



# GFX-250 5 OPzS 250



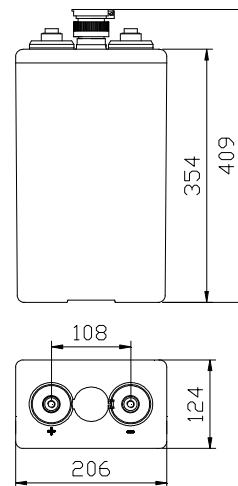
### Application:

- Solar and wind power system
- Electric power, nuclear power
- Telecommunication
- UPS
- Marine

### Features of performance application

- ✦ Designed service life of 22 years
- ✦ Supplement water period is 0.25-1 year (normal) 1-2 year (choose water content recombination valve)
- ✦ High cycle service life
- ✦ Wide operation temperature range
- ✦ Excellent deep cycle performance
- ✦ Superior low current discharge performance
- ✦ Better safety performance and reliability
- ✦ Modular and installation design
- ✦ Performance/price ratio is high and yearly operating cost is low
- ✦ Environmental friendly

Rated voltage	2 V
Capacity@ 25°C(77°F)	250Ah @ 10hr to 1.80V per cell
Weight	Without electrolyte: about 16 kg ( 35.2 lb) With electrolyte: about 21 kg ( 46.2 lb)
electrolyte density (charged)	1.240±0.01g/cm <sup>3</sup> (20°C) (68°F)
Reference internal resistance (charged)	About 0.58mΩ@ 25°C(77°F)
Short-circuit current	About 3345A (0.1S reference value)
Max discharge current	750A (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	37.5A
Charge voltage @ 25°C(77°F)	Float charge: 2.23V, average charge: 2.35V Temperature compensation factor: -3 mV/°C
Terminal output	M10 copper terminal (HPb59-1)



### Execution standard:

IEC60896-11 DIN40736  
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



### Structure features of Shuangdeng 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 complex 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 have 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.

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

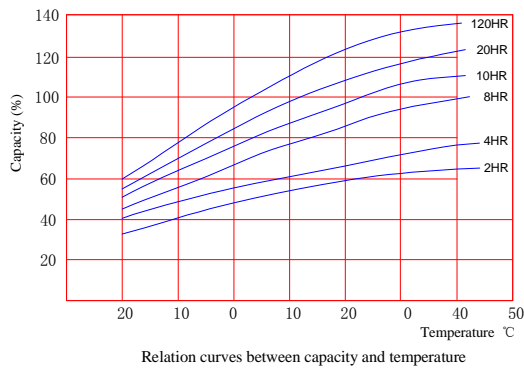
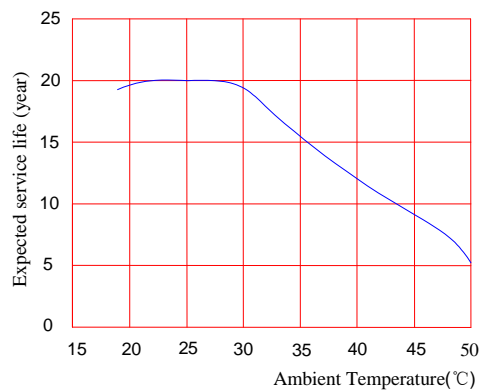
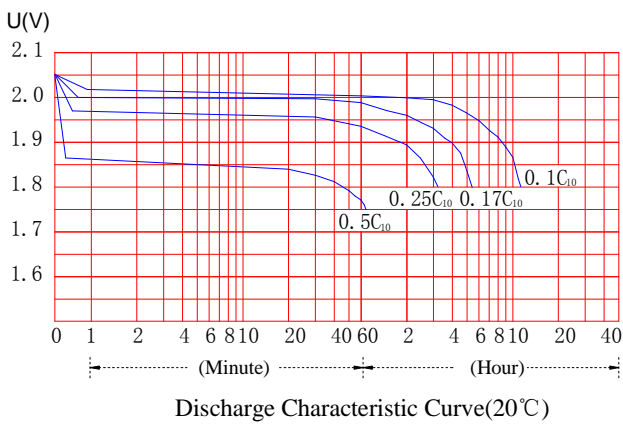
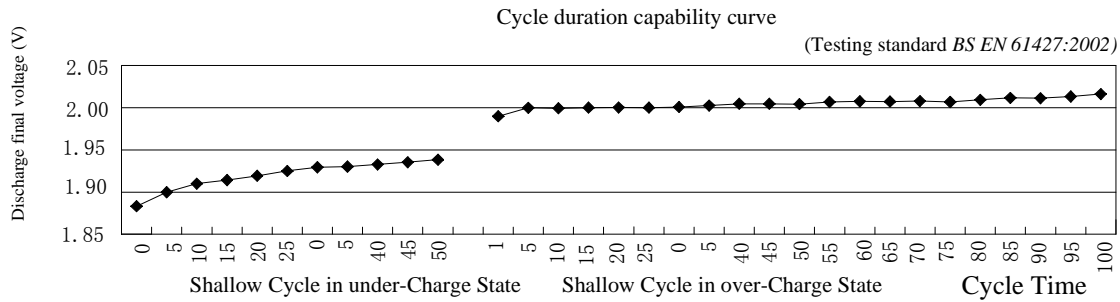
	5min	10min	15min	30min	45min	1hr	1.5hr	2hr	3hr	4hr	5hr	8 hr	10 hr	20hr	100 hr	120hr
1.90V	152	138	125	113	95	93	70	65	52	41	36	27	23	12.91	3.35	2.80
1.85V	167	165	160	133	109	104	81	72	57	45	39	28	24	14.20	3.53	2.95
1.80V	206	201	197	160	122	117	83	78	61	51	43	31	26	14.25	3.67	3.07
1.75V	247	241	230	177	140	127	93	82	63	52	44	33	28	15.50	3.78	3.16

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	273	248	222	205	187	168	151	134	104	84	73	51	43	25.82	6.70	5.60
1.85V	300	298	273	240	215	189	168	147	113	93	79	56	47	27.12	6.99	5.84
1.80V	400	390	367	312	275	238	205	172	131	107	90	63	52	27.81	7.19	6.02
1.75V	480	468	421	350	305	260	221	181	135	110	91	63	52	29.92	7.30	6.10



# GFX-250 5 OPzS 250



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/>