LEAD ACID RAW POWER GEL Deep Cycle Battery

12V 100AH [12RP100GD]

General Features

- Designed floating charging service life: 13 years (25ºC)
- Safety valve installation for explosion proof ,Sealed and maintenance free operation
- Nano-sized gas-phase SiO2 electrolyte was prepared with unique formula
- Extremely low self-discharge characteristic
- Wide operating temperature range from -10ºC~50ºC
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion

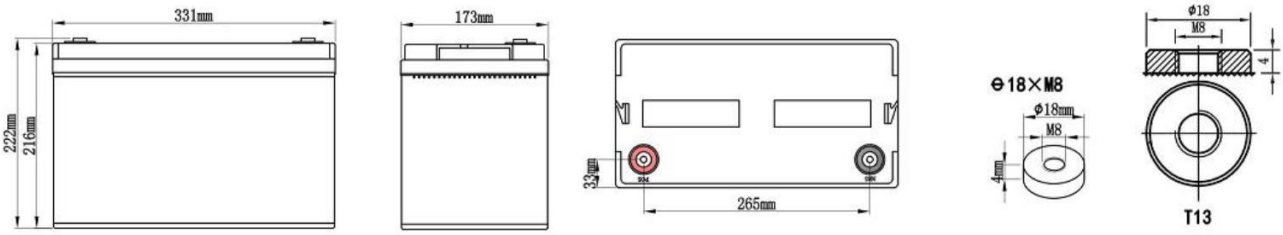
Application

- Electric tools/toys
- Electric wheel chairs
- Golf trolleys and golf carts
- Solar lighting systems
- Solar/wind energy storage systems
- Telecom stations and power stations

PhysicalSpecifications

Nominal Voltage	Nominal Capacity (10HR)	Dimension				Weight ±3%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V	100AH	331±3mm	173±2mm	216±3mm	222±3mm	Approx 30.9kg (68.1lbs)	≈4.50mΩ	T13 (standard)

Dimensions



Constant-Voltage Charge

Rated Capacity	
20 hour rate (5.0A)	106.0AH
10 hour rate (10.0A)	100.0AH
5 hour rate (17.0A)	85.0AH
3 hour rate (25.0A)	76.0AH
1 hour rate (60.0A)	60.0AH
Capacity affected by Temperature	
40ºC(104ºF)	103%
25ºC(77ºF)	100%
0ºC(32ºF)	86%

CycleApplication
1. Limit initial current less than 30A.
2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25ºC(77ºF).
3. Hold at 14.1V to 14.4V until current drop to under0.60A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/ºC.
Standby Service
1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 30A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status.
2. Temperature compensation coefficient of charging voltage is -18mV/ºC.

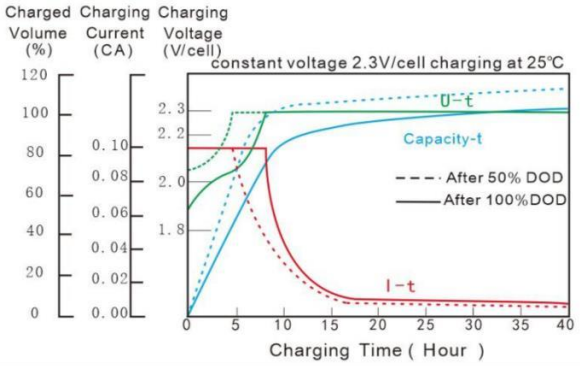
⚠ NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

Battery Discharge Table

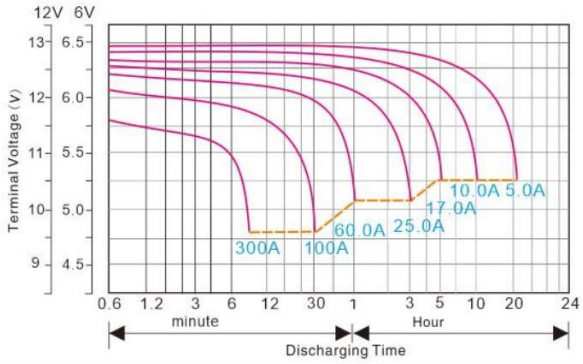
End Voltage (V)	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (Amperes at 25ºC)													
10.20	321	245	184.5	97.8	90.75	63.73	50.37	42.11	26.41	18.34	13.05	11.01	5.76
10.50	285	224	172.3	93.8	86.67	61.18	48.33	40.58	25.59	17.52	12.34	10.71	5.66
10.80	265	204	161.1	90.6	82.59	58.63	46.39	39.05	24.67	16.76	11.73	10.40	5.49
Constant Power Discharge Data Sheet (Watt at 25ºC)													
10.20	3191	2702	1944	1221	918	797	581	437	326	210	156.0	132.5	69.4
10.50	3069	2294	1746	1194	897	785	573	423	316	204	154.0	128.5	67.3
10.80	2855	2141	1667	1167	867	749	547	409	305	197	151.9	122.4	65.8

Performance Characteristics

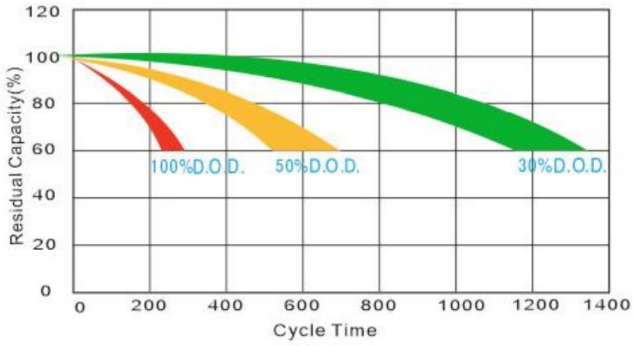
Charge Characteristics (25ºC/77ºF)



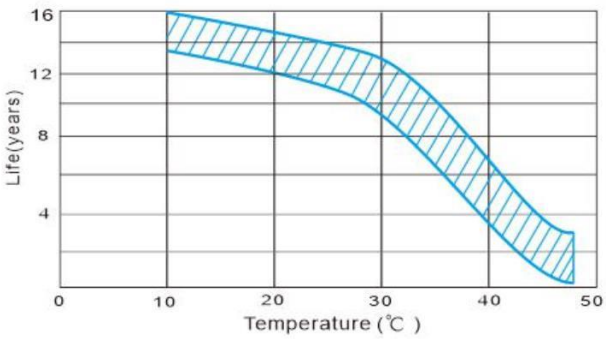
Discharge Characteristic (25ºC/77ºF)



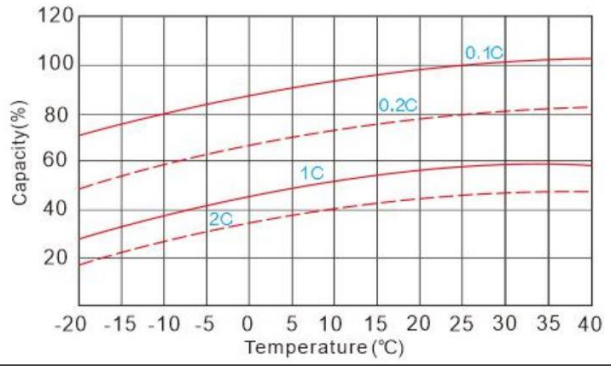
Cycle Life in Relation to Depth of Discharge



Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics