

DG12-145(12V145Ah)



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	145Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 44.0 Kg (Tolerance ± 1.5%)
Internal Resistance	Approx. 5 mΩ
Terminal	F5(M8)/F12(M8)
Max. Discharge Current	1450A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	29.0A
Reference Capacity	C3 99.0AH C5 110.0AH C10 126.0AH C20 145.0AH
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

Length	340±1mm (13.4 inches)
Width	173±1mm (6.81 inches)
Height	280±1mm (11.0 inches)
Total Height	287±1mm (11.3 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	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	247.1	198.4	133.0	81.1	48.5	33.5	27.5	22.5	15.5	13.1	7.98
1.65V	235.2	194.3	131.8	80.7	48.1	33.4	27.3	22.4	15.4	13.0	7.69
1.70V	226.9	191.3	131.0	79.9	47.8	33.1	27.2	22.2	15.2	12.8	7.47
1.75V	211.8	184.3	128.9	79.2	47.4	33.0	27.0	22.0	15.1	12.7	7.25
1.80V	195.4	171.8	124.5	77.3	46.6	32.1	26.3	21.6	14.9	12.6	6.82
1.85V	176.7	155.9	117.7	73.4	44.5	30.7	25.1	20.6	14.2	12.2	6.53

Constant Power Discharge Characteristics : WPC(25°C)

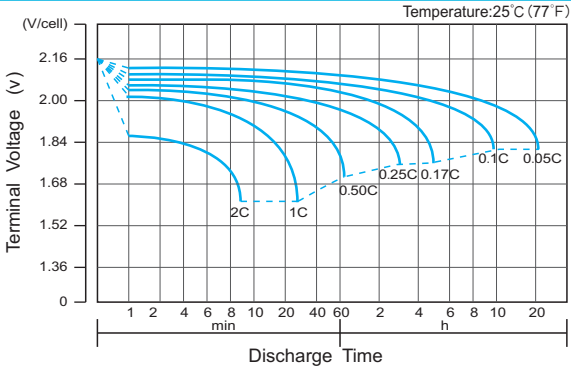
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	439	364	253	156	95.3	66.5	54.6	44.7	30.8	26.1	14.1
1.65V	425	358	250	156	94.8	66.5	54.5	44.6	30.7	25.9	13.9
1.70V	414	354	250	155	94.2	66.2	54.4	44.4	30.5	25.7	13.6
1.75V	390	341	247	153	93.5	66.0	53.9	43.9	30.2	25.4	13.3
1.80V	364	319	239	150	92.3	64.2	52.7	43.1	29.7	25.2	13.1
1.85V	333	291	227	144	88.9	61.4	50.1	41.3	28.5	24.4	12.3

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

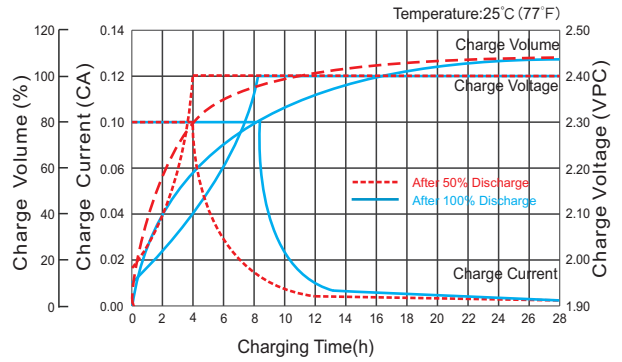
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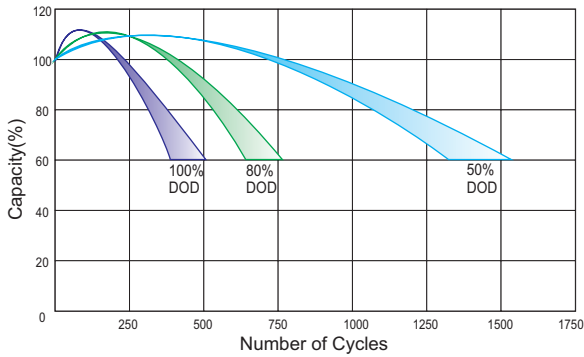
Discharge Characteristics Curve



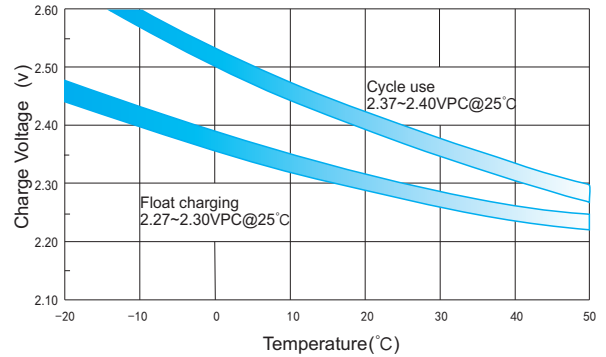
Charge Characteristic Curve for Cycle Use(IU)



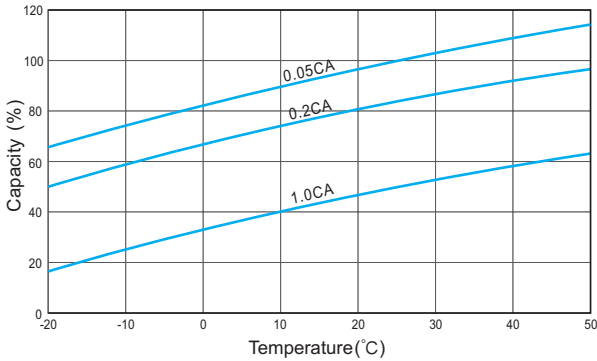
Cycle Life in Relation to Depth of Discharge



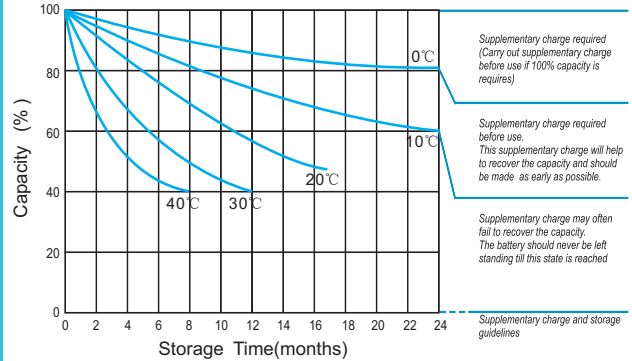
Relationship Between Charging Voltage and Temperature



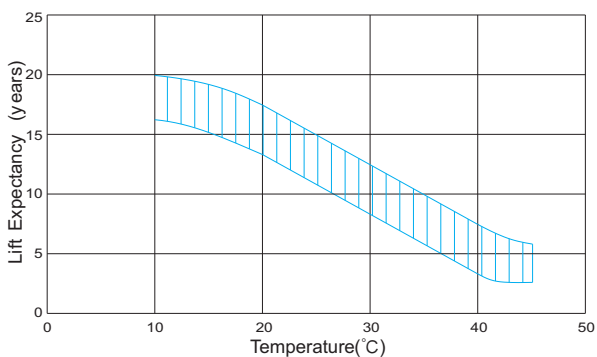
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



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

