.0	106.0	86.5	67.6	36.4
1.65V	780.7	610.4	419.9	251.6	182.7	143.0	115.7	103.4	82.6	67.0	35.8
1.70V	728.0	575.3	412.1	247.7	178.1	139.8	113.8	100.8	81.3	66.3	35.1
1.75V	646.1	517.4	379.0	234.0	169.0	135.2	112.5	95.6	78.7	65.7	34.5
1.80V	556.4	471.3	357.5	223.0	162.5	130.0	110.5	94.3	77.4	65.0	33.8
1.85V	470.6	424.5	330.2	210.6	154.7	126.8	104.0	89.1	73.5	63.1	31.9

Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.60V	1437	1158	791.7	488.2	354.9	257.4	232.1	204.1	164.5	134.6	72.8
1.65V	1399	1152	787.2	481.0	347.8	253.5	230.1	201.5	163.2	133.3	71.5
1.70V	1322	1090	779.4	473.9	342.6	252.9	227.5	197.0	160.6	132.6	70.2
1.75V	1177	982.8	731.3	449.2	330.2	239.9	224.3	187.2	155.4	131.3	68.9
1.80V	1019	896.4	695.5	428.4	316.6	239.2	220.4	184.6	152.8	130.0	67.6
1.85V	869.1	808.0	644.8	405.6	301.6	221.7	208.0	174.9	145.0	126.1	63.7

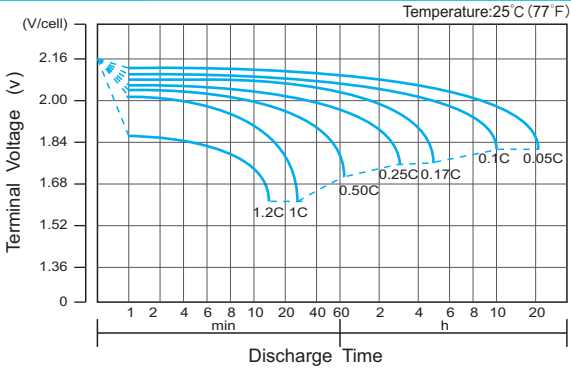
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

The battery must be fully charged before the capacity test. The C₁₀ should reach 95% after the first cycle and 100% after the third cycle.

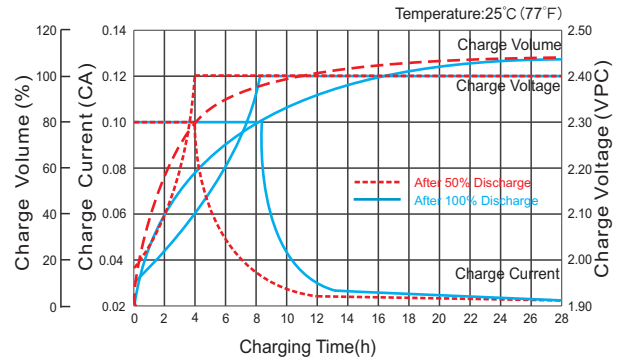
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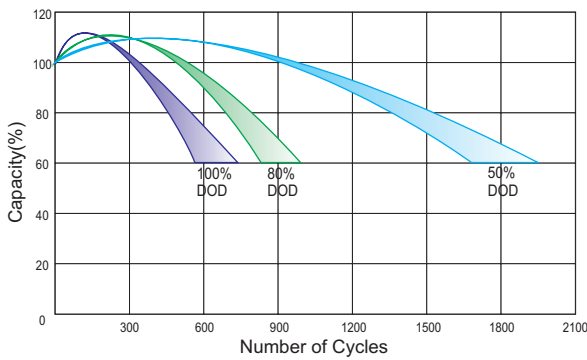
Discharge Characteristics Curve



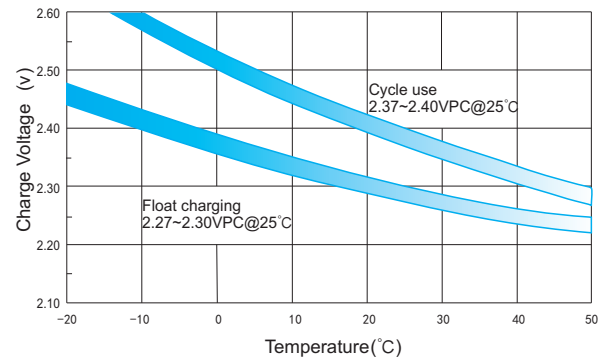
Charge Characteristic Curve for Cycle Use(IU)



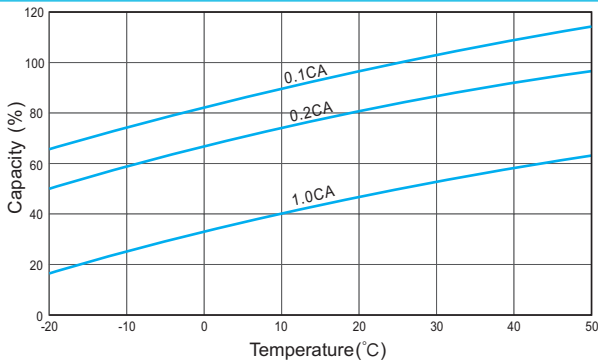
Cycle Life in Relation to Depth of Discharge



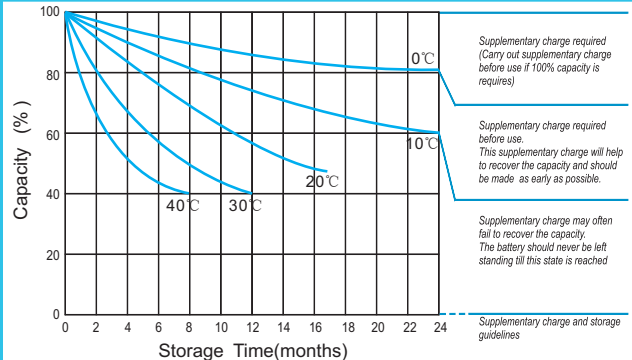
Relationship Between Charging Voltage and Temperature



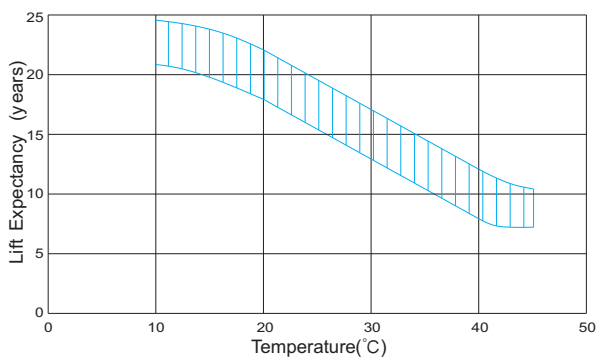
Temperature Effects on Capacity



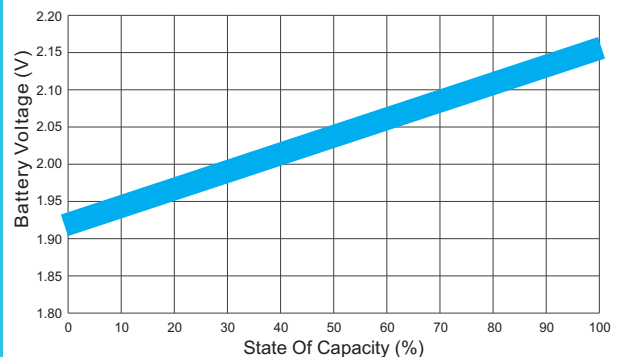
Storage Characteristics



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.