

# DG12-230(12V230Ah)



## Specification

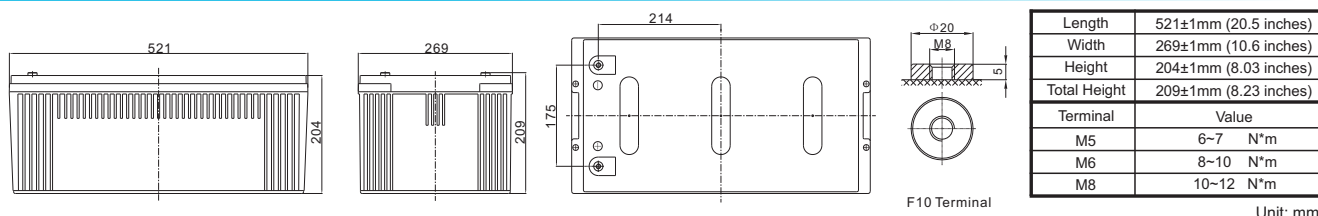
Cells Per Unit	6
Voltage Per Unit	12
Capacity	230Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 67.0 Kg (Tolerance ± 1.5%)
Internal Resistance	Approx. 6 mΩ
Terminal	F10 (M8)
Max. Discharge Current	2300A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	46.0A
Reference Capacity	C3 157.2AH C5 174.0AH C10 200.0AH C20 230.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V~14.4 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 3% 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 can deliver 450 cycles at 100% DOD. Suitable for solar & wind system, CATV, marine, RV and deep discharge UPS, and telecommunication, etc.



## Dimensions



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

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	314.7	210.9	128.6	76.9	53.2	43.6	35.7	24.6	20.8	12.7
1.65V	308.2	209.1	128.0	76.4	53.0	43.4	35.5	24.4	20.6	12.2
1.70V	303.4	207.8	126.8	75.8	52.6	43.2	35.3	24.2	20.4	11.8
1.75V	292.3	204.5	125.6	75.2	52.4	42.8	34.8	24.0	20.2	11.5
1.80V	272.5	197.4	122.6	73.8	50.9	41.8	34.2	23.6	20.0	10.8
1.85V	247.3	186.7	116.5	70.6	48.7	39.7	32.7	22.6	19.4	10.4

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

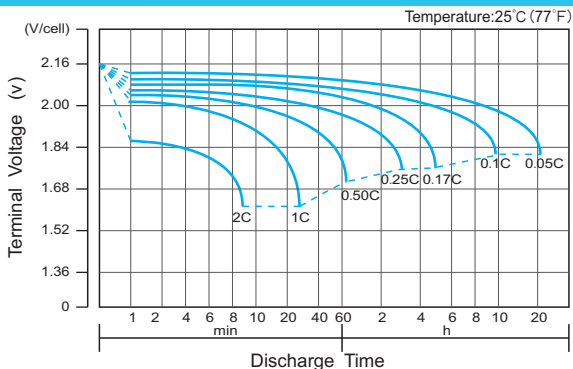
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	577	401	248	151	106	86.6	70.9	48.9	41.4	22.4
1.65V	568	396	247	150	105	86.5	70.7	48.7	41.1	22.0
1.70V	561	397	245	149	105	86.3	70.5	48.3	40.8	21.6
1.75V	542	392	243	148	105	85.5	69.7	47.9	40.4	21.2
1.80V	506	379	238	146	102	83.5	68.4	47.1	40.0	20.8
1.85V	461	359	228	141	97.4	79.5	65.5	45.1	38.8	19.5

