ROVON POWER

RoveGEL

DG12-120

12V 120Ah

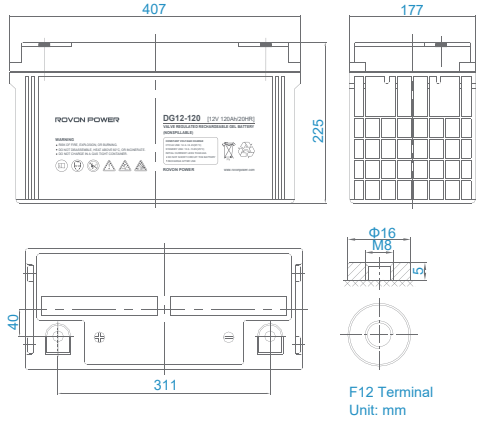
Deep Cycle Gel Valve Regulated Lead Acid Battery

RoveGEL (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 RoveGEL series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and can deliver 450 cycles at 100% DOD.



Specification	
Cells Per Unit	6
Voltage Per Unit	12
Capacity	120Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 35.5 kg (Tolerance ±3.0%)
Internal Resistance	Approx. 5.5 mΩ
Terminal	F5(M8) / F12(M8)
Max. Discharge Current	1200A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	24.0 A
Reference Capacity	C3 81.9Ah C5 91.0Ah C10 104.0Ah C20 120.0Ah
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	ROVON 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

Dimensions



Length
407±2mm (16.0 inches)

Width
177±2mm (6.97 inches)

Height
225±2mm (8.86 inches)

Total Height
225±2mm (8.86 inches)

Terminal M5 Value
6-7 N*m

Terminal M6 Value
8-10 N*m

Terminal M8 Value
10-12 N*m

Constant Current Discharge Characteristics: A (25°C)

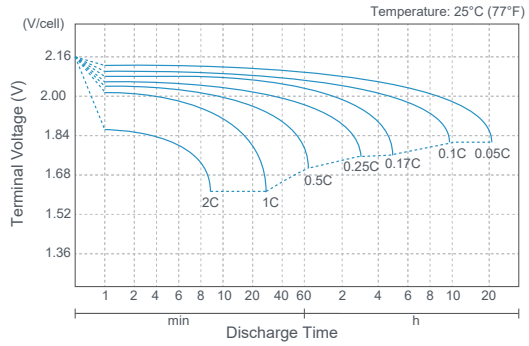
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	204.5	164.2	110.0	67.1	40.1	27.7	22.7	18.6	12.8	10.8	6.60
1.65V	194.6	160.8	109.1	66.8	39.8	27.6	22.6	18.5	12.7	10.7	6.36
1.70V	187.7	158.3	108.4	66.1	39.5	27.4	22.5	18.4	12.6	10.6	6.18
1.75V	175.3	152.5	106.7	65.5	39.2	27.3	22.3	18.2	12.5	10.5	6.00
1.80V	161.7	142.2	103.0	64.0	38.5	26.6	21.8	17.8	12.3	10.4	5.64
1.85V	146.2	129.0	97.4	60.8	36.8	25.4	20.7	17.1	11.8	10.1	5.40

Constant Power Discharge Characteristics: W/cell (25°C)

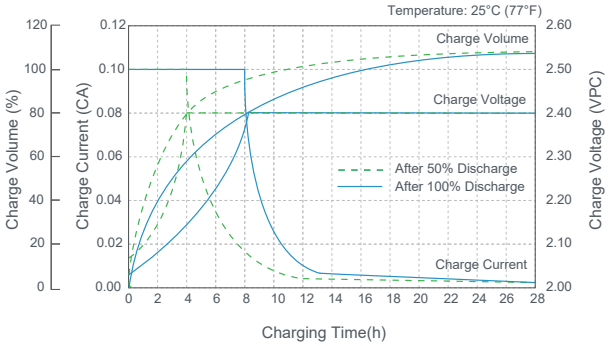
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	363	301	209	129	78.8	55.1	45.2	37.0	25.5	21.6	11.7
1.65V	352	296	207	129	78.4	55.0	45.1	36.9	25.4	21.5	11.5
1.70V	343	293	207	128	78.0	54.8	45.0	36.8	25.2	21.3	11.3
1.75V	323	283	204	127	77.4	54.6	44.6	36.3	25.0	21.1	11.0
1.80V	301	264	198	124	76.4	53.1	43.6	35.7	24.6	20.8	10.8
1.85V	275	241	188	119	73.6	50.8	41.5	34.2	23.6	20.2	10.2

