DG6-280(6V280Ah)

RITAR®

Specification

Cells Per Unit	3
Voltage Per Unit	6V
Capacity	280Ah@20hour-rate to 1.75V per cell @25℃
Weight	Approx. 41.7 Kg (Tolerance±5%)
Internal Resistance	≤3.0 mΩ(Full Charge Condition @25℃)
Terminal	Default F14(M8)
Max. Discharge Current	2800A (5 sec)
Design Life	15 years
Max. Charging Current	56.0 A
Reference Capacity	C_3 185.1Ah C_5 210.0Ah C_{10} 246.0Ah C_{20} 280.0Ah
Float Charging Voltage	6.69 V~6.75 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	7.10 V~7.20 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -40℃~60℃ Charge: 0℃~50℃ Storage: -40℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) GEL batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 2% at 25℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

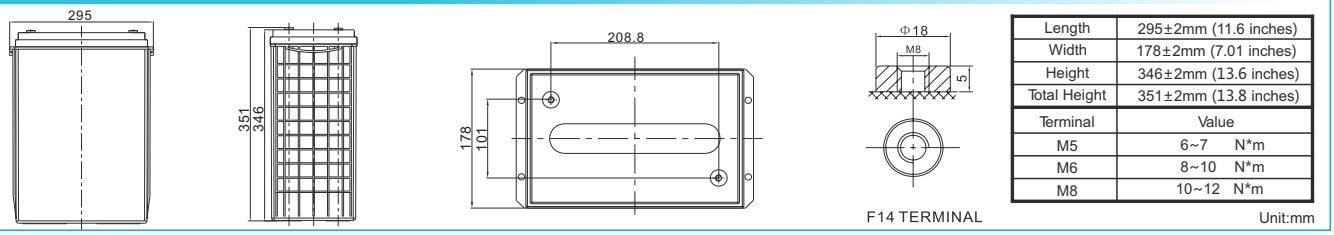


DG (Deep Cycle GEL) series is pure GEL battery with 15 years floating design life , it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented GEL electrolyte, the DG series offers excellent recovery capability after 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 BSTXD2103160008519EC

Dimensions



Length	295±2mm (11.6 inches)
Width	178±2mm (7.01 inches)
Height	346±2mm (13.6 inches)
Total Height	351±2mm (13.8 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℃)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	371.8	243.9	152.1	92.9	69.6	55.6	46.6	31.5	26.0	14.6
1.65V	355.4	234.2	146.8	89.9	67.5	54.1	45.4	31.2	25.7	14.3
1.70V	332.9	223.8	142.1	87.0	65.7	52.6	44.2	30.7	25.3	14.2
1.75V	309.8	213.9	136.9	83.9	63.7	51.3	43.1	30.3	25.0	14.0
1.80V	286.0	204.5	131.6	80.9	61.7	49.8	42.0	29.7	24.6	13.9
1.85V	237.4	176.1	118.1	74.2	57.1	46.3	39.2	27.9	23.2	13.2

Constant Power Discharge Characteristics : W/Cell (25℃)

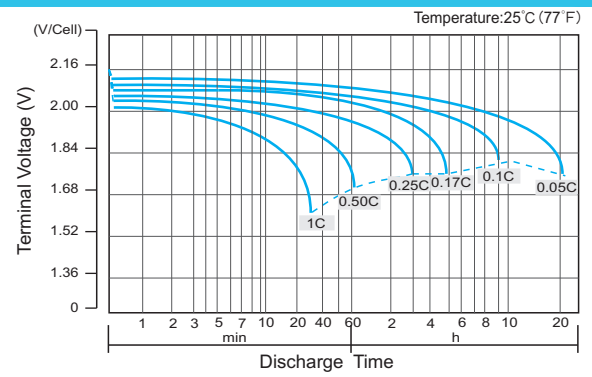
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	649.9	443.1	285.7	176.1	133.0	106.7	89.9	61.5	51.1	28.7
1.65V	624.7	429.0	278.0	171.3	129.8	104.2	87.9	60.9	50.5	28.3
1.70V	599.4	415.0	270.2	166.6	126.5	101.7	85.9	60.2	49.8	28.0
1.75V	565.9	400.7	261.9	161.5	123.3	99.5	84.0	59.5	49.3	27.7
1.80V	529.9	386.8	253.3	156.5	119.9	97.0	82.1	58.6	48.7	27.4
1.85V	446.0	336.5	228.6	144.2	111.3	90.5	76.8	55.1	45.9	26.1

(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_{20} should reach 95% after the first cycle and 100% after the third cycle.

