

# DG2-1200(2V1200Ah)



## Specification

Cells Per Unit	1
Voltage Per Unit	2
Capacity	1200Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 66.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 0.55 mΩ
Terminal	F10(M8)
Max. Discharge Current	4000A (5 sec)
Design Life	20 years (floating charge)
Maximum Charging Current	240.0 A
Reference Capacity	C3 936.0AH C5 1038.0AH C10 1200.0AH C20 1272.0AH
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.



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



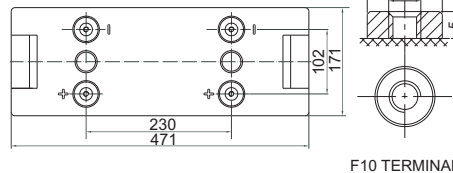
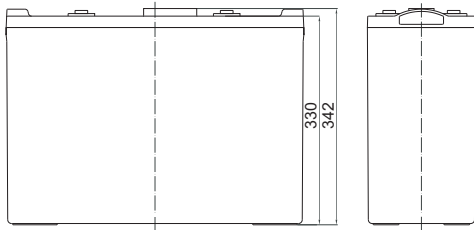
OHSAS 18001



MH 28539



## Dimensions



Length	471±2mm (18.5 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	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.60V	1174	784.8	481.2	351.6	270.0	216.0	195.6	159.6	124.8	67.2
1.65V	1127	775.2	464.4	337.2	264.0	213.6	190.8	152.4	123.6	66.0
1.70V	1062	760.8	457.2	328.8	258.0	210.0	186.0	150.0	122.4	64.8
1.75V	955.2	699.6	432.0	312.0	249.6	207.6	176.4	145.2	121.2	63.6
1.80V	870.0	660.0	411.6	300.0	240.0	204.0	174.0	142.8	120.0	62.4
1.85V	783.6	609.6	388.8	285.6	234.0	192.0	164.4	135.6	116.4	58.8

### Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.60V	2138	1462	901.2	655.2	475.2	428.4	376.8	303.6	248.4	134.4
1.65V	2126	1453	888.0	642.0	468.0	424.8	372.0	301.2	246.0	132.0
1.70V	2012	1439	874.8	632.4	466.8	420.0	363.6	296.4	244.8	129.6
1.75V	1814	1350	829.2	609.6	442.8	414.0	345.6	286.8	242.4	127.2
1.80V	1655	1284	790.8	584.4	441.6	406.8	340.8	282.0	240.0	124.8
1.85V	1492	1190	748.8	556.8	409.2	384.0	322.8	267.6	232.8	117.6

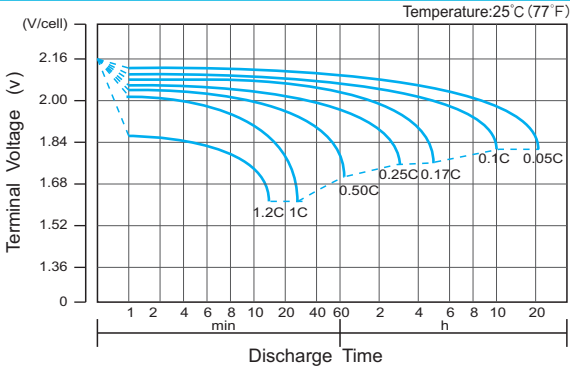
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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.

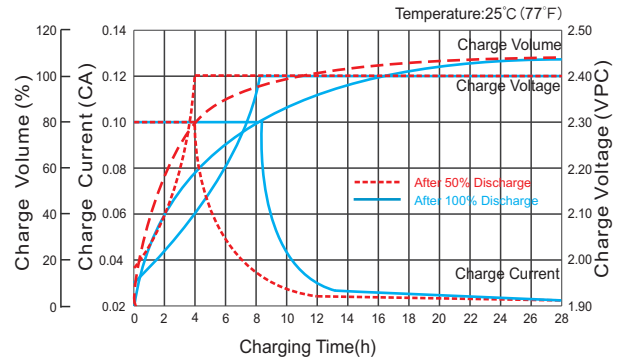
# DG2-1200(2V1200Ah)



