ROVON POWER

RoveGEL

DG12-200

12V 200Ah

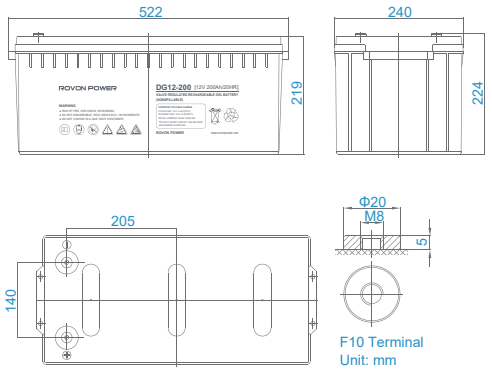
Deep Cycle Gel Valve Regulated Lead Acid Battery

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	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	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 522±2mm (20.6 inches)	Terminal M5 Value 6-7 N*m
Width 240±2mm (9.45 inches)	Terminal M6 Value 8-10 N*m
Height 219±2mm (8.62 inches)	Terminal M8 Value 10-12 N*m
Total Height 224±2mm (8.82 inches)	

Constant Current Discharge Characteristics: A (25°C)

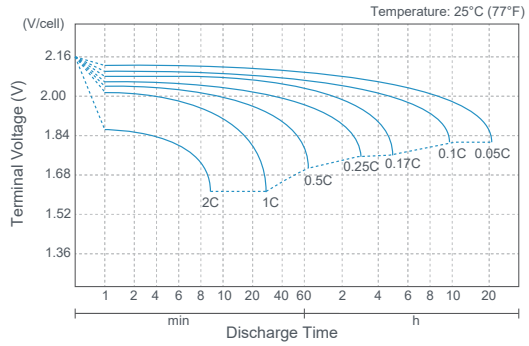
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	273.6	183.4	111.8	66.9	46.2	37.9	31.0	21.4	18.1	11.0
1.65V	268.0	181.8	111.3	66.4	46.1	37.7	30.8	21.2	17.9	10.6
1.70V	263.8	180.7	110.2	65.9	45.7	37.5	30.7	21.0	17.7	10.3
1.75V	254.1	177.9	109.2	65.4	45.5	37.2	30.3	20.8	17.5	10.0
1.80V	237.0	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: W/cell (25°C)

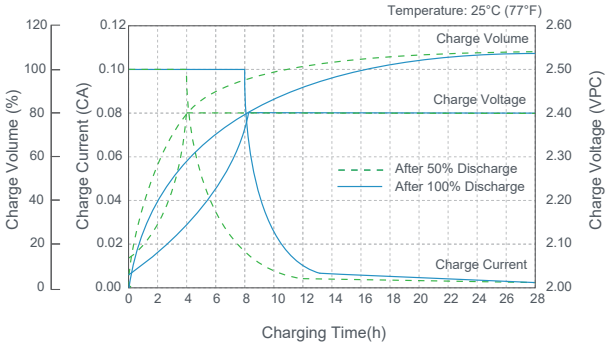
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	502	348	215	131	91.8	75.3	61.7	42.5	36.0	19.5
1.65V	494	344	215	131	91.7	75.2	61.5	42.3	35.8	19.1
1.70V	488	345	213	130	91.3	75.0	61.3	42.0	35.4	18.8
1.75V	471	341	211	129	91.0	74.3	60.6	41.7	35.1	18.4
1.80V	440	330	207	127	88.5	72.6	59.5	41.0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