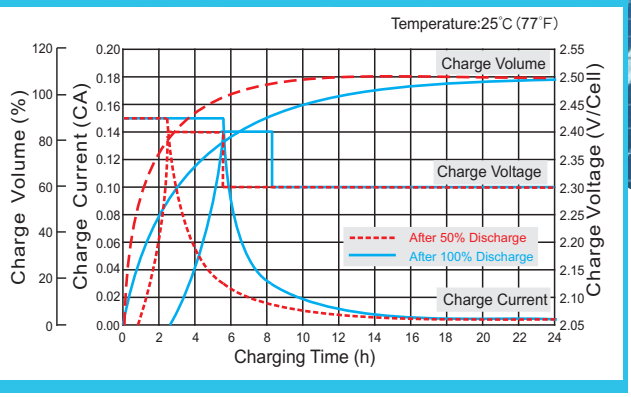
DG6-280(6V280Ah)

RITAR®

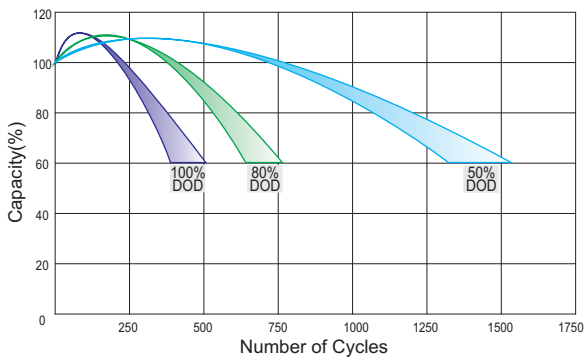
Discharge Characteristics Curve



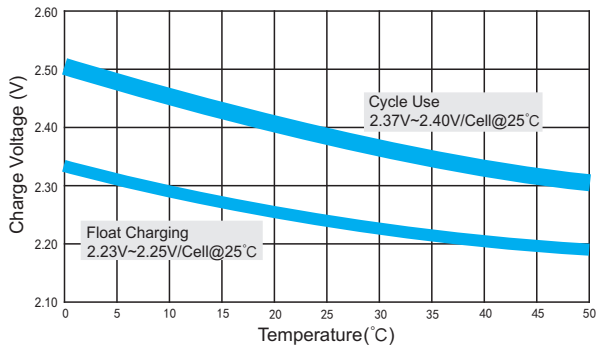
Charge Characteristic Curve for Cycle Use(IUU)



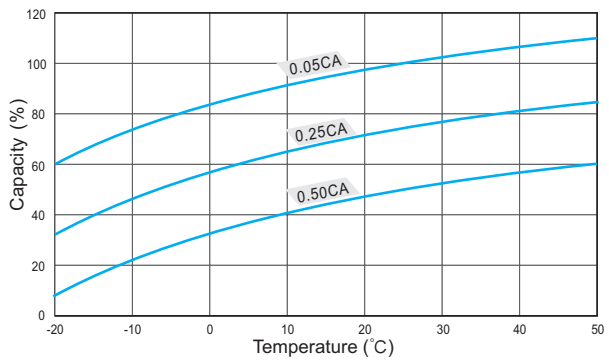
Cycle Life in Relation to Depth of Discharge



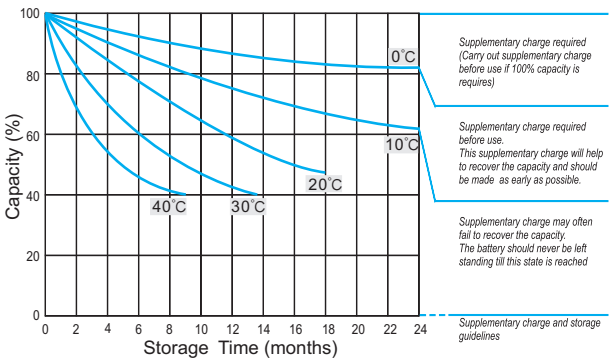
Relationship Between Charging Voltage and Temperature



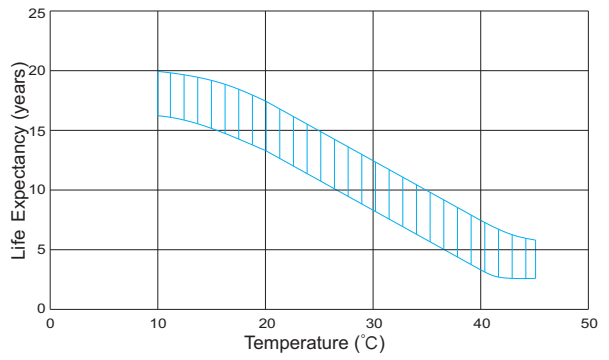
Temperature Effects on Capacity



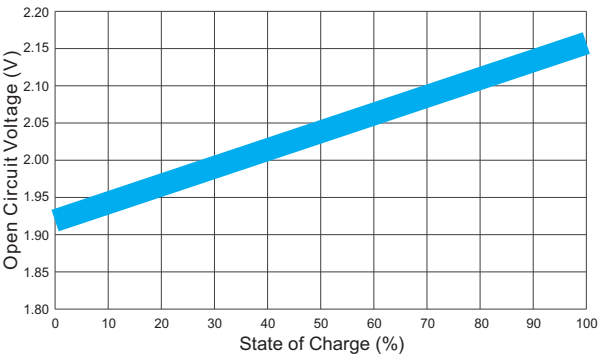
Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20℃)



(Note) All above information shall be changed without prior notice, RITAR reserves the right to explain and update the latest information.

HENGYANG RITAR POWER CO.,LTD.
RITAR POWER (VIETNAM) CO.,LTD.
URL: www.ritarpower.com

Add: 10th Floor, Tower C, 1st Building, Software Industry Base, No.81, Xuefu Road, Nanshan District, Shenzhen, Guangdong, China 518057
Tel: +86-755-33981668/83475380 Fax: +86-755-83475180 E-mail: sales@ritarpower.com

Version 24A-0