

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.



## **Battery Construction**

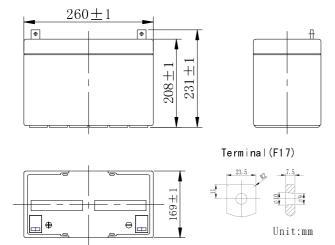
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

#### **General Feature**

- Absorbent Glass Mat(AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.

### **SPECIFICATION**

Nominal voltage ····· 12V
Number of cell ····· 6
Length(mm/inch) 260/10.2
Width(mm/inch 169/6.65
Height(mm/inch) 208/8.19
Total Height(mm/inch) ······ 231/9.09
Approx. Weight(kg/lbs) ····· 22.0/48.5



### **Performance Characteristics**

Capacity 77°F(25°C) 5 hour rate (7.5A、10.8V) 75A 1 hour rate (13.5A、10.5V) 67.5A 1 hour rate (48.5A、9.6V) 48.5A 1 hour rate (48.5A、9.6V) 1 hour rate (48.5A								
77°F(25°C)       5 hour rate (13.5A、10.5V)       67.52         1 hour rate (48.5A、9.6V)       48.54         Internal Resistance       Full charged Battery77°F(25°C): 8ms         Capacity       104° F(40°C)       102°         affected by       77° F(25°C)       100°         Temperature       32° F(10°C)       859         (10 hour rate)       5° F(-15°C)       659         Self-Discharge 68°F(20°C)       Capacity after 3 month storage       909         Capacity after 6 month storage       809         Capacity after 12month storage       609         Max. discharge current77°F(25°C): 700A(5S)         Charge       Float: 13.6~13.8 V/77° F/(25°C)		20 hour rate (3.85A \ 10.8V)	77Ah					
Internal Resistance  Capacity affected by Temperature $(10 \text{ hour rate})$ Self-Discharge $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Self-Discharge $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity $(48.5 \text{ C})$ Temperature $(48.5 \text{ A} \cdot 9.6 \text{ V})$ $(10^{\circ} \text{ F}(25^{\circ} \text{ C}))$ Self-Discharge $(10^{\circ} \text{ F}(40^{\circ} \text{ C}))$ Capacity after 3 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after 3 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after 6 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after 3 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after 6 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after 7 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after 12 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Max. discharge current $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Self-Discharge $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after 3 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after 12 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after 12 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after 12 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ The self-Discharge $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after 3 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after 12 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after 12 month storage $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$ Capacity after $(48.5 \text{ A} \cdot 9.6 \text{ V})$	Capacity	10 hour rate (7.5A, 10.8V)	75Ah					
Internal ResistanceFull charged Battery77°F(25°C): 8msCapacity $104^{\circ}$ F( $40^{\circ}$ C) $102^{\circ}$ affected byTemperature $32^{\circ}$ F( $10^{\circ}$ C) $85^{\circ}$ (10 hour rate)Self-Discharge $68^{\circ}$ F( $20^{\circ}$ C)Capacity after 3 month storage $90^{\circ}$ Capacity after 6 month storageMax. discharge current77°F( $25^{\circ}$ C): $700A(5S)$ ChargeFloat: $13.6 \sim 13.8 \text{ V/77}^{\circ}$ F/( $25^{\circ}$ C)	77°F(25℃)	5 hour rate (13.5A、10.5V)	67.5Ah					
Resistance  Full charged Battery77°F(25°C): 8ms  Capacity affected by Temperature (10 hour rate)  Self-Discharge $68^{\circ}F(20^{\circ}C)$ Max. discharge current77°F(25°C): 700A(5S)  Full charged Battery77°F(25°C): 8ms $104^{\circ} F(40^{\circ}C)$ $102^{\circ}C$ $100^{\circ}C$		1 hour rate (48.5A \ 9.6V)	48.5Ah					
affected by Temperature $32^{\circ} \text{ F}(10^{\circ}\text{C})$ $32^{\circ} \text{ F}(10^{\circ}\text{C})$ $859^{\circ}$ $(10 \text{ hour rate})$ $5^{\circ} \text{ F}(-15^{\circ}\text{C})$ $659^{\circ}$ $889^{\circ}$ Capacity after 3 month storage $809^{\circ}$ Capacity after 6 month storage $809^{\circ}$ Capacity after 12month storage $809^{\circ}$ Capacity after $809^{\circ}$ Cap	11110111111	Full charged Battery77°F(25°C)	): 8mΩ					
Temperature $32^{\circ} \text{ F}(10^{\circ}\text{C})$ 859 $(10 \text{ hour rate})$ $5^{\circ} \text{ F}(-15^{\circ}\text{C})$ 659 $(10 \text{ hour rate})$ Capacity after 3 month storage 909 $(10 \text{ hour rate})$ Capacity after 6 month storage 809 $(10 \text{ hour rate})$ Capacity after 12month storage 609 $(10 \text{ hour rate})$ $(10 \text{ hour rate}$	Capacity	104° F(40°C)	102%					
(10 hour rate) $5^{\circ}$ F(-15°C) $65^{\circ}$ Self-Discharge $68^{\circ}$ F(20°C) Capacity after 3 month storage $80^{\circ}$ Capacity after 6 month storage $80^{\circ}$ Capacity after 12month storage $60^{\circ}$ Max. discharge current77°F(25°C): $700A(5S)$ Charge Float: $13.6 \sim 13.8 \text{ V/77}^{\circ}$ F/(25°C)	affected by	77° F(25℃)	100%					
Self-Discharge $68^{\circ}F(20^{\circ}C)$ Capacity after 3 month storage 909 Capacity after 6 month storage 809 Capacity after 12month storage 609 Max. discharge current 77°F(25°C): 700A(5S)  Charge Float: $13.6 \sim 13.8 \text{ V/77}^{\circ} \text{ F/(25}^{\circ}C)$	Temperature	32° F(10℃)	85%					
Self-Discharge 68°F(20°C)  Capacity after 6 month storage Capacity after 12month storage 609  Max. discharge current77°F(25°C): 700A(5S)  Charge Float: 13.6~13.8 V/77° F/(25°C)	(10 hour rate)	5° F(-15℃)	65%					
Capacity after 6 month storage 809  Capacity after 12month storage 609  Max. discharge current77°F(25°C): 700A(5S)  Charge Float: $13.6 \sim 13.8 \text{ V/77}^{\circ} \text{ F/}(25^{\circ}\text{C})$	Calf Diaghaman	Capacity after 3 month storage	90%					
Max. discharge current77°F(25°C): 700A(5S)  Charge Float: 13.6~13.8 V/77° F/(25°C)	ε	Capacity after 6 month storage	80%					
Charge Float: 13.6~13.8 V/77° F/(25°C)	08 F(20 C)	Capacity after 12month storage	60%					
	Max. disc	harge current $77^{\circ}$ F( $25^{\circ}$ C): $700$ A(	(5S)					
(Constant Cycle: 14.5 $\sim$ 14.9 V/77°F/(25°C)	Charge	Charge Float: 13.6~13.8 V/77° F/(25°C)						
Cycle.14.5 14.5 (7/7 1/(25 C)								
Voltage) Max. Current: 18.8A	Voltage)							

