



POWER SOLID

The Crown of Power Solution

GEL Deep Cycle Battery

PS-121000-GS

12V , 100Ah

General Features

- Designed floating charging service life: 15 years (25°C)
- Safety valve installation for explosion proof ,Sealed and maintenance free operation
- By using strong grids, high purity lead and patented Gel electrolyte
- Extremely low self-discharge characteristic
- Wide operating temperature range from -20°C~55°C
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion
- Maximum discharge current :100 Amperes for 5 seconds

Application

- DC power supply
- UPS/EPS power supply
- Electrical devices & instruments
- Security and fire alarm systems
- Telecom stations and power stations
- Medical equipments
- Emergency lighting systems



Constant-Voltage Charge

Rated Capacity	
20 hour rate (5.0A)	105.0AH
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	
40°C(104°F)	103%
25°C(77°F)	100%
0°C(32°F)	86%

Cycle Application	
1. Limit initial current less than 25.0A.	
2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).	
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/°C.	
Standby Service	
1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 25.0A 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/°C.	

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 25°C)													
10.20	315	240	181	95.9	89.0	62.5	49.4	41.3	25.9	17.99	12.80	10.80	5.65
10.50	280	220	169	92.0	85.0	60.0	47.4	39.8	25.1	17.18	12.10	10.50	5.55
10.80	260	200	158	88.9	81.0	57.5	45.5	38.3	24.2	16.44	11.50	10.20	5.38
Constant Power Discharge Data Sheet (Watt at 25°C)													
10.20	3130	2650	1907	1198	900	782	570	429	320	206	153	130	68.1
10.50	3010	2250	1712	1171	880	770	562	415	310	200	151	126	66.0
10.80	2800	2100	1635	1145	850	735	536	401	299	193	149	120	64.5

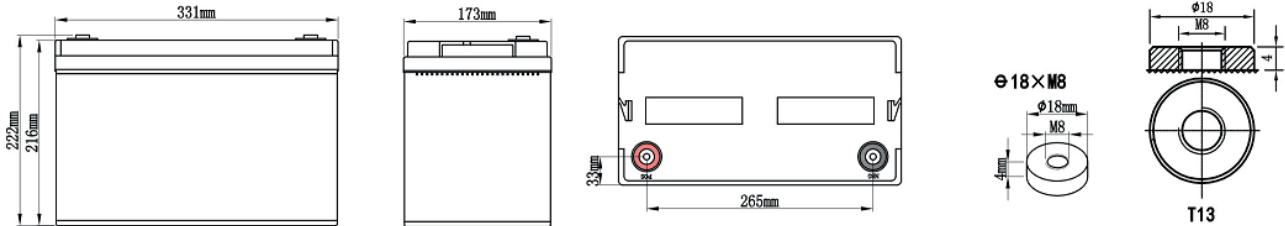
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Physical Specifications

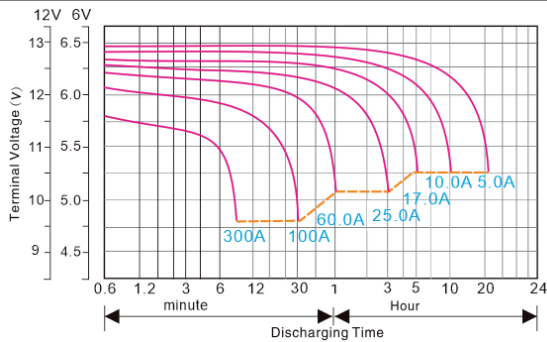
Nominal Voltage	Nominal Capacity (10HR)	Dimension				Weight ±3%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V	100AH	331±3mm	173±2mm	216±3mm	222±3mm	Approx 30.0kg (66.14lbs)	≈4.53 mΩ	T13 (standard)

Dimensions(mm)

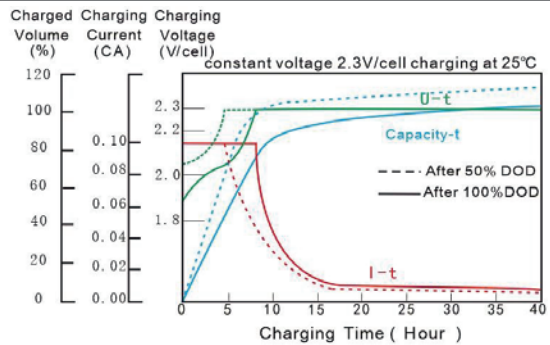


Performance Characteristics

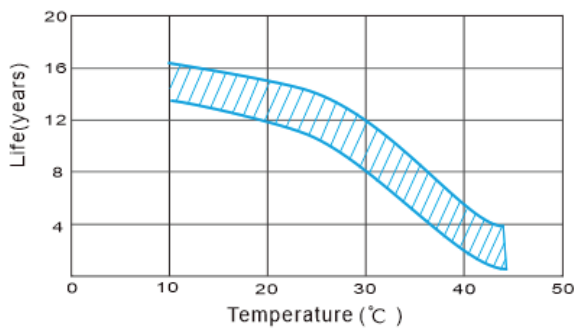
Discharge Characteristic (25°C/77°F)



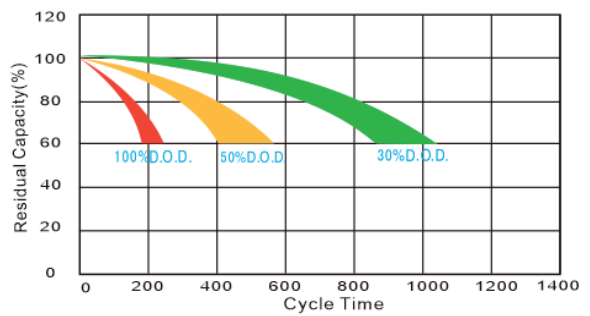
Charge Characteristics (25°C/77°F)



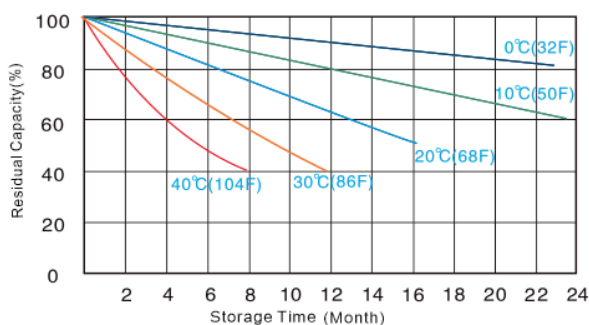
Temperature vs Float Life



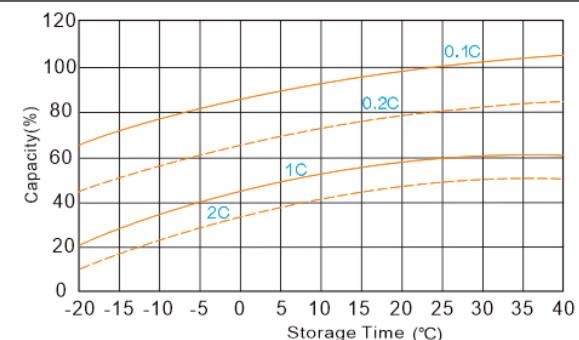
Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



Capacity Curve At Different Temperature



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