

DG12-160S (12V160Ah)

RITAR®

Specification

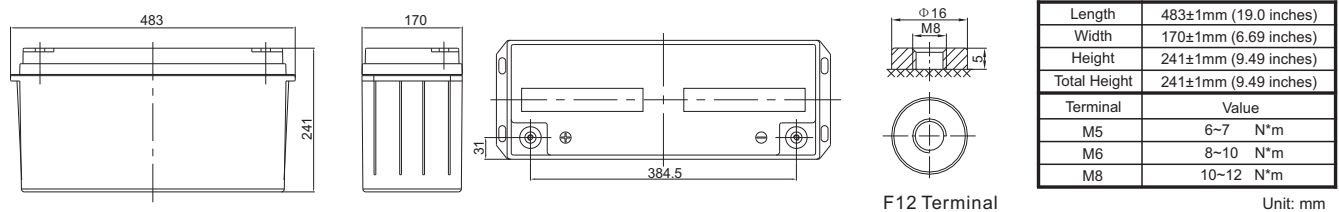
Cells Per Unit	6
Voltage Per Unit	12
Capacity	160Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 48.0 Kg (Tolerance ± 1.5%)
Internal Resistance	Approx. 6 mΩ
Terminal	F5(M8)/F12(M8)
Max. Discharge Current	1600A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	32.0A
Reference Capacity	C3 109.2AH C5 121.0AH C10 139.0AH C20 160.0AH
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	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	264.5	214.5	145.2	88.5	53.5	37.0	30.3	24.8	17.1	14.5	8.80
1.65V	251.7	210.1	144.0	88.1	53.1	36.8	30.2	24.7	17.0	14.3	8.48
1.70V	242.8	206.8	143.1	87.3	52.7	36.6	30.0	24.5	16.8	14.2	8.24
1.75V	226.7	199.3	140.9	86.5	52.3	36.4	29.8	24.2	16.7	14.0	8.00
1.80V	209.2	185.8	136.0	84.5	51.4	35.4	29.1	23.8	16.4	13.9	7.52
1.85V	189.1	168.6	128.6	80.2	49.1	33.9	27.6	22.8	15.7	13.5	7.20

Constant Power Discharge Characteristics : WPC(25°C)

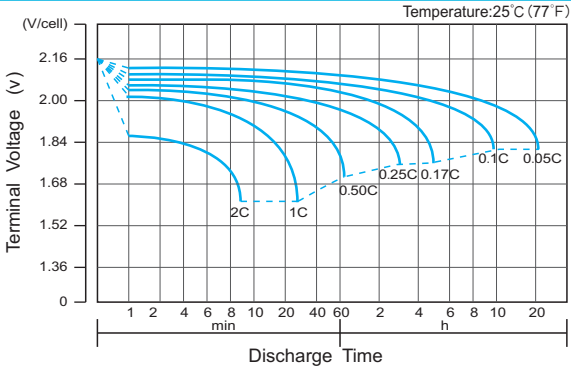
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	470	393	276	171	105	73.4	60.2	49.3	34.0	28.8	15.6
1.65V	455	387	273	170	105	73.4	60.2	49.2	33.9	28.6	15.3
1.70V	443	383	274	169	104	73.1	60.0	49.0	33.6	28.3	15.0
1.75V	418	369	270	167	103	72.8	59.5	48.5	33.4	28.1	14.7
1.80V	389	345	261	164	102	70.8	58.1	47.6	32.8	27.8	14.4
1.85V	356	314	248	157	98.1	67.7	55.3	45.5	31.4	27.0	13.6

