

# DG2-1500(2V1500Ah)



## Specification

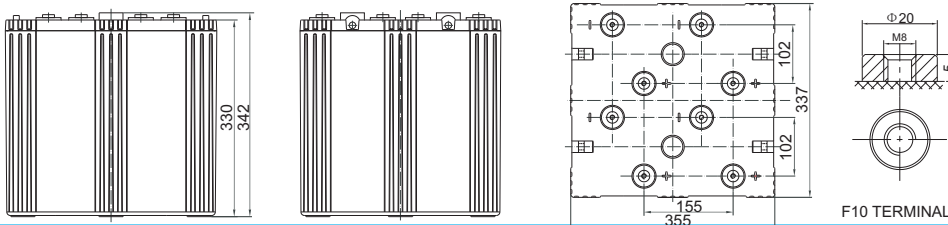
Cells Per Unit	1
Voltage Per Unit	2V
Capacity	1500Ah@20hour-rate to 1.75V per cell @25°C
Weight	Approx. 81.5 Kg (Tolerance ±5%)
Internal Resistance	≤0.52 mΩ (Full Charge Condition @25°C)
Terminal	Default F10(M8)
Max. Discharge Current	6000A (5 sec)
Design Life	20 years
Max. Charging Current	300.0 A
Reference Capacity	C <sub>3</sub> 1035.0Ah C <sub>5</sub> 1173.0Ah C <sub>10</sub> 1380.0Ah C <sub>20</sub> 1500.0Ah
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: 0°C~50°C Storage: -40°C~60°C
Normal Operating Temperature Range	25°C ±5°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) GEL 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 25°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.



## Dimensions



Length	355±2mm (14.0 inches)
Width	337±2mm (13.3 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	1364	851.4	553.4	404.3	310.5	248.4	224.9	183.5	143.5	79.2
1.65V	1310	841.0	534.1	387.8	303.6	245.6	219.4	175.3	142.1	77.8
1.70V	1235	825.4	525.8	378.1	296.7	241.5	213.9	172.5	140.8	76.4
1.75V	1110	759.0	496.8	358.8	287.0	238.7	202.9	167.0	139.4	75.0
1.80V	1011	716.0	473.3	345.0	276.0	234.6	200.1	164.2	138.0	73.6
1.85V	910.9	661.4	447.1	328.4	269.1	220.8	189.1	155.9	133.9	69.3

### Constant Power Discharge Characteristics : W/Cell (25°C)

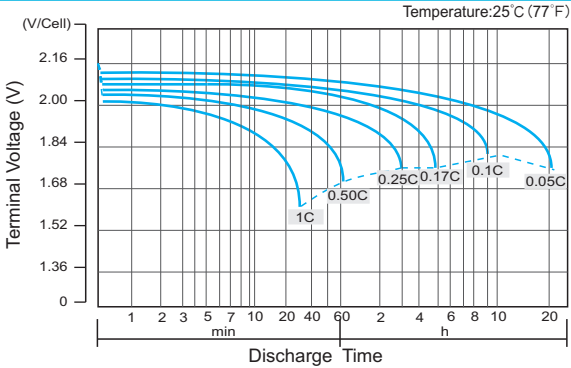
F. V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.60V	2404	1544	1038	770.7	596.4	479.5	436.0	357.7	280.7	156.3
1.65V	2339	1539	1007	742.0	585.3	475.8	426.6	342.6	278.7	153.8
1.70V	2233	1525	996.7	726.4	574.1	469.4	417.2	338.1	276.7	151.2
1.75V	2035	1415	946.6	691.9	557.4	465.6	396.9	328.2	274.7	148.6
1.80V	1877	1347	906.4	667.8	537.9	459.1	392.8	323.7	272.6	145.9
1.85V	1712	1255	860.6	638.2	526.4	433.6	372.3	308.3	265.1	137.7

(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 C<sub>20</sub> should reach 95% after the first cycle and 100% after the third cycle.

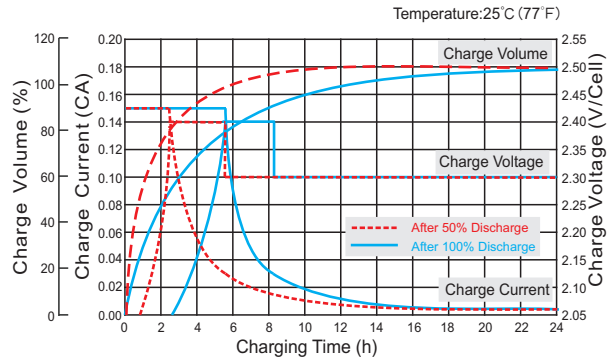
# DG2-1500(2V1500Ah)



