



# 3-GFX-200 6V 4 OPzS 200



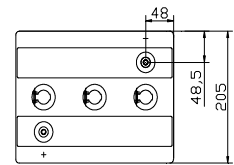
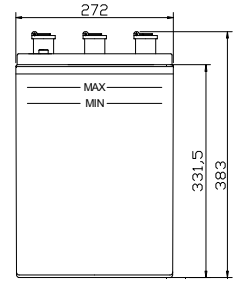
### Application:

- Solar and wind power system
- Electric power, nuclear power
- Telecommunication
- UPS
- Situation with high environmental protection and energy-saving

### Features of performance application

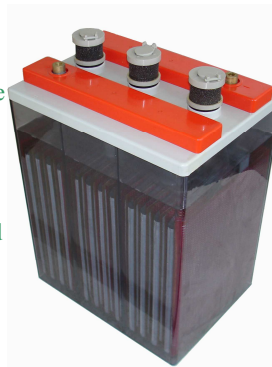
- ✚ Designed service life of 18 years
- ✚ Water supplement cycle 0.25-1 year (normal) 1-2 year (choose water content recombination valve)
- ✚ High cycle service life
- ✚ Better temperature resistance performance
- ✚ Excellent deep cycle performance
- ✚ Superior low current discharge performance
- ✚ Better charge reception capability
- ✚ Better safety performance and reliability
- ✚ Modular and personified installation design
- ✚ Performance/ price ratio is high and yearly operating cost is low
- ✚ Environmental friendly, cycle application

Rated voltage	6 V
Capacity@ 25°C(77°F)	200Ah @ 10hr to 5.4V
Weight	Without electrolyte: about 35.0 kg ( 77.0 lb) With electrolyte: about 45.5 kg ( 100.1 lb)
electrolyte density (charged)	1.240±0.01g/cm <sup>3</sup> (20°C) (68°F)
Reference internal resistance (charged)	About 2.4mΩ@ 25°C(77°F)
Short-circuit current	About 2500A (0.1S reference value)
Max discharge current	600A (5sec)
Self-discharge	< 10% 90 days @ 25°C (77°F)
Temperature range	Application: -20°C ~ 50°C (-4°F ~ 122°F) Storage: 0°C ~ 20°C (32°F ~ 68°F) Recommendation: 20°C ~ 25°C (68°F ~ 77°F)
Max charge current	30A
Charge voltage @ 25°C(77°F)	Float charge: 6.69V, average charge: 7.05V Temperature compensation factor: -9 mV/°C
Terminal output	M8 copper terminal (HPb59-1)



### Structure features of Shuangdeng 3/6-GFX series acid-proof stationary battery:

- Plate: positive plate adopts tubular type plate which can effectively prevent active substance falling, positive plate frame is made of multi-component alloy, the alloy crystal particle is tiny and dense, the corrosion-resisting performance is good and service life is long. The negative plate adopts pasted plate, grid adopts radiated structure, which enhances utilization ratio of active substance and discharge capability of strong current; moreover, the charge reception capability is strong.
- Battery case: adopt AS transparent case with corrosion prevention, high strength and beautiful appearance, the internal structure and state of battery can be directly observed via transparent case.
- Separator: the combined separator of multi-hole corrugated plastic plate and micro-bore rubber separator has bigger electrolyte storage space, which enhances dispersion speed of electrolyte, greatly reduces internal resistance of battery and prevents dendrite short circuit after deep discharge.
- Terminal sealing: the built-in copper-core lead-based terminal post has strong current carrying capacity and corrosion resistance. The unique terminal post sealing structure can effectively eliminate the stress which is generated due to plate extension, leakage is avoided, sealing reliability of terminal post is ensured and service life of battery is greatly increased.
- Acid resistant bolt: adopt special funnel-shaped acid resistant bolt which can filter acid fume and prevent flame, the density and temperature of electrolyte can be measured directly, use is safe and maintenance is convenient.



### Execution standard:

IEC60896-11 DIN40737-3  
BS EN 61427-2002  
GB/T13337.1  
Q/321284KCC 03-2006

### Authentication and certificate:

**Certificate of Qualification on Perfecting Measurement & Measuring System**  
GB/T19022-2003

ISO10012:2003、IDT

### Quality Management System Authentication

GB/T19001-2000

NO.03006Q10002R0M-2

### Environmental Management System Authentication

ISO 14001:2004

NO.010607E2024R1M-2

### Occupational Health Management System Authentication

GB/T28001-2001

NO.010607S10147R0M-2

### CE authentication

EN 61000-6-3:2001+A11:2004

EN 61000-6-1:2001

### National Industrial Product Production License

XK06-044-00012

### Product Quality Test Free Certificate

(2006)GM(321630488)

### Export product quality license

Discharge current at different final voltages and different discharge rates unit: A (25°C, 77°F)

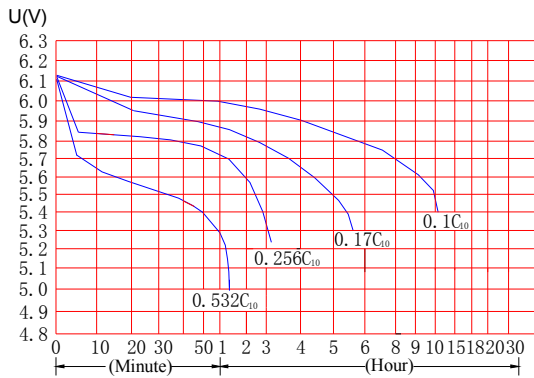
	5min	10min	15min	30min	45min	1hr	1.5hr	2hr	3hr	4hr	5hr	8 hr	10 hr	20hr	100 hr	120hr
1.90V	112	102	93	84	70	69	52	48	39	33	29	21	18	9.83	2.45	2.05
1.85V	124	123	118	99	81	77	60	54	43	36	31	22	19	10.81	2.58	2.16
1.80V	165	161	158	128	98	93	67	62	49	41	35	25	20	11.35	2.67	2.23
1.75V	198	193	184	141	112	102	75	66	50	42	36	26	21	11.80	2.73	2.29