DG12-120 12V 120Ah

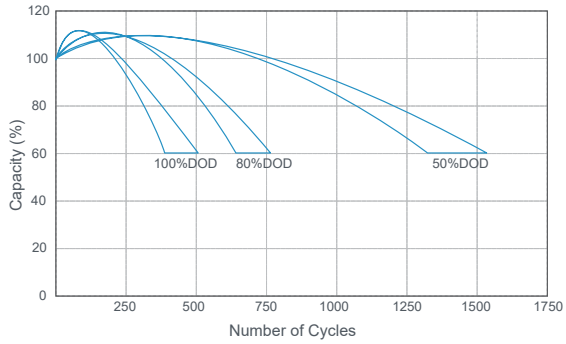
Discharge Characteristics Curve



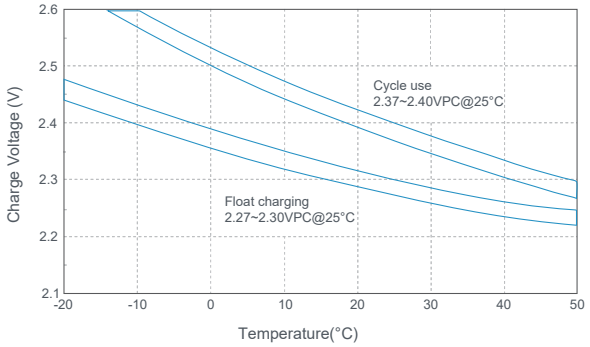
Charge Characteristic Curve for Cycle Use (IU)



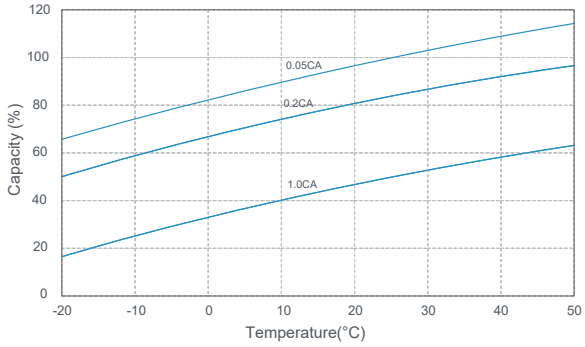
Cycle Life in Relation to Depth of Discharge



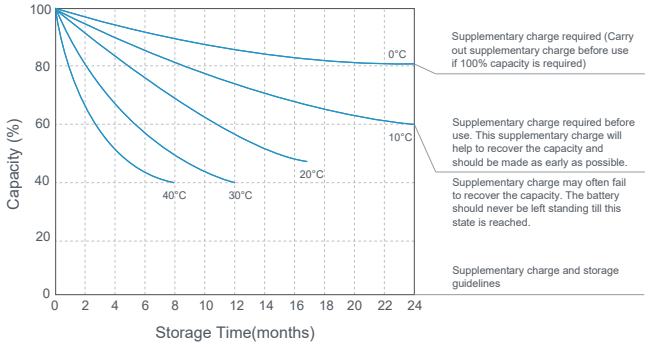
Relationship Between Charging Voltage and Temperature



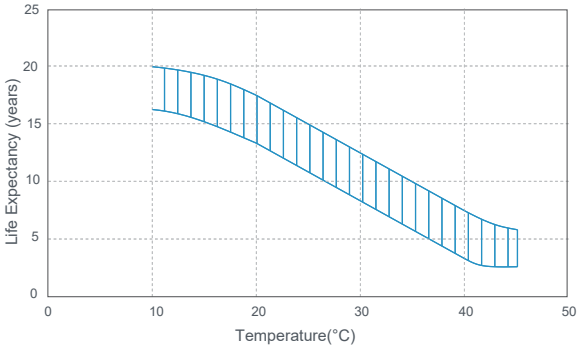
Temperature Effects on Capacity



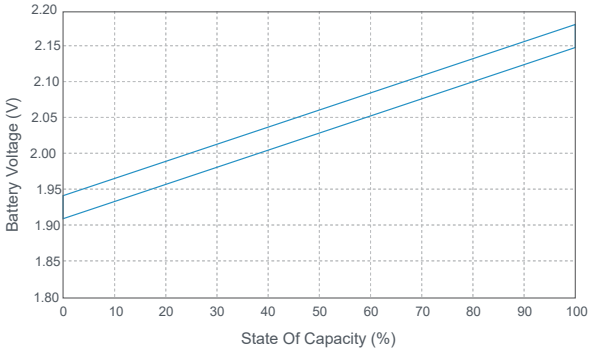
Storage Characteristics



Effect of Temperature on Long Term Life



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



Specifications are subject to change without prior notice. ROVON reserves the right to interpret and update this information.