

# DG6-280(6V280Ah)



## Specification

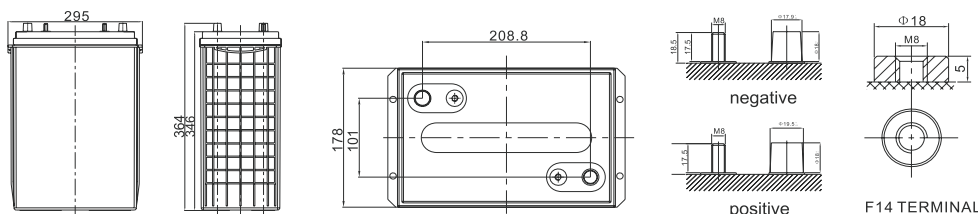
Cells Per Unit	3
Voltage Per Unit	6
Capacity	280Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 41.7 Kg (Tolerance ± 1.5%)
Internal Resistance	Approx. 3.0mΩ
Terminal	F22(M8)/F14(M8)
Max. Discharge Current	2800A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	56.0 A
Reference Capacity	C3 196.5AH C5 218.0AH C10 250.0AH C20 288.0AH
Float Charging Voltage	6.80 V~6.90 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	7.10 V~7.20 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



Length	295±1mm (11.6 inches)
Width	178±1mm (7.01 inches)
Height	364±1mm (13.6 inches)
Total Height	364±1mm (14.3 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	8HR	10HR	20HR
1.60V	393.9	264.0	160.9	96.3	66.6	54.5	44.6	30.8	26.0	15.8
1.65V	385.8	261.7	160.2	95.6	66.3	54.3	44.4	30.5	25.8	15.3
1.70V	379.7	260.0	158.7	94.8	65.8	54.0	44.1	30.3	25.5	14.8
1.75V	365.8	256.0	157.2	94.1	65.5	53.5	43.6	30.0	25.3	14.4
1.80V	341.1	247.1	153.5	92.4	63.8	52.3	42.8	29.5	25.0	13.5
1.85V	309.5	233.7	145.8	88.3	60.9	49.7	41.0	28.3	24.3	13.0

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

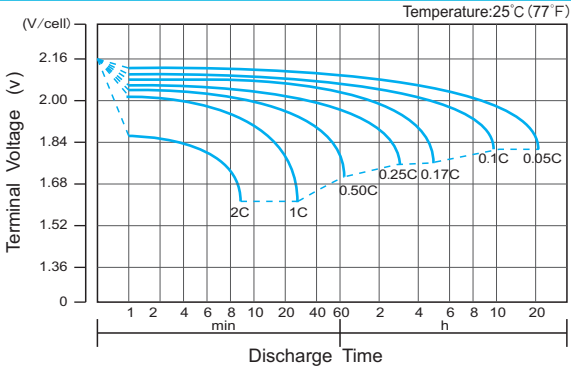
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	709	493	304	186	130	106	87.2	60.1	50.9	27.5
1.65V	698	487	304	185	130	106	87.0	59.8	50.6	27.0
1.70V	690	488	301	184	129	106	86.7	59.4	50.1	26.5
1.75V	666	482	299	182	129	105	85.7	59.0	49.6	26.0
1.80V	623	466	293	180	125	103	84.1	58.0	49.1	25.5
1.85V	567	442	281	173	120	97.8	80.5	55.5	47.7	24.0

(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)



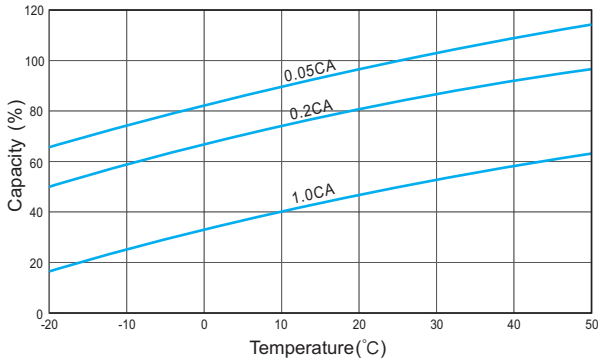
## Cycle Life in Relation to Depth of Discharge



## Relationship Between Charging Voltage and Temperature



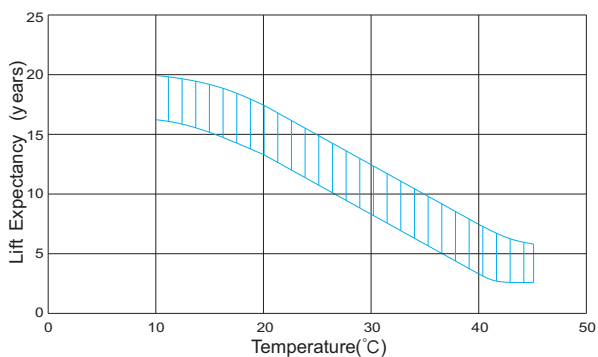
## Temperature Effects on Capacity



## Storage Characteristics



## Effect of Temperature on Long Term Life



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