Discharge power at different final voltages and different discharge rates unit: W (25°C, 77°F)

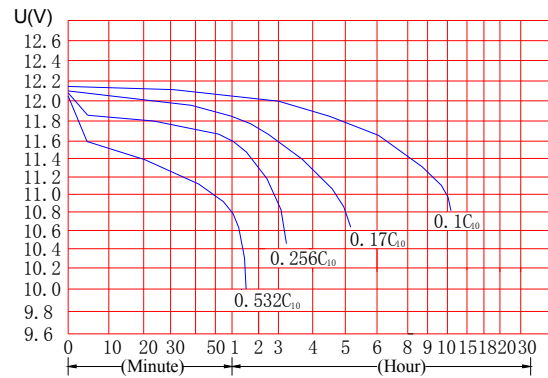
	5min	10min	15min	30min	45min	1hr	1.5hr	2hr	3hr	4hr	5hr	8 hr	10 hr	20hr	100 hr	120hr
1.90V	1321.6	1203.6	1097.4	991.2	826.0	814.2	613.6	566.4	460.2	389.4	342.2	247.8	216.0	118.94	29.65	24.81
1.85V	1463.2	1451.4	1392.4	1168.2	955.8	908.6	708.0	637.2	507.4	424.8	365.8	259.6	228.0	130.80	31.22	26.14
1.80V	1947.0	1899.8	1864.4	1510.4	1156.4	1097.4	790.6	731.6	578.2	483.8	413.0	295.0	240.0	137.34	32.31	26.98
1.75V	2336.	2277.	2171.	1663.	1321.	1203.	885.0	778.8	590.0	495.6	424.8	306.8	252.0	142.7	33.03	27.71



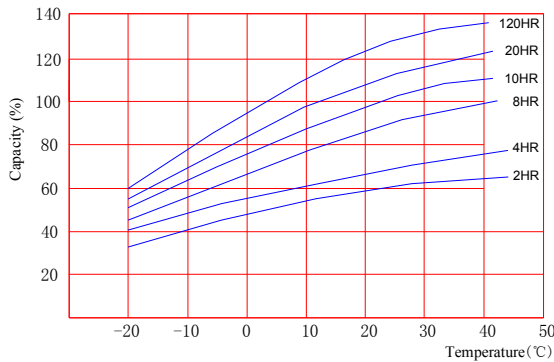
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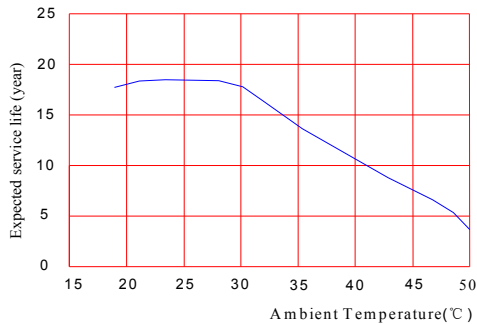
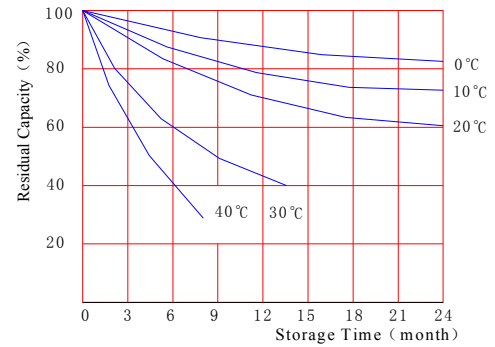
Discharge Characteristic Curve(20°C)



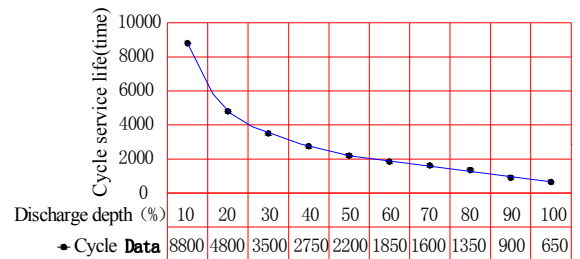
Discharge Characteristic Curve(20°C)



Relation curves between capacity and temperature



Relation curves between temperature and service Life



Relation curve between discharge depth and cycle service life

Remark: a) test circumstances: 20-30°C, relative humidity is 50~80percent;  
 b) charge mode: electricity of charge is equal to 105~115percent of discharge  
 c) residual capacity is 80 percent C<sub>10</sub>

Free Service Line: +86-4008-899-886  
 Fax: +86-25-83176850  
 Tel: +86-25-83176860  
 E-mail: [gjpt@chinashoto.com](mailto:gjpt@chinashoto.com)  
 E-mail: [joyce.zhong@chinashoto.com](mailto:joyce.zhong@chinashoto.com)  
 Web: <http://www.chinashoto.cn/>

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