

# DG12-200(12V200Ah)



## Specification

Cells Per Unit	6
Voltage Per Unit	12V
Capacity	200Ah@20hour-rate to 1.75V per cell @25°C
Weight	Approx. 59.0 Kg (Tolerance ±5%)
Internal Resistance	≤7.0 mΩ (Full Charge Condition @25°C)
Terminal	Default F10(M8), F16(M8)&L6 Optional
Max. Discharge Current	2000A (5 sec)
Design Life	15 years
Max. Charging Current	40.0 A

Reference Capacity	C <sub>20</sub> 200.0Ah
Float Charging Voltage	13.38 V~13.50 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Equalization Charging Voltage	13.80 V~14.10 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 15 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

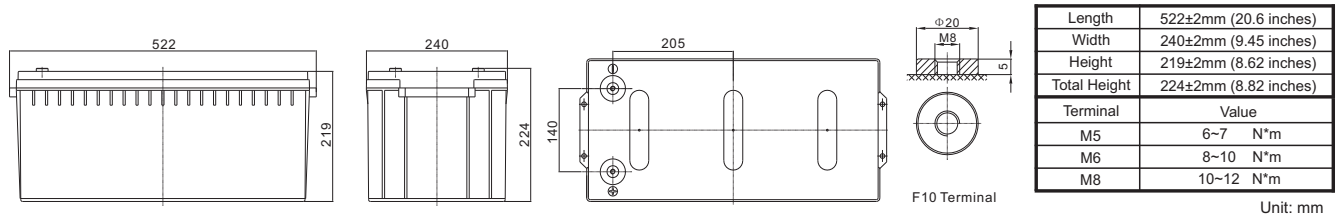
ISO 45001



MH 28539

BSTXD210316008519EC

## Dimensions



### Constant Current Discharge Characteristics : A(25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	327.4	265.5	174.2	108.6	66.4	49.7	39.7	33.3	22.5	18.6	10.4
1.65V	309.4	253.9	167.3	104.9	64.2	48.2	38.6	32.4	22.3	18.3	10.2
1.70V	284.9	237.8	159.9	101.5	62.1	46.9	37.6	31.6	21.9	18.1	10.1
1.75V	260.7	221.3	152.8	97.8	60.0	45.5	36.6	30.8	21.6	17.8	10.0
1.80V	236.0	204.3	146.1	94.0	57.8	44.1	35.6	30.0	21.2	17.6	9.90
1.85V	192.9	169.5	125.8	84.3	53.0	40.8	33.0	28.0	19.9	16.6	9.40

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

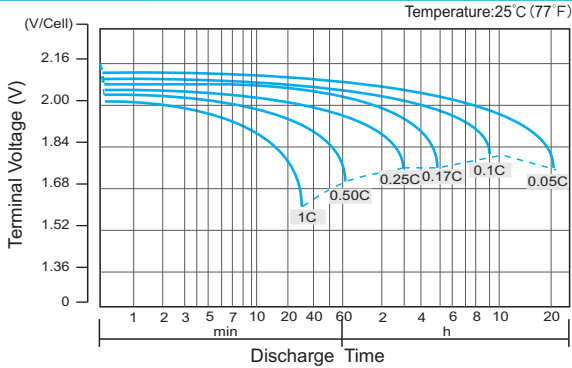
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	556.6	464.2	316.5	204.1	125.8	95.0	76.2	64.2	44.0	36.5	20.5
1.65V	529.6	446.2	306.4	198.5	122.4	92.7	74.4	62.8	43.5	36.1	20.2
1.70V	502.6	428.2	296.4	193.0	119.0	90.4	72.7	61.3	43.0	35.6	20.0
1.75V	468.3	404.2	286.2	187.1	115.4	88.0	71.1	60.0	42.5	35.2	19.8
1.80V	431.3	378.5	276.3	180.9	111.8	85.6	69.3	58.7	41.8	34.8	19.6
1.85V	358.8	318.6	240.4	163.3	103.0	79.5	64.6	54.9	39.4	32.8	18.6

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

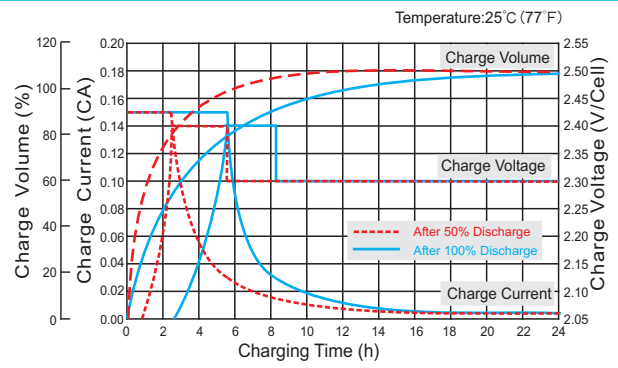
# DG12-200(12V200Ah)