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

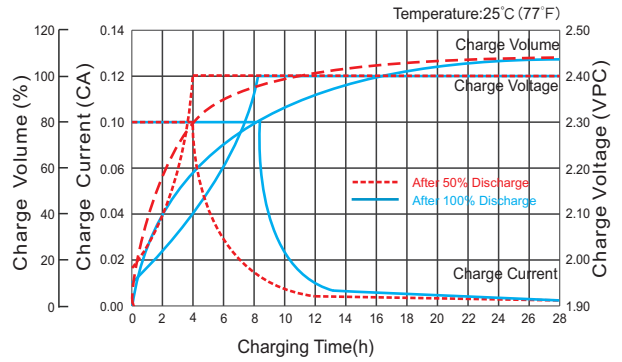
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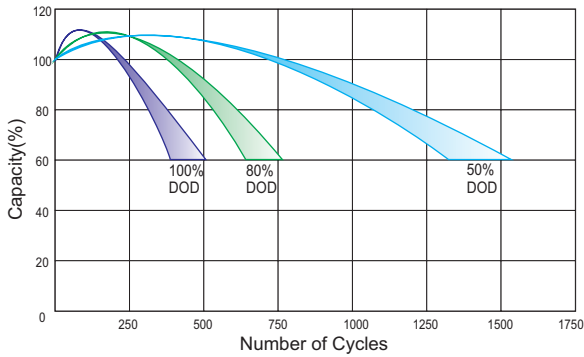
Discharge Characteristics Curve



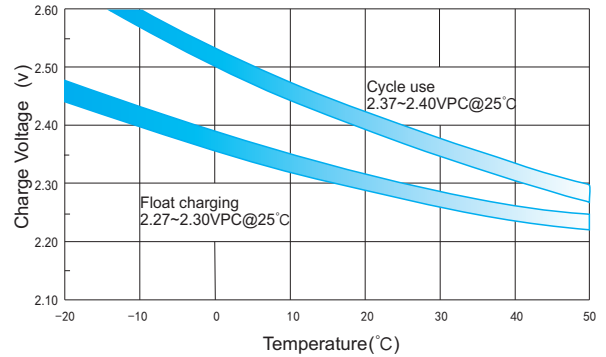
Charge Characteristic Curve for Cycle Use(IU)



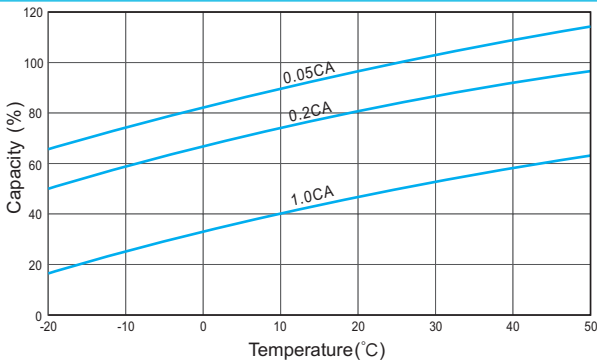
Cycle Life in Relation to Depth of Discharge



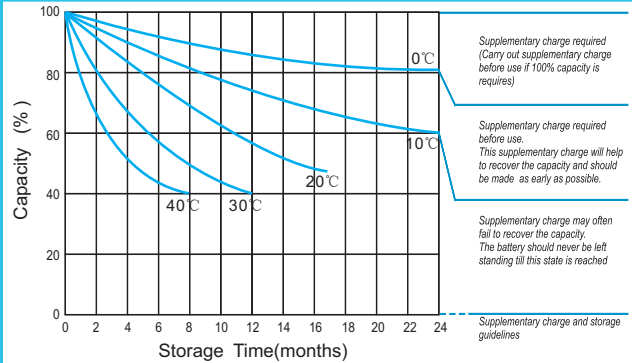
Relationship Between Charging Voltage and Temperature



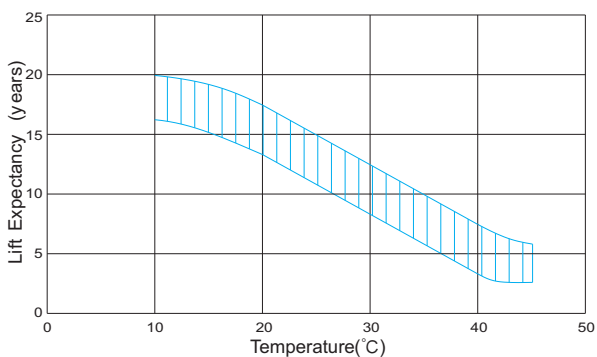
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



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