DG12-200 12V 200Ah

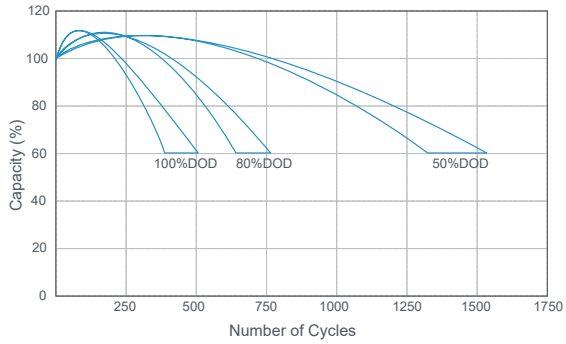
Discharge Characteristics Curve



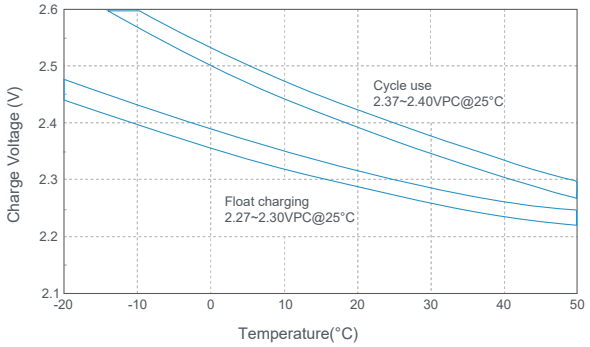
Charge Characteristic Curve for Cycle Use (IU)



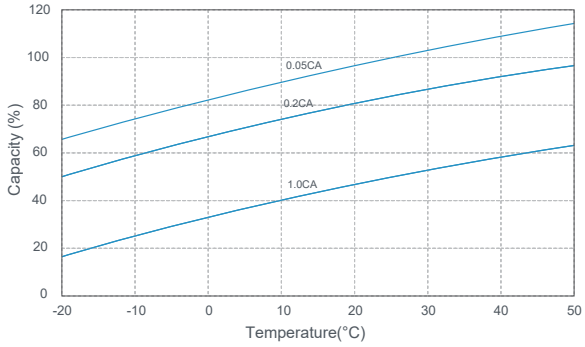
Cycle Life in Relation to Depth of Discharge



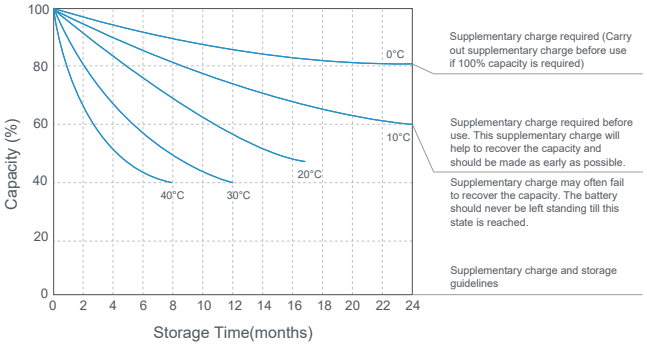
Relationship Between Charging Voltage and Temperature



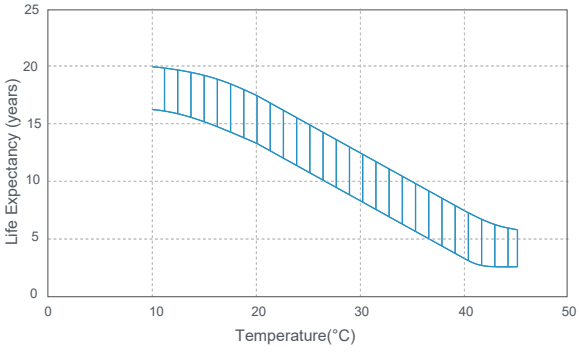
Temperature Effects on Capacity



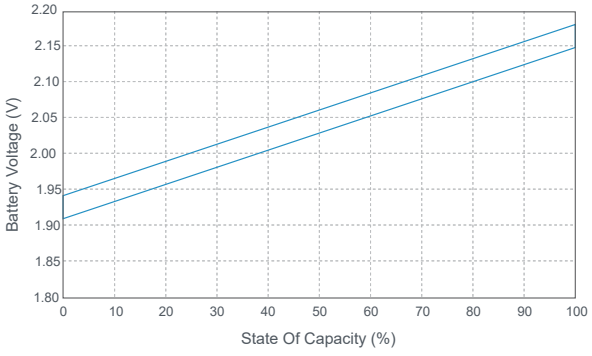
Storage Characteristics



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.