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

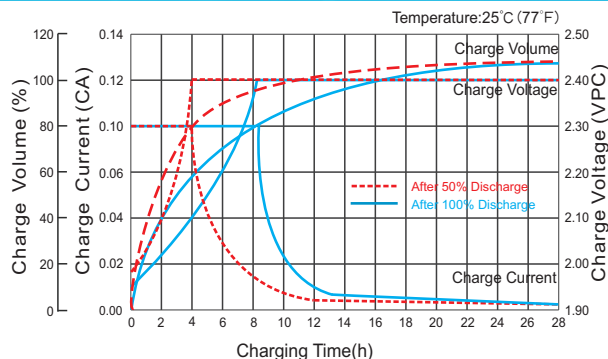
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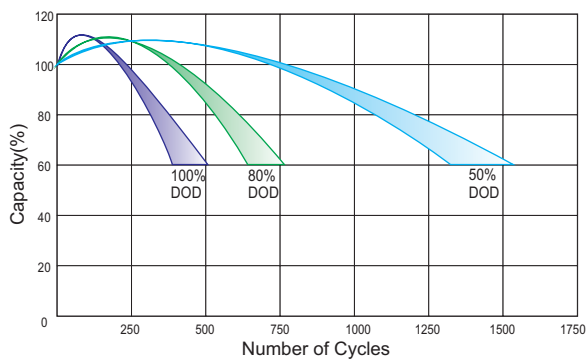
## Discharge Characteristics Curve



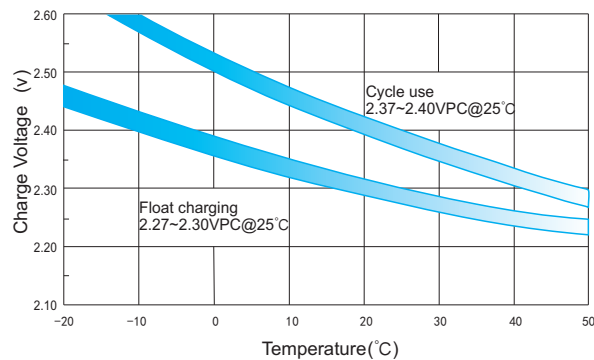
## Charge Characteristic Curve for Cycle Use(IU)



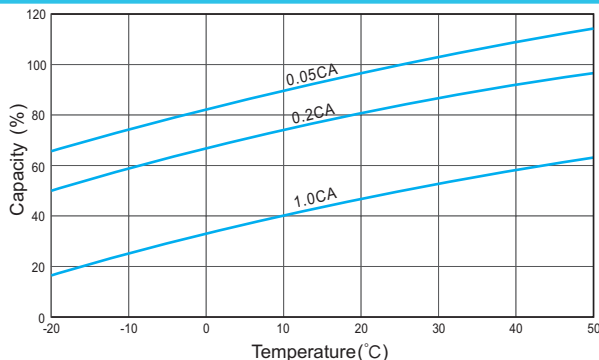
## Cycle Life in Relation to Depth of Discharge



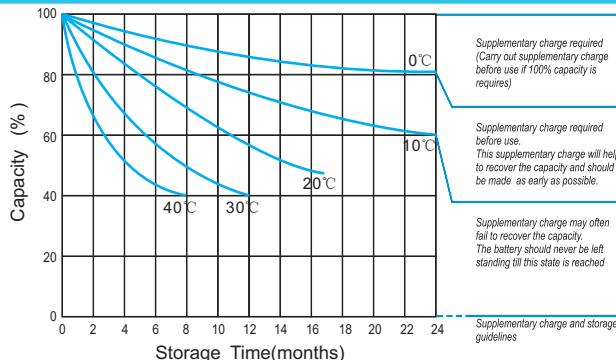
## Relationship Between Charging Voltage and Temperature



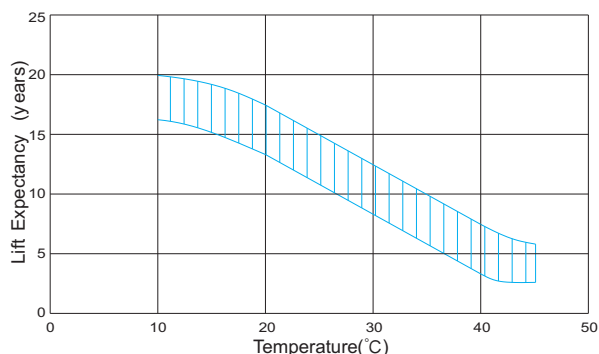
## Temperature Effects on Capacity



## Storage Characteristics



## Effect of Temperature on Long Term Life



## Relationship of OCV And State of Charge(20°C)