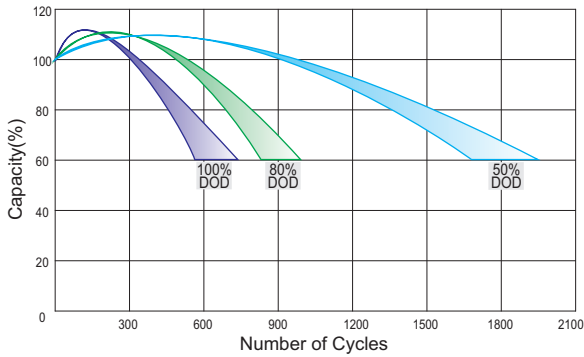
## Discharge Characteristics Curve



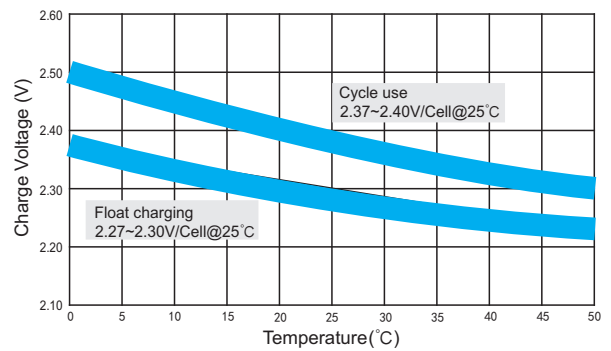
## Charge Characteristic Curve for Cycle Use(IUU)



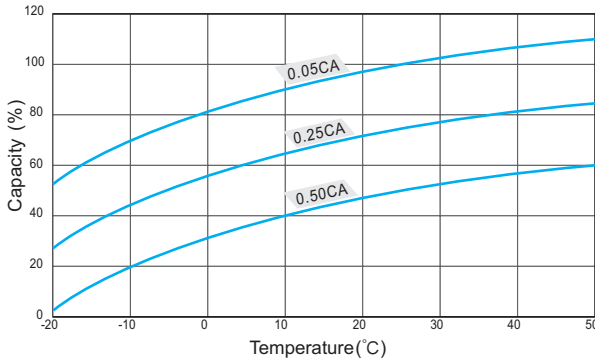
## Cycle Life in Relation to Depth of Discharge



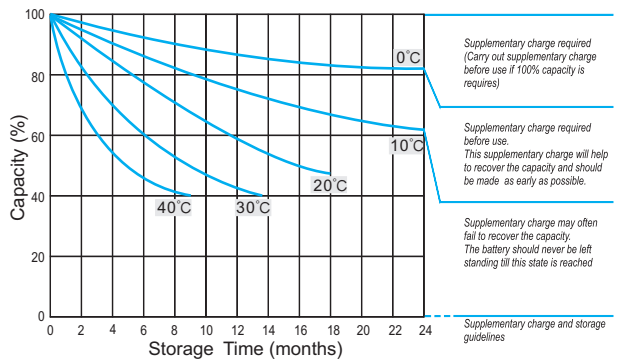
## Relationship Between Charging Voltage and Temperature



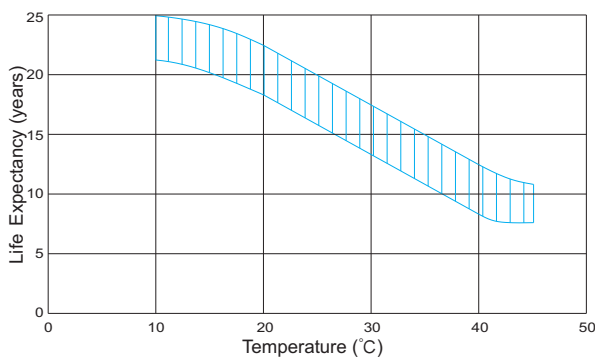
## Temperature Effects on Capacity



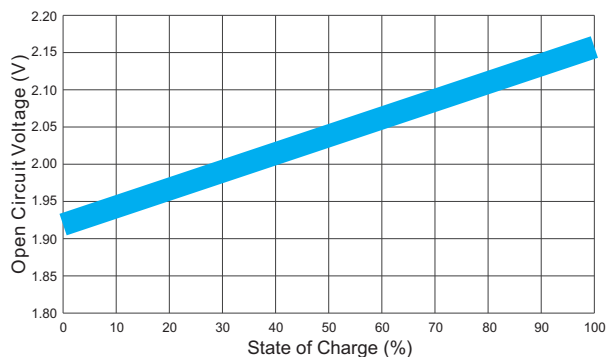
## Storage Characteristics



## 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.