

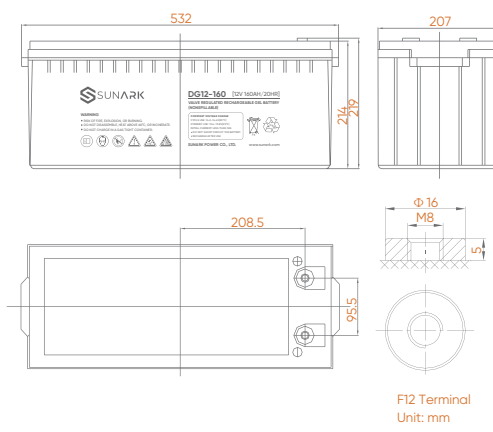
DG12-160

12V 160AH

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.

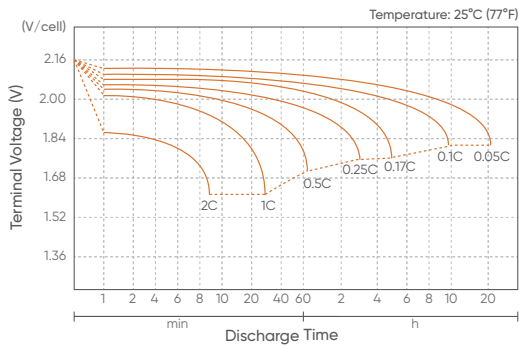


Specification		Dimensions	
Cells Per Unit	6	 Length 532±2mm (20.9 inches) Width 207±2mm (8.15 inches) Height 214±2mm (8.43 inches) Total Height 219±2mm (8.62 inches) Terminal M5 Value 6-7 N*m Terminal M6 Value 8-10 N*m Terminal M8 Value 10-12 N*m F12 Terminal Unit: mm	
Voltage Per Unit	12		
Capacity	160Ah@20hr-rate to 1.75V per cell @25°C		
Weight	Approx. 50.0Kg (Tolerance ±3.0%)		
Internal Resistance	Approx. 6 mΩ		
Terminal	F16(M8) / F12(M8)		
Max. Discharge Current	1600A (5 sec)		
Design Life	15 years (floating charge)		
Maximum Charging Current	32.0 A		
Reference Capacity	C3 109.2AH C5 121.0AH C10 139.0AH C20 160.0AH		
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		

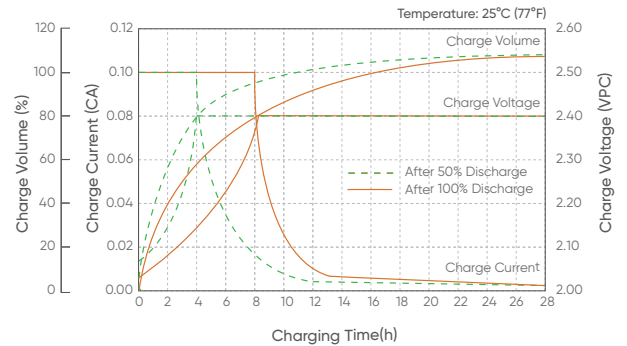
Constant Current Discharge Characteristics: A (25°C)											
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	272.7	218.9	146.7	89.4	53.5	37.0	30.3	24.8	17.1	14.5	8.80
1.65V	259.5	214.4	145.4	89.0	53.1	36.8	30.2	24.7	17.0	14.3	8.48
1.70V	250.3	211.1	144.5	88.2	52.7	36.6	30.0	24.5	16.8	14.2	8.24
1.75V	233.7	203.3	142.3	87.4	52.3	36.4	29.8	24.2	16.7	14.0	8.00
1.80V	215.6	189.6	137.4	85.3	51.4	35.4	29.1	23.8	16.4	13.9	7.52
1.85V	195.0	172.0	129.9	81.0	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	484	401	279	172	105	73.4	60.2	49.3	34.0	28.8	15.6
1.65V	469	395	276	172	105	73.4	60.2	49.2	33.9	28.6	15.3
1.70V	457	390	276	171	104	73.1	60.0	49.0	33.6	28.3	15.0
1.75V	430	377	272	169	103	72.8	59.5	48.5	33.4	28.1	14.7
1.80V	401	352	264	166	102	70.8	58.1	47.6	32.8	27.8	14.4
1.85V	367	321	250	159	98.1	67.7	55.3	45.5	31.4	27.0	13.6