#### Discharge Constant Current (Amperes at 77° F25 °C)

End Point Volts/Cell	5min	10min	15min	30m i n	1h	3h	5h	10h	20h
1.60V	237	178	137	82. 3	48. 5	19. 7	14. 0	7.88	4. 05
1. 65V	223	168	132	79. 8	47. 9	19. 5	13. 9	7.82	4. 05
1.70V	210	158	126	77.2	46. 2	19. 2	13. 7	7.75	4. 00
1.75V	196	149	121	74.5	46. 5	18. 9	13. 5	7.65	3. 95
1. 80V	181	140	114	72. 0	45. 7	18. 5	13. 2	7.50	3. 85

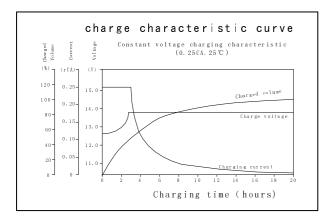
#### Discharge Constant Power (watts at 77° F 25 ℃)

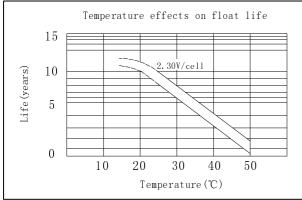
End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1. 60V	415	325	255	153	120	97.7	54. 9	40.0	27. 4
1. 65V	405	302	250	151	117	95. 9	53. 9	37. 2	26. 9
1. 7 0V	377	292	246	148	115	94. 1	52. 9	36. 5	26. 4
1. 75V	358	276	232	146	112	92. 3	51. 9	35. 8	25. 8
1.80V	343	263	220	143	109	90. 5	51.0	35. 1	25. 3

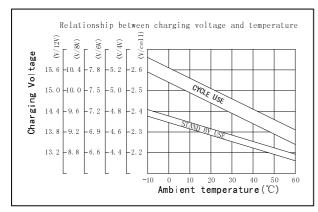
(Note)The above characteristics data are average values obtained Within three charge/discharge cycles not the minimum values.

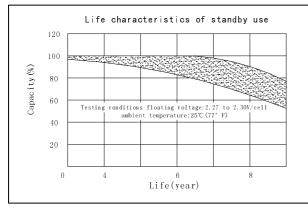
Rechargeable Valve Regulated lead-Acid Battery

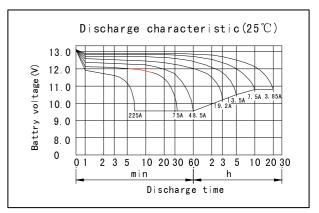


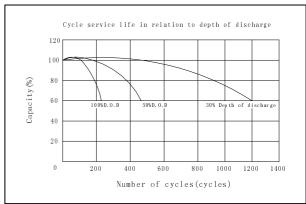


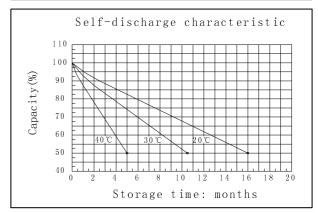


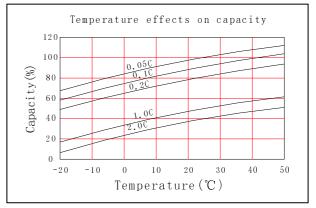












# **GREAT POWER BATTERY TECHNOLOGY CO.,LTD**

Address:Longguan 1st Road,LongHua Town,BaoAn District,Shenzhen,China. TEL.86-755-2900 8403 Fax:86-755-3386 3366

Email:info@greatpowerbattery.com Http://www.greatpowerbattery.com

