ROVON POWER

RoveGEL

DG12-80

12V 80Ah

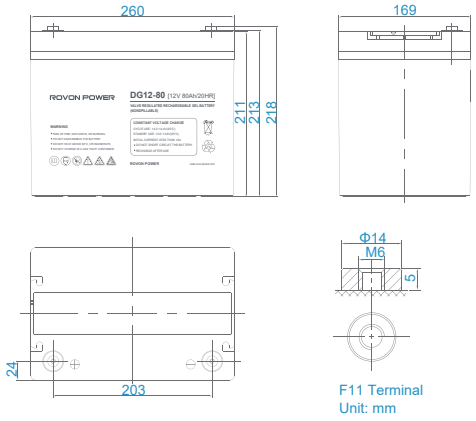
Deep Cycle Gel Valve Regulated Lead Acid Battery

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	80Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 25.0 kg (Tolerance ±3.0%)
Internal Resistance	Approx. 7.0 mΩ
Terminal	F15(M6) / F11(M6)
Max. Discharge Current	800A (5 sec)
Design Life	15 years (floating charge)
Maximum Charging Current	16.0 A
Reference Capacity	C3 54.6Ah C5 63.0Ah C10 70.2Ah C20 80.0Ah
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
260±2mm (10.2 inches)

Width
169±2mm (6.65 inches)

Height
211±2mm (8.31 inches)

Total Height
218±2mm (8.50 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)

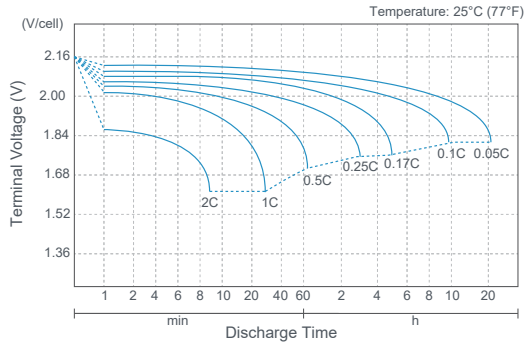
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	148.3	116.0	76.3	44.7	26.7	18.5	15.3	12.9	8.80	7.30	4.40
1.65V	141.1	113.7	75.0	44.5	26.5	18.4	15.2	12.8	8.73	7.23	4.24
1.70V	136.1	111.9	74.4	44.1	26.3	18.3	15.2	12.7	8.65	7.16	4.12
1.75V	127.1	107.8	74.5	43.7	26.1	18.2	15.0	12.6	8.58	7.09	4.00
1.80V	117.3	100.5	74.0	42.7	25.7	17.7	14.7	12.3	8.44	7.02	3.76
1.85V	106.0	91.2	69.9	40.5	24.5	16.9	14.0	11.8	8.08	6.81	3.60

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

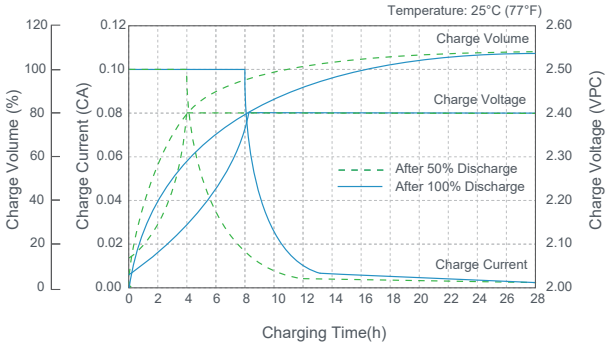
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	263	211	143	86.1	52.5	36.6	30.4	25.6	17.5	14.5	7.78
1.65V	255	207	141	85.9	52.3	36.6	30.4	25.5	17.4	14.4	7.65
1.70V	248	205	141	85.3	51.9	36.5	30.3	25.5	17.3	14.3	7.50
1.75V	234	198	142	84.5	51.6	36.3	30.0	25.2	17.2	14.2	7.36
1.80V	218	185	141	82.9	50.9	35.3	29.3	24.7	16.9	14.0	7.22
1.85V	200	169	134	79.4	49.0	33.8	27.9	23.6	16.2	13.6	6.80