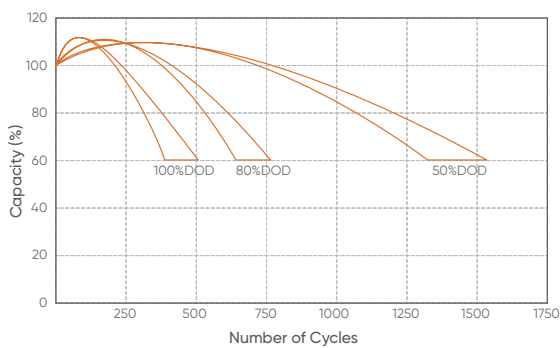
Discharge Characteristics Curve



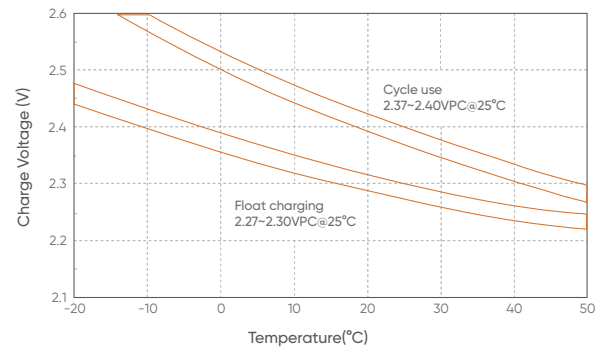
Charge Characteristic Curve for Cycle Use (IU)



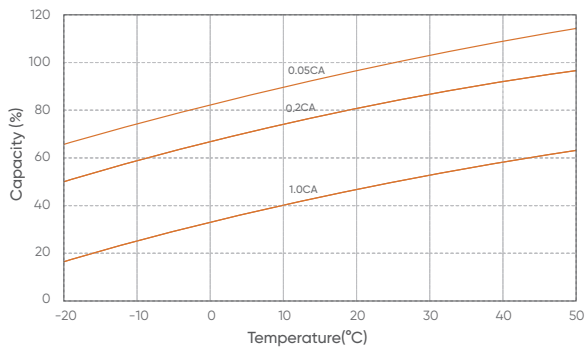
Cycle Life in Relation to Depth of Discharge



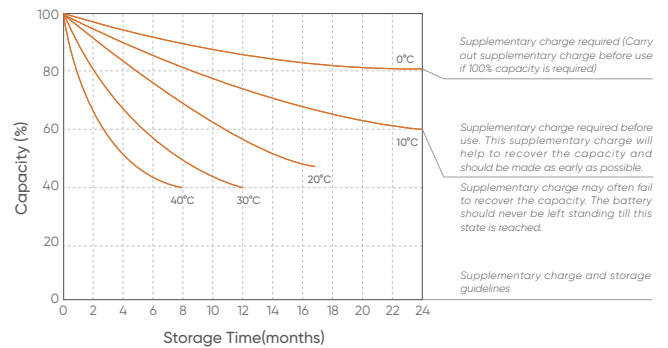
Relationship Between Charging Voltage and Temperature



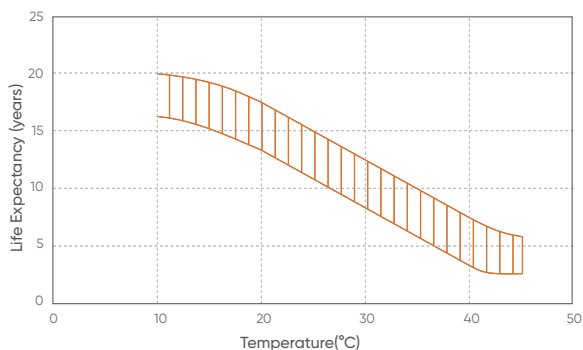
Temperature Effects on Capacity



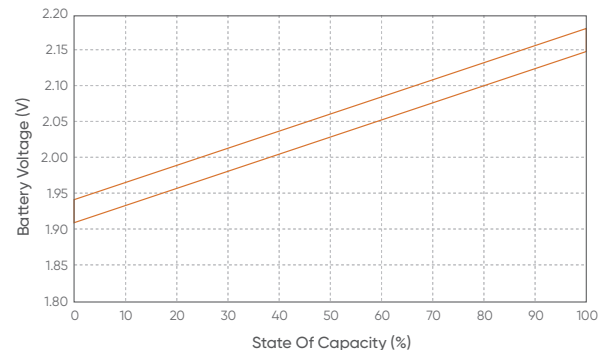
Storage Characteristics



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.