ROVON POWER

RoveGEL

DG12-250

12V 250Ah

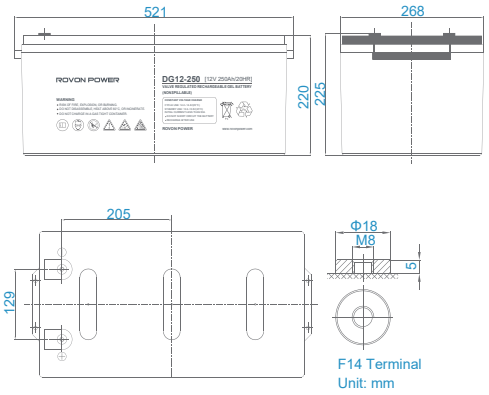
Deep Cycle Gel Valve Regulated Lead Acid Battery

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	250Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 70.0kg (Tolerance ±3.0%)
Internal Resistance	Approx. 5 mΩ
Terminal	F14(M8)
Max. Discharge Current	2500A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	50.0 A
Reference Capacity	C3 177.6Ah C5 197.0Ah C10 226.0Ah C20 250.0Ah
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
521±2mm (20.5 inches)

Width
268±2mm (10.6 inches)

Height
220±2mm (8.66 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)

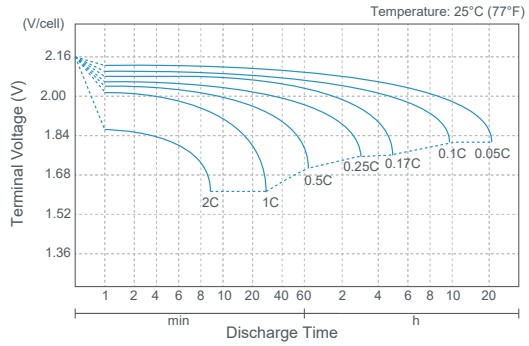
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	355.7	238.4	145.3	87.0	60.1	49.3	40.3	27.8	23.5	14.3
1.65V	348.4	236.3	144.7	86.3	59.9	49.0	40.1	27.5	23.3	13.8
1.70V	343.0	234.9	143.3	85.7	59.4	48.8	39.8	27.3	23.0	13.4
1.75V	330.4	231.2	142.0	85.0	59.2	48.4	39.4	27.1	22.8	12.5
1.80V	308.1	223.2	138.6	83.5	57.6	47.2	38.7	26.6	22.6	12.2
1.85V	279.5	211.1	131.7	79.8	55.0	44.9	37.0	25.5	21.9	11.7

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

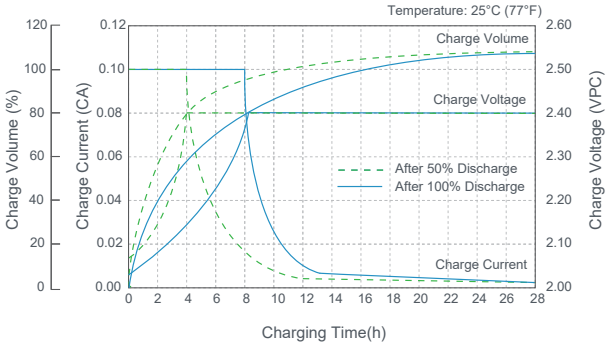
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	652	453	280	171	119	97.9	80.2	55.3	46.8	25.3
1.65V	642	448	279	170	119	97.7	80.0	55.0	46.5	24.8
1.70V	634	449	277	169	119	97.5	79.7	54.6	46.1	24.4
1.75V	612	443	275	168	118	96.6	78.7	54.2	45.6	23.9
1.80V	573	429	270	166	115	94.4	77.3	53.3	45.2	23.5
1.85V	521	406	258	159	110	89.9	74.0	51.0	43.8	22.1

