RENOGY

Deep Cycle AGM Battery 12 Volt 200Ah









RENOGY **DEEP CYCLE AGM BATTERY 12 VOLT 200AH**

Renogy 12V Deep Cycle AGM Battery has been widely applied in different scenarios due to its outstanding performance. Possessing the features of maintenance free and leak-proof, it is the ideal candidate for standby use applications including UPSs, telecommunication systems, security systems and emergency lighting systems. It can also easily handle cyclic use applications, such as RVs, boats, medical equipment, and lawn mowers, thanks to its high discharge rate and wide operation temperature range. Besides, it's high power-to-weight ratio makes it suitable for solar and wind energy storage applications. With the finest materials, the state-of-the-art production techniques, and the strictest quality control procedures, Renogy AGM batteries aim to provide the most reliable, convenient, and economic rechargeable battery solution.

KEY **FEATURES**

Maintenance Free

Manufactured with thick absorbent glass mat (AGM) separators and advanced valve regulated technology, Renogy Deep Cycle AGM Batteries save you from acid leakage and frequent maintenance.

Excellent Discharge Performance

Proprietary quinary alloy plates and specially treated plate grids enable low internal resistance and high discharge currents of up to 10 times the battery rated capacity

Long Shelf Life

Made of high purity materials, Renogy Deep Cycle AGM Batteries reduce the monthly self-discharge rate below 3% at 77°F (25°C), which is 5 times lower than their flooded counterparts.

Wide Operation Temperature Range

Improved electrolyte formula ensures stable battery capacity and outstanding discharge performance at low temperatures below 32°F (0°C).

Specifications

Electric Characteristics	
Nominal Voltage	12V
Number of Cells	6
Capacity (77°F/25°C)	200Ah (20 Hour Rate to 10.5V)
Internal Resistance	3.5 mΩ
Self-discharge Rate (77°F/25°C)	<3%
Float Charge Voltage (77°F/25°C)	13.6V~13.8V
Cycle Use Voltage (77°F/25°C)	14.4V~14.8V
Max Charge Current	60A
Max Discharge Current	2000A (5 Seconds)

Temperature Parameters	
Normal Operating Temperature	77°F±9°F (25°C±5°C)
Operating Temperature Range	Discharge: -4°F~140°F (-20°C~60°C)
	Charge: 32°F~122°F (0°C~50°C)
Storage Temperature Range	-4°F~140°F (-20°C~60°C)

Mechanical Properties	
Terminal	M8
Container Material	ABS
Weight	127.9 lbs. (58kg)
Dimension (L x W x H)	20.6 x 9.4 x 8.8 inch (522 x 240 x 224 mm)

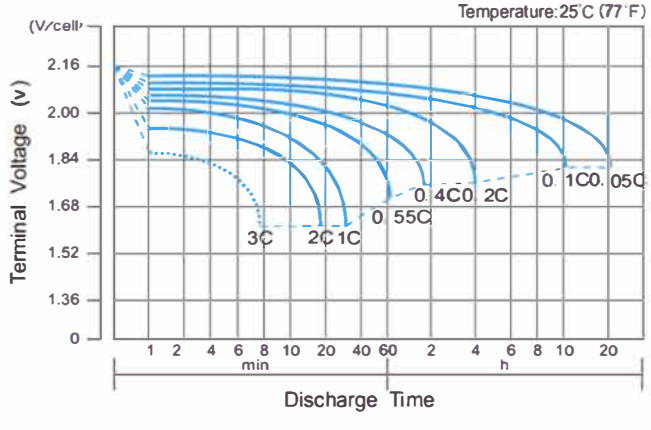
Constant Current Discharge Characteristics (77°F /25°C) Unit: A

F.V/Time	10min	15min	30hr	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	437.1	350.7	215.6	121.5	72.34	56.35	44.20	37.60	24.12	20.00	10.37
1.65V	402.6	327.9	204.3	117.3	69.92	54.62	42.88	36.42	23.93	19.81	10.31
1.70V	373.1	308.4	193.7	113.6	68.05	52.31	41.56	35.43	23.55	19.43	10.18
1.75V	342.3	288.9	186.0	110.0	65.44	50.96	40.42	34.45	23.17	19.24	10.00
1.80V	311.5	264.5	179.2	105.1	63.20	50.00	39.48	34.00	22.79	19.05	9.903
1.85V	243.8	218.9	151.9	93.83	57.80	46.54	37.02	31.30	21.46	17.90	9.811

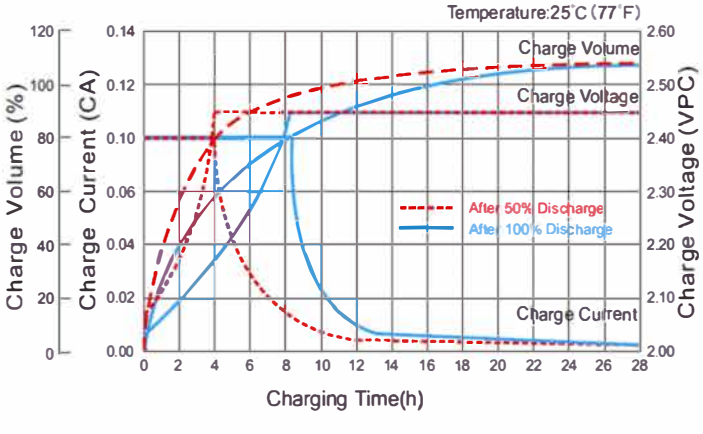
Constant Power Discharge Characteristics (77°F /25°C) Unit: WPC

