

DG12-200

12V 200AH

Deep Cycle Gel Valve Regulated Lead Acid Battery

DG (Deep Cycle GEL) series is pure GEL battery with 20 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.

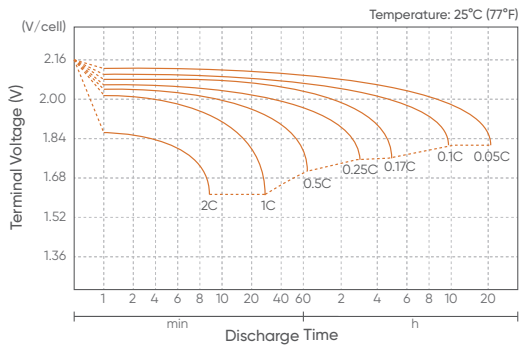


Specification		Dimensions
Cells Per Unit	6	Length 522±2mm (20.6 inches) Width 240±2mm (9.45 inches) Height 219±2mm (8.62 inches) Total Height 224±2mm (8.82 inches) Terminal M5 Value 6-7 N*m Terminal M6 Value 8-10 N*m Terminal M8 Value 10-12 N*m
Voltage Per Unit	12	
Capacity	200Ah@20hr-rate to 1.75V per cell @25°C	
Weight	Approx. 60.0Kg (Tolerance ±3.0%)	
Internal Resistance	Approx. 5.0 mΩ	
Terminal	F16(M8) / F10(M8)	
Max. Discharge Current	2000A (5 sec)	
Design Life	15 years (floating charge)	
Maximum Charging Current	40.0 A	
Reference Capacity	C3 136.5AH C5 151.5AH C10 174.0AH C20 200.0AH	
Float Charging Voltage	13.6V~13.8V @25°C Temperature Compensation: -3mV/°C/Cell	
Cycle Use Voltage	14.2V~14.4V @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	SunArk 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 charge batteries before using.	
Container Material	A.B.S. UL94-HB, UL94-V0 Optional	

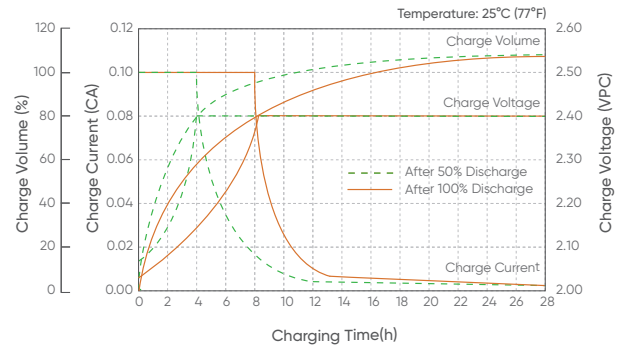
Constant Current Discharge Characteristics: A (25°C)										
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	273.6	183.4	111.8	66.9	46.2	37.9	31.0	21.4	18.1	11.0
1.65V	268.0	181.8	111.3	66.4	46.1	37.7	30.8	21.2	17.9	10.6
1.70V	263.8	180.7	110.2	65.9	45.7	37.5	30.7	21.0	17.7	10.3
1.75V	254.1	177.9	109.2	65.4	45.5	37.2	30.3	20.8	17.5	10.0
1.80V	237.0	171.7	106.6	64.2	44.3	36.3	29.7	20.5	17.4	9.40
1.85V	215.0	162.4	101.3	61.4	42.3	34.6	28.5	19.6	16.8	9.00

Constant Power Discharge Characteristics : WPC (25°C)										
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	502	348	215	131	91.8	75.3	61.7	42.5	36.0	19.5
1.65V	494	344	215	131	91.7	75.2	61.5	42.3	35.8	19.1
1.70V	488	345	213	130	91.3	75.0	61.3	42.0	35.4	18.8
1.75V	471	341	211	129	91.0	74.3	60.6	41.7	35.1	18.4
1.80V	440	330	207	127	88.5	72.6	59.5	41.0	34.7	18.1
1.85V	401	313	198	123	84.7	69.1	56.9	39.3	33.7	17.0