DG12-250 12V 250Ah

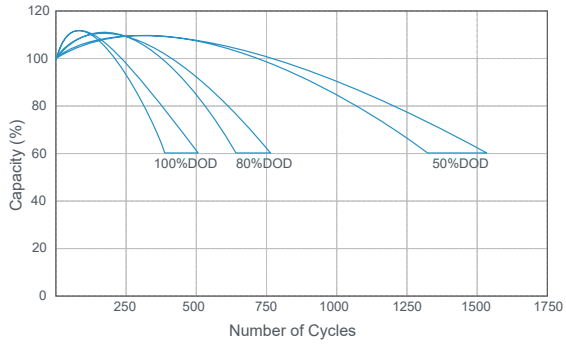
Discharge Characteristics Curve



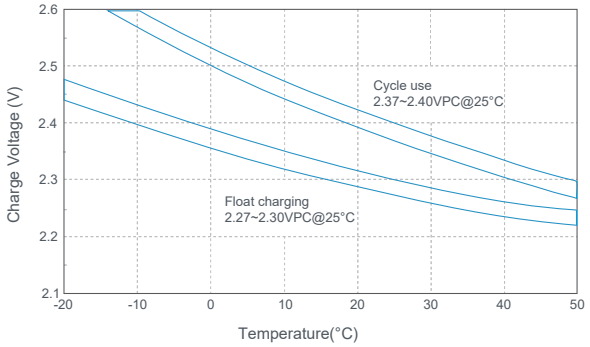
Charge Characteristic Curve for Cycle Use (IU)



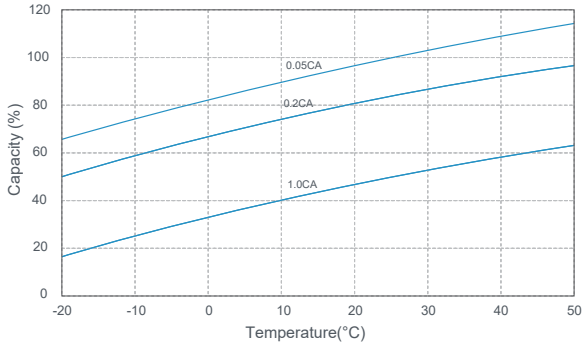
Cycle Life in Relation to Depth of Discharge



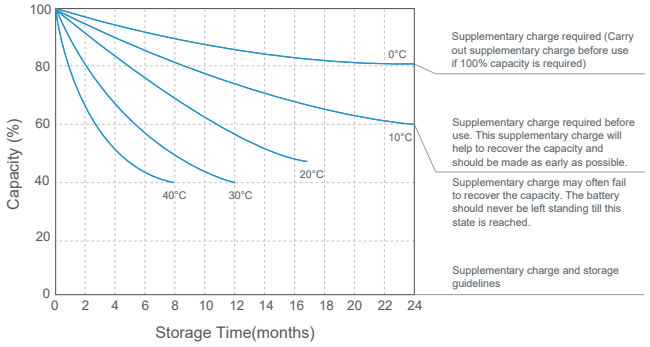
Relationship Between Charging Voltage and Temperature



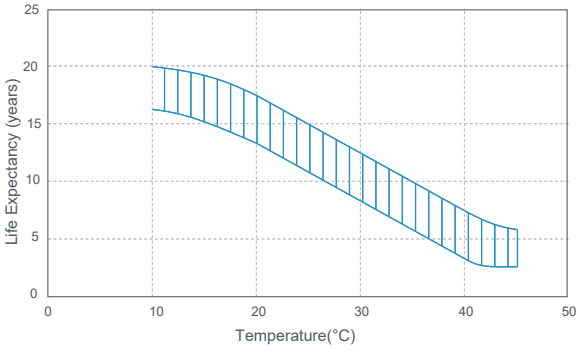
Temperature Effects on Capacity



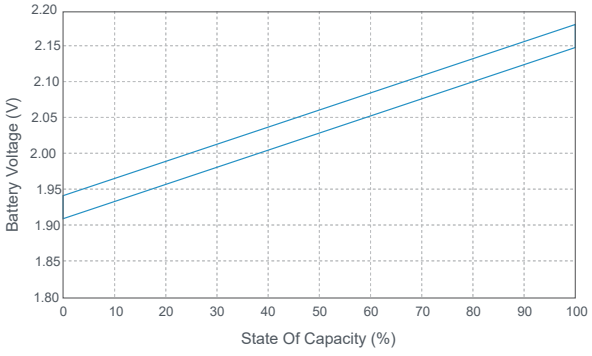
Storage Characteristics



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.