RNG-BATT-GEL12-200 (12V 100AH/10HR)

Gel Specifications

Renogy Gel batteries are capable of delivering high currents on demand and offer long service life with very low self-discharge. They are designed for frequent and cyclic discharge. They are suitable for various applications including electric vehicles, solar/wind energy system, UPS battery backup, telecommunication systems, medical equipment, and more.

Specifications

Capacity (25℃)	10Hr(10A,1.75V)	5Hr（18.6A,1.75V）	3Hr(14.16A,1.75V)	1Hr(60.0A,1.70V)
	200Ah	170Ah	150Ah	110Ah
Dimensions	Length	Width	Height	Total Height
	20.6 inches	9.5 inches	8.7 inches	8.7 inches
Approx. Weight	128 lbs. ± 3%			
Internal Resistance	5mΩ			
Self Discharge	≤2% per month (25℃)			
Charge Voltage (25℃)	Cycle Use		Float Use	
	14.2V(-24mV/℃),max charge current:40A		13.5V(-18mV/℃)	
Operating Temperature	-25°C to 45°C			
Shelf Life	9 months at 25°C			
Material	ABS Containers and Covers			

Discharge Charts

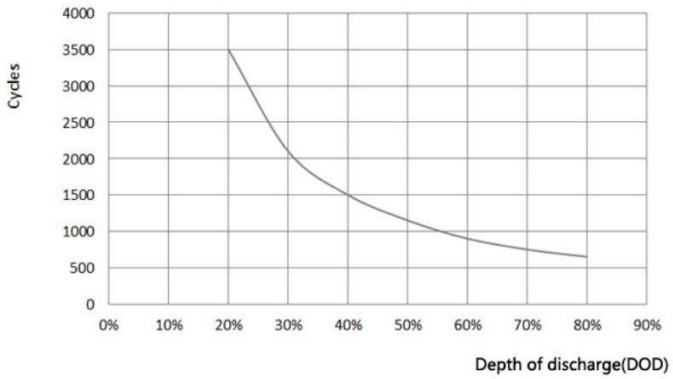
Constant Current Discharge (Amperes) at 25°C

End Voltage (V/cell)	5min	10min	15min	20min	30min	45 min	1h	1.5h	2h	3h	5h	10h	20h
1.60	558.6	407.2	317.2	266	194.4	152.4	115	89.8	68.8	52.4	35	20	10.5
1.65	530	395.8	311	261.8	192.4	149.4	113.4	88.6	68.8	52.4	35	20	10.5
1.70	499.2	372.4	304.8	255.8	190.2	144.8	113.4	87.2	68.8	52.4	35	20	10.5
1.75	462.4	345.8	294.8	245.6	164.2	140.8	111.4	86	68.8	52.4	35	20	10.5
1.80	394.8	315	276.2	229.2	174	135.8	110	83.6	68.8	50	35	20	10.4

Constant Current Discharge (Watts) at 25

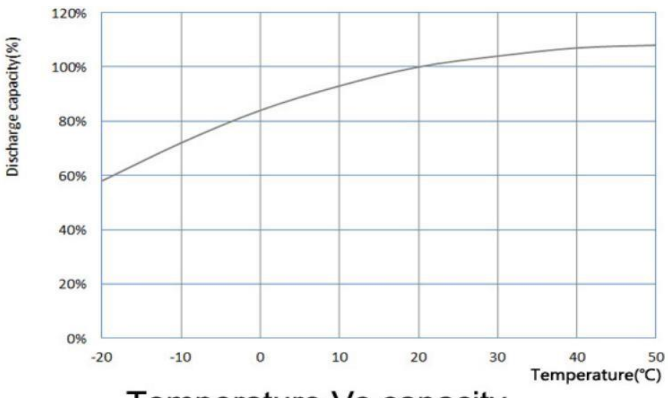
End Voltage (V/cell)	5min	10min	15min	20min	30min	45 min	1h	1.5h	2h	3h	5h	10h	20h
1.60	986	738.6	579.8	486.6	364.6	274.2	213.8	166	130	94.2	64.4	38	20.4
1.65	917.2	711.4	567	480.8	361.4	271.8	209.8	164.6	130	94.2	64.4	37.6	20.4
1.70	838.6	672.2	548	471	356.4	268	209.8	163.2	130	94.5	64.4	37.6	20.4
1.75	773	623	531	453.2	347.2	261.8	206	161.6	130	94.2	64.4	37.2	20.4
1.80	719.2	568	507	424.6	330.8	252.4	203.2	157.8	126.8	91.8	61	37.2	19.84

Cycle vs Depth of Discharge



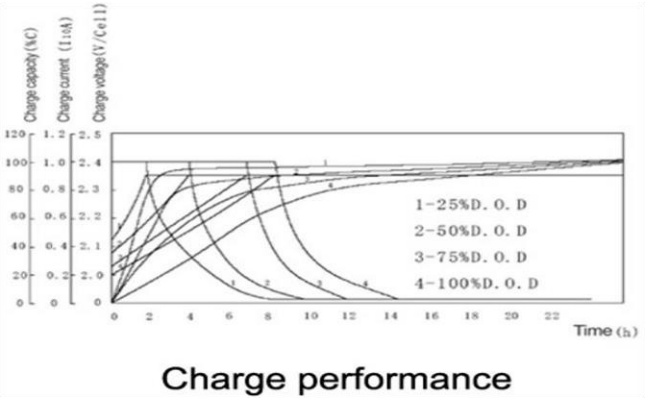
Cycle Vs Discharge depth

Temperature vs Capacity



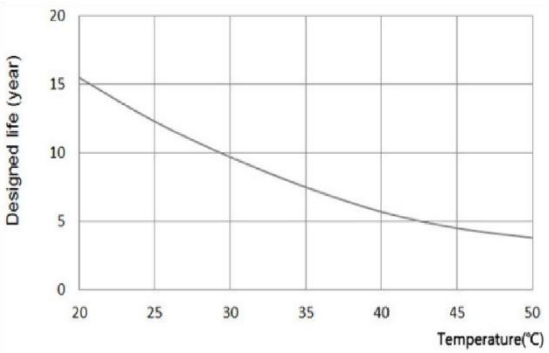
Temperature Vs capacity

Charge Performance



Charge performance

Designed Life vs Temperature



Designed life Vs temperature

Maintenance and Cautions

- Avoid over-discharging batteries, especially when they are in series connections
- Charge the batteries with recommended voltages, ensure the battery can be fully charged
- Generally, recharge capacity should be 1.1 ~ 1.5 * the discharge capacity
- The effect of temperature on cycle charge voltage: -4 mV / °C / Cell
- Length of cycle services is significantly affected by depth for discharge (primarily), along with ambient temperature, discharge rate, and the way the battery is recharged.