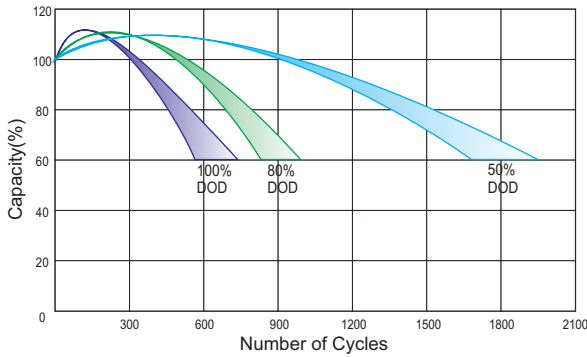
## Discharge Characteristics Curve



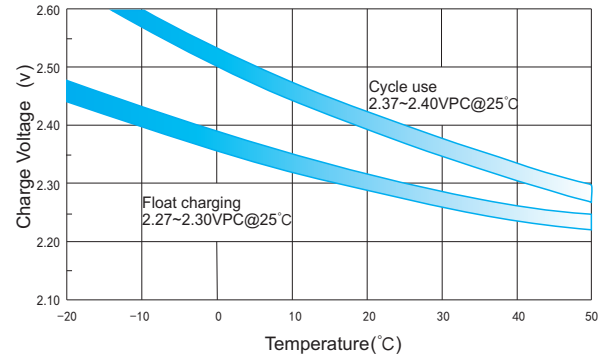
## Charge Characteristic Curve for Cycle Use(IU)



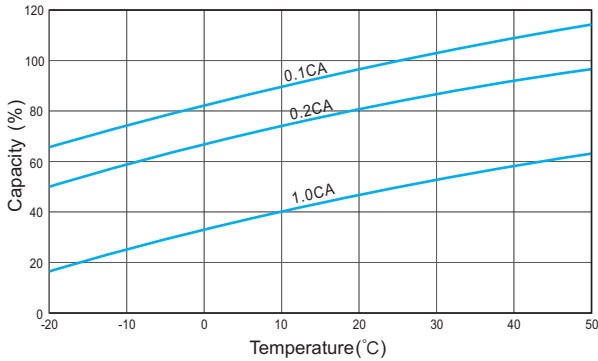
## Cycle Life in Relation to Depth of Discharge



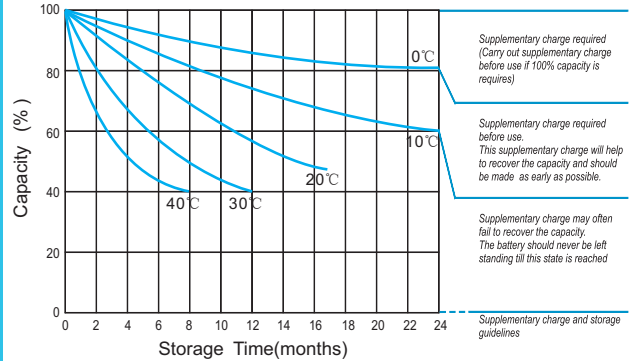
## Relationship Between Charging Voltage and Temperature



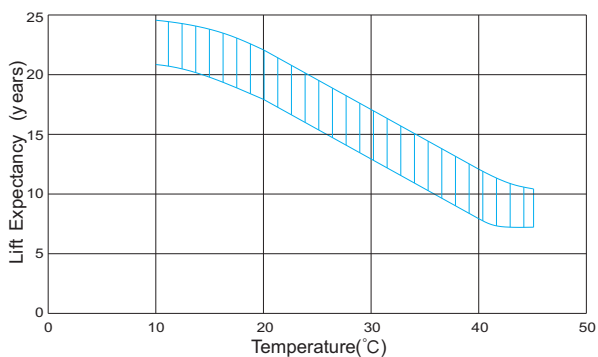
## Temperature Effects on Capacity



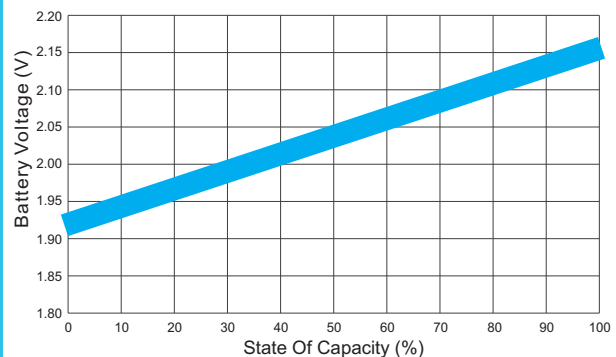
## Storage Characteristics



## 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.