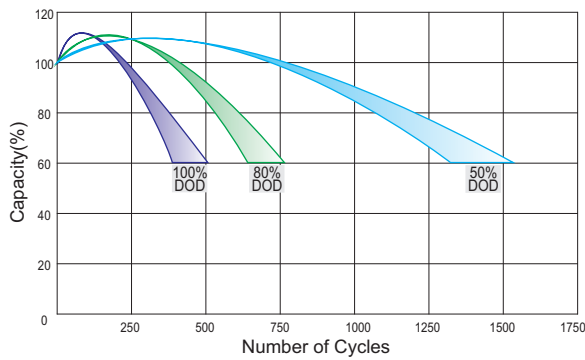
## Discharge Characteristics Curve



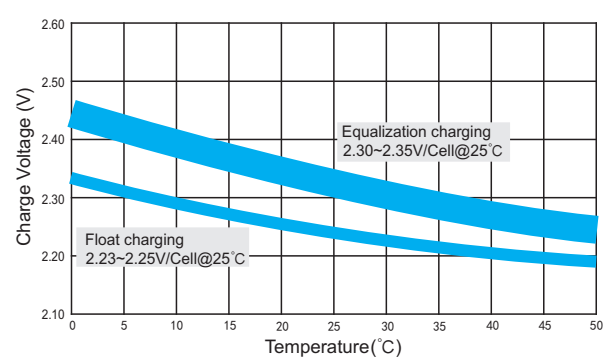
## Charge Characteristic Curve for Cycle Use(IUU)



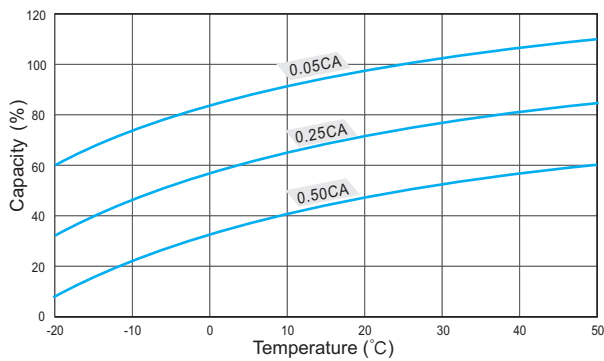
## Cycle Life in Relation to Depth of Discharge



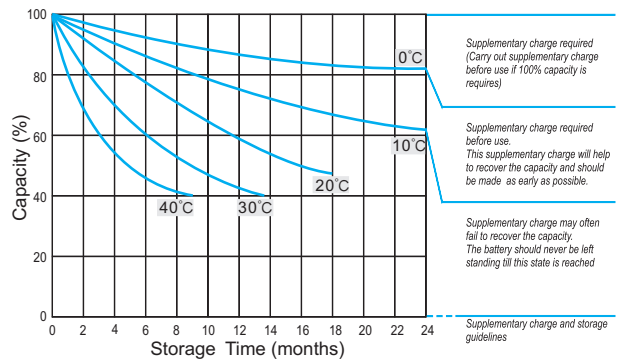
## Relationship Between Charging Voltage and Temperature



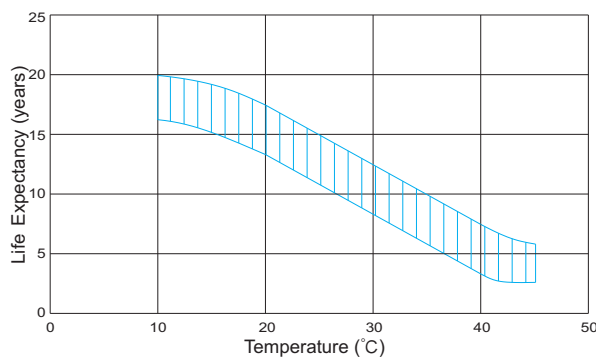
## Temperature Effects on Capacity



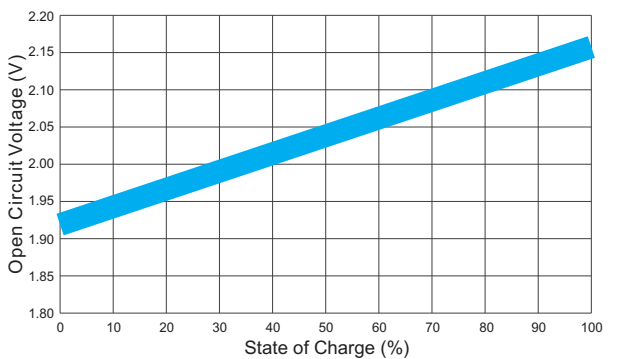
## Storage Characteristics



## 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.