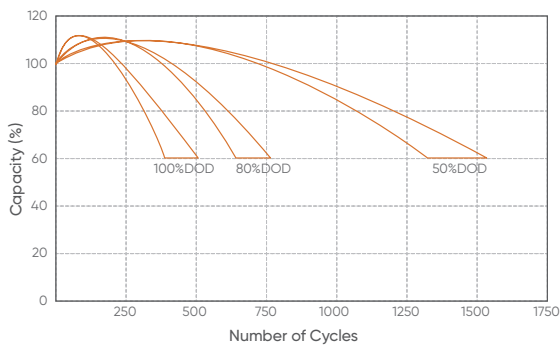
Discharge Characteristics Curve



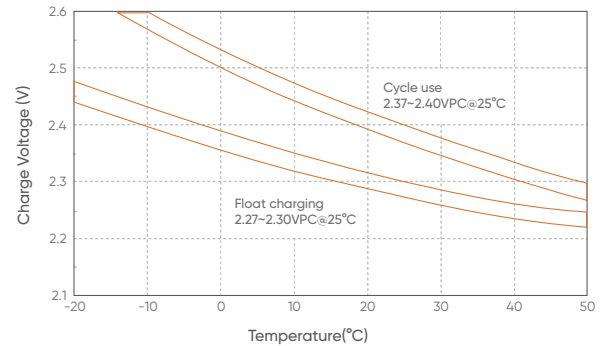
Charge Characteristic Curve for Cycle Use (IU)



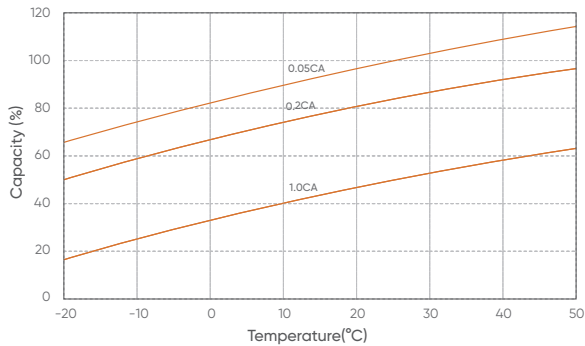
Cycle Life in Relation to Depth of Discharge



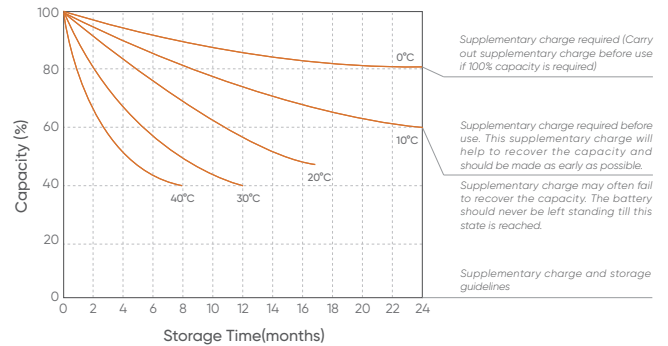
Relationship Between Charging Voltage and Temperature



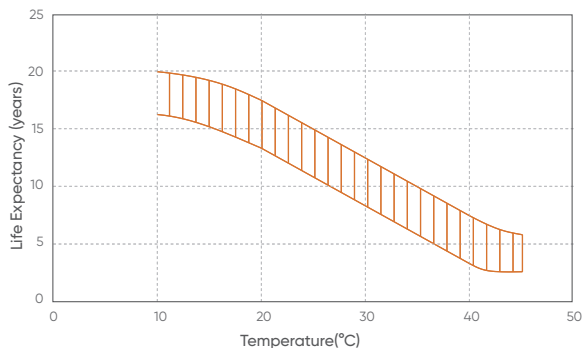
Temperature Effects on Capacity



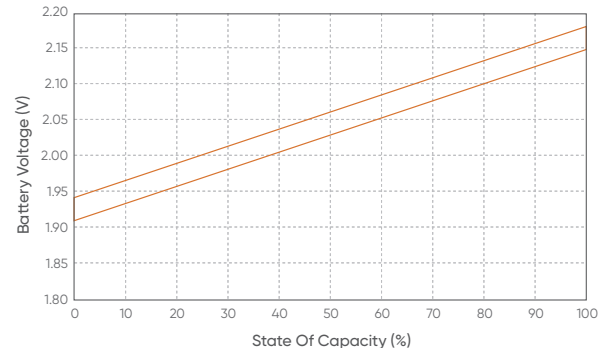
Storage Characteristics



Effect of Temperature on Long Term Life



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



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