



# GFX-2000 16 OPzS 2000



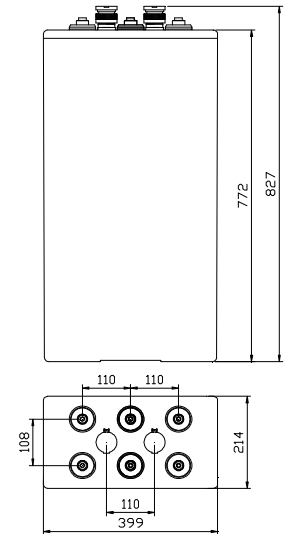
### Application:

- 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)	2000Ah @ 10hr to 1.80V per cell
Weight	Without electrolyte: about 110 kg ( 242 lb) With electrolyte: about 150 kg ( 330 lb)
electrolyte density (charged)	1.240±0.01g/cm <sup>3</sup> (20°C) (68°F)
Reference internal resistance (charged)	About 0.28mΩ@ 25°C(77°F)
Short-circuit current	About 6929A (0.1S reference value)
Max discharge current	6000A (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	300A
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)

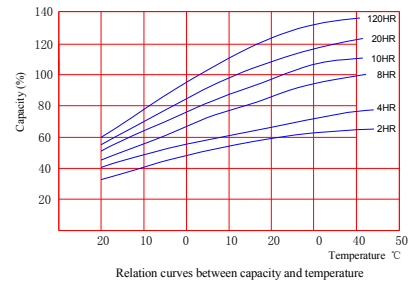
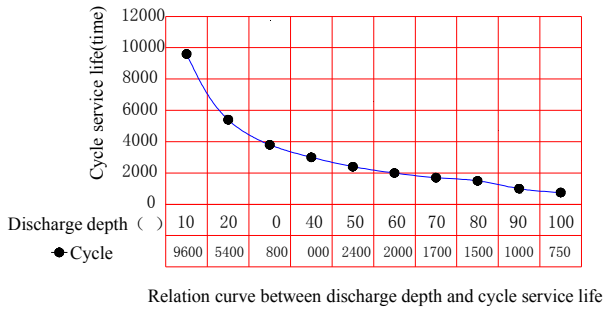
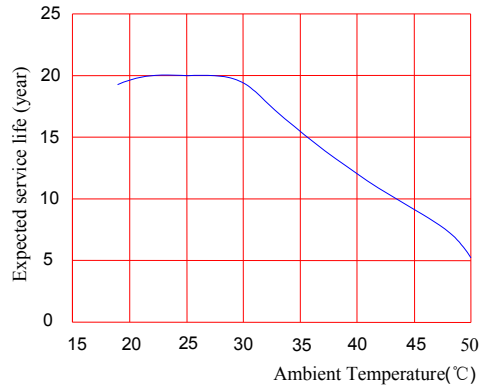
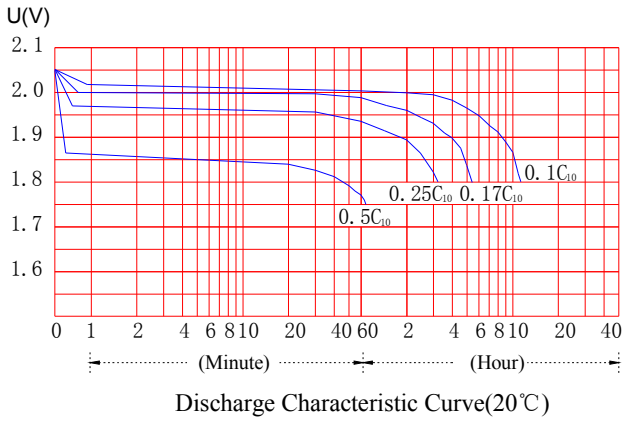
	5min	10min	15min	30min	45min	1hr	1.5hr	2hr	3hr	4hr	5hr	8 hr	10 hr	20hr	100 hr	120hr
1.90V	660	599	545	535	531	526	497	464	351	309	269	198	171	100	26.74	22.33
1.85V	713	707	704	698	686	642	571	539	400	344	302	220	189	110	28.15	23.50
1.80V	1071	1064	1034	1002	845	845	628	617	481	400	348	246	207	115.5	29.14	24.32
1.75V	1306	1298	1261	1180	963	958	704	674	516	424	366	251	209	120.1	29.86	24.93

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

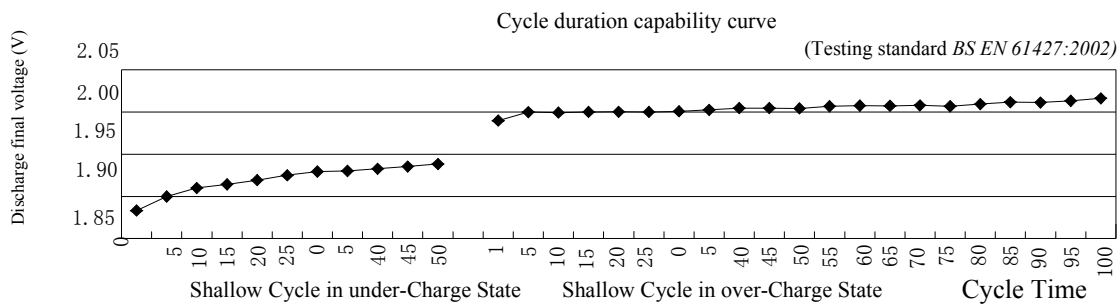
	5min	10min	15min	30min	45min	1hr	1.5hr	2hr	3hr	4hr	5hr	8 hr	10 hr	20hr	100 hr	120hr
1.90V	1185	1077	1028	1016	1000	984	929	873	725	621	540	392	338	200.0	53.48	44.66
1.85V	1280	1271	1263	1248	1189	1130	1061	992	816	688	595	426	367	217.8	55.74	46.53
1.80V	2077	2063	1792	1728	1613	1498	1365	1231	990	815	691	488	409	226.4	57.11	47.67
1.75V	2534	2517	1825	1795	1661	1526	1391	1256	1025	834	705	492	413	231.8	57.63	48.11



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- 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>



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 Web: <http://www.chinashoto.cn/>

Shuangdeng Group promises to provide excellent engineering service for customers, including product solution, installation design and on-site maintenance.

The above data is only taken as reference instead of inspection standard. Additional notification won't be available for parameter change due to improvement and regulation of product. Inspection shall be performed in accordance with standards.

We must make a statement, when the battery service life and safe operating performance is confirmed, the test condition will be stricter; accordingly, the battery shall not be used in these conditions, because it's difficult for battery to reach expected service life.