DG12-80 12V 80Ah

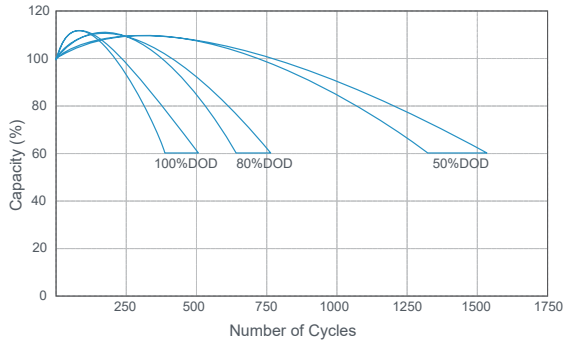
Discharge Characteristics Curve



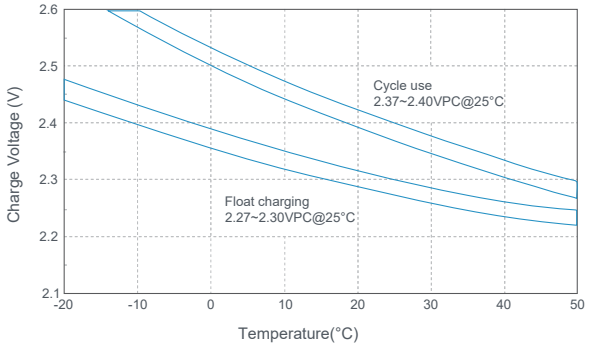
Charge Characteristic Curve for Cycle Use (IU)



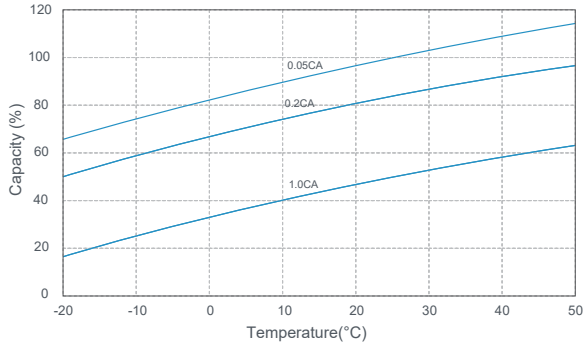
Cycle Life in Relation to Depth of Discharge



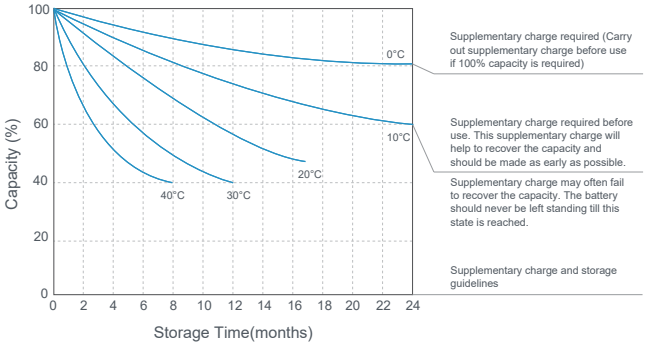
Relationship Between Charging Voltage and Temperature



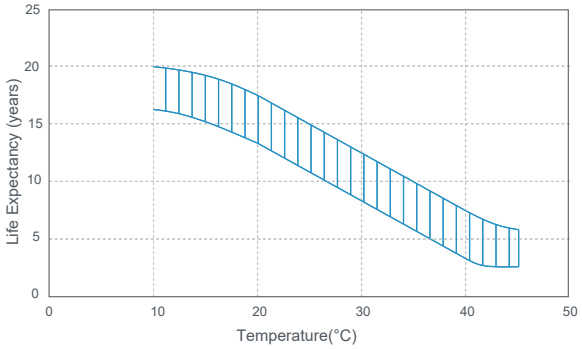
Temperature Effects on Capacity



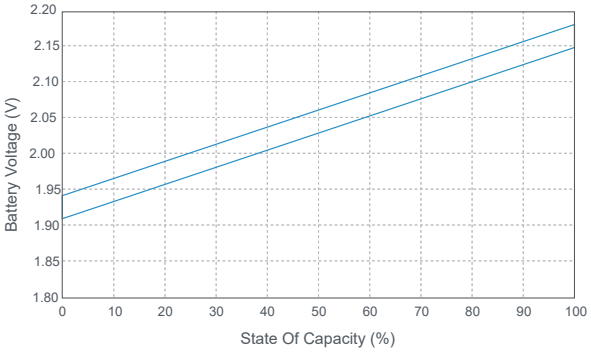
Storage Characteristics



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.