F.V/Time	10min	15min	30hr	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	744.2	611.7	391.8	228.0	136.8	107.0	85.19	71.17	47.00	39.22	20.69
1.65V	716.6	594.8	382.6	224.1	133.1	104.3	83.11	69.24	46.62	38.85	20.51
1.70V	668.8	563.0	364.2	217.6	129.8	100.3	80.47	67.51	46.06	38.09	20.32
1.75V	622.4	531.4	351.5	211.5	125.1	97.86	78.58	65.97	45.30	37.71	19.95
1.80V	573.4	491.2	340.1	202.9	122.3	97.31	77.07	65.09	44.55	37.34	19.77
1.85V	454.9	412.7	291.7	182.2	112.6	90.77	72.53	60.20	42.11	35.26	19.58

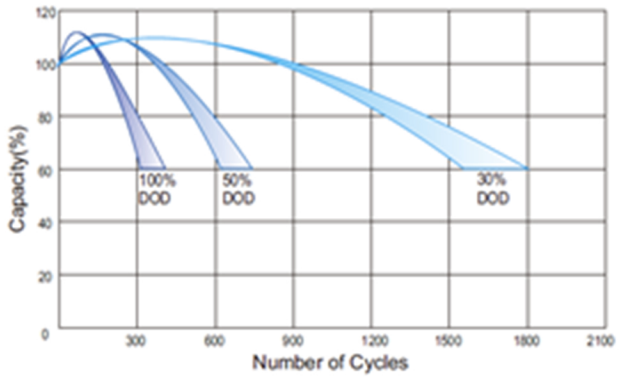
Discharge Characteristics Curve



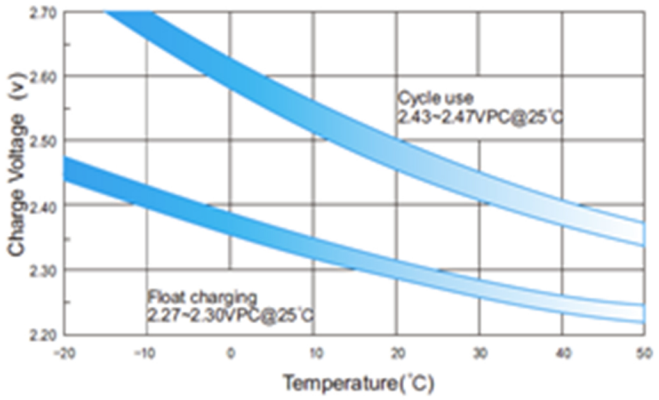
Charge Characteristics Curve for Cycle Use



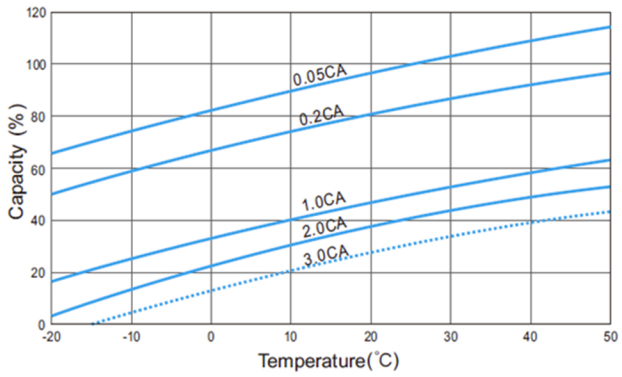
Relationship between Cycle Life and DOD



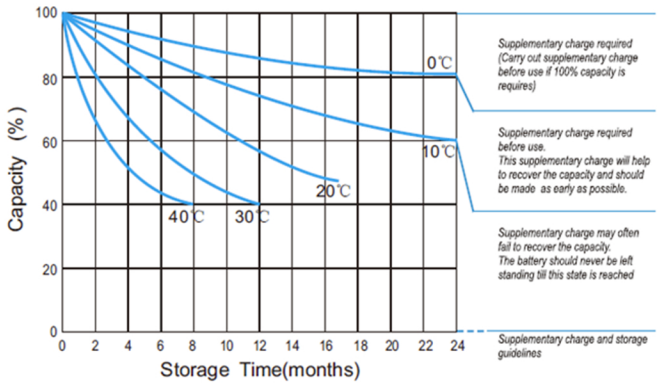
Relationship between Charge Voltage and Temperature



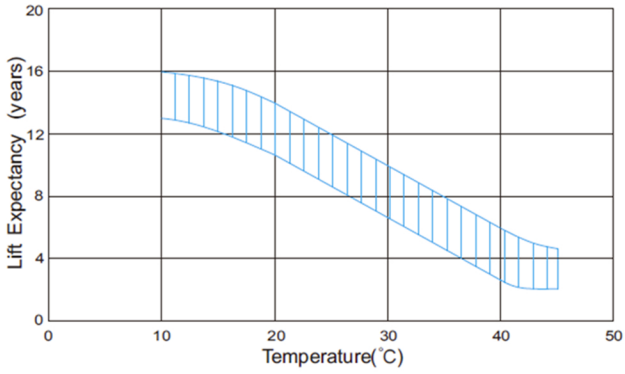
Temperature Effects on Capacity



Storage Characteristics



Effect pf Temperature on Long Term Life



Relationship between OCV and State of Charge

