

RAW POWER GEL Deep Cycle Battery FT 12V 100AH [12RP100GD]



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

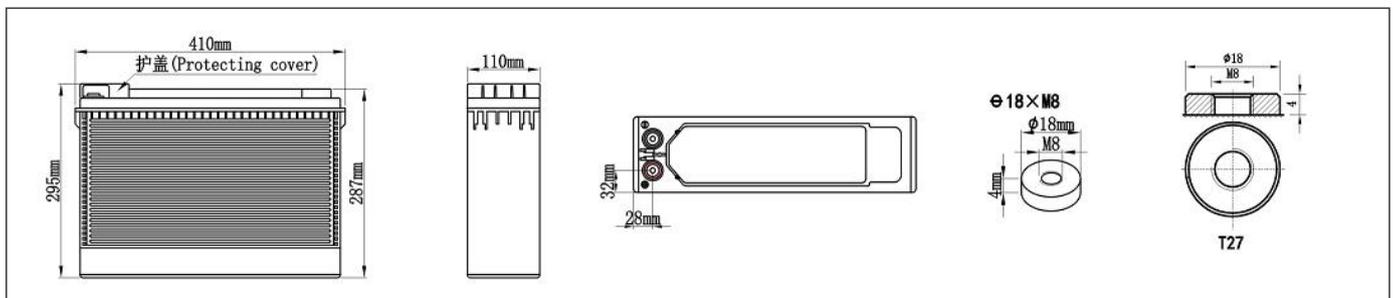
Application

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

Physical Specifications

Nominal Voltage	Nominal Capacity (10HR)	Dimension				Weight ±3%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V	100AH	410±3mm	110±2mm	287±3mm	295±3mm	Approx 30.0kg (66.1lbs)	≈6.0mΩ	T27 (standard)

Dimensions



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 30.0A.
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 30.0A 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.

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 25°C)													
10.20	305	231	192.3	92.6	85.88	60.31	47.63	39.43	24.98	17.37	12.39	10.34	5.46
10.50	270	213	179.6	88.8	82.08	57.87	45.77	38.06	24.20	16.59	11.71	10.15	5.36
10.80	251	193	167.9	85.9	78.17	55.53	43.92	36.50	23.33	15.91	11.13	9.96	5.19
Constant Power Discharge Data Sheet (Watt at 25°C)													
10.20	3027	2563	2071	1158	871	756	551	415	309	200.1	148.3	125.9	65.88
10.50	2911	2176	1859	1132	851	745	544	401	300	193.2	146.4	122.0	63.83
10.80	2708	2031	1774	1108	822	711	518	387	289	186.4	144.4	116.1	62.36

Performance